

US CATALOG

# **Emergi-Lite**<sup>®</sup>

# Specification-grade emergency lighting products and accessories



Emergi-lite is a life safety solutions provider, delivering state-of-theart systems and products into the emergency lighting marketplace. Our products and services are designed to provide the most effective protection and safety, in line with customer needs, relevant industry standards and regulations.

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# **Partner with Emergi-Lite®** for expertise, reliability, and innovation

Safety you can trust. Depend on outstanding service from the experts at our North American manufacturing center of excellence.

The Emergi-Lite® Global Emergency Lighting Research & Innovation Center in Canada is part of the ABB Group, a pioneering technology leader.

# **Emergency lighting experts**

Engineering teams with complementary expertise work together under one roof, giving you unparalleled access to our capabilities in design, innovation, quality, final assembly, testing, and service.

Our highly skilled mechanical, electrical and software engineers and product designers are specialists with proven expertise in the emergency lighting industry.

# **Product reliability**

Rest easy knowing that our high internal quality and performance standards are met at every step, from design to production to order fulfillment.

Quality, safety, ease of installation, and long-term reliability are designed into each product from the beginning, ensuring excellence. All products undergo functional testing using our specialized quality inspection facilities.

# **Fast delivery**

With over 150 people on our North American manufacturing team, we have complete control over lead time, service, and quality. We can produce exactly what we need without waiting for a large production run or overseas shipment. For express service, we keep ready-to-ship stock in warehouses across the U.S.

# Innovative solutions

Our product designers are on the forefront of new lighting design applications. The newest high-capacity mini inverters have expanded opportunities to transform existing lighting into emergency lighting. Our high-performance LED fixtures have low energy requirements, allowing fewer units to provide necessary lighting.

The Nexus® system puts the power of automation in your hands to manage your entire emergency lighting system from one central location. At a glance, you can see the status of every unit, even in multiple locations.

Our dedicated, experienced North American service team works with you as emergency lighting partners to ensure your satisfaction.

# Peace of mind

With Emergi-Lite®, you have

- · Reliable safety solutions
- A dependable business partner
- Industry expertise
- Dedicated service
- North American manufacturing
- A known, trusted reputation

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The ABB North American facility is an emergency lighting center of excellence thanks to the commitment, expertise, and creativity of every employee.

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# **Nexus®** Emergency lighting monitoring system

Building & Life Safety Codes oblige building owners/managers to ensure the safe evacuation of a building in the event of an emergency.

01 Nexus® is a proven system supported by a 5-year warranty, and can contribute to LEED certification and support green building initiatives.

# Are you prepared for a safety inspection?

In the interest of public safety, building owners/ managers must meet the outlined requirements for exit signs and emergency lighting equipment, including the following:

- Conduct a discharge test every month.
- Conduct functional tests annually.
- Keep a log book of maintenance information.

Complying with these requirements can be labor intensive and costly, especially in large buildings where testing every emergency light requires many man-hours. Disrupting the power supply during lengthy inspections can also put public safety at risk.

# Manage testing with Nexus® to save time and costs

Nexus® is a real-time monitoring system that manages the status of your entire emergency lighting and Exit Sign system from a central control unit. Nexus® runs diagnostics, performs required monthly and annual functional tests,

generates maintenance logs and runs compliance reports. Available in wired or wireless (RF) versions, Nexus® installations often pay for themselves in less than two (2) years. In addition to operational savings, Nexus® helps increase system reliability and performance and reduces the risk of failed inspections. One building or a group of properties under the same management can be monitored with Nexus®.

# Maximize system availability

By allowing maintenance personnel to easily maintain and monitor the emergency lighting system without having to manually check each unit, Nexus® reduces the hours required to disrupt the power supply for inspections. With Nexus®, monthly tests and reports on the status of all emergency lights and exit signs can be done individually, in groups, or together.

Advantages of the Nexus® system include saving labor; maximizing system availability by testing units in groups and stages rather than setting all units in recovery mode; and the convenience of self-monitoring. Nexus® indicates the location of a faulty unit and reports it instantly without requiring a manual search.

Nexus Pro is designed to enable building owners and managers to easily maintain and test emergency lighting, without the need to visually verify performance or disrupt the power supply.

With digital solutions, building owners now can have peace of mind knowing their buildings are safer than ever. All operations can be managed remotely, giving building owners and managers complete control wherever they are, whenever they need it most while preventing any human error in the process.

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One building or a group of properties under the same management can be monitored with Nexus<sup>®</sup>.

# Update status instantly

Nexus® passes messages both to and from the emergency units to instruct the units to perform all mandatory testing by communicating between the emergency units and a centrally located controller. Nexus® is a proven system supported by a 5-year warranty, and can contribute to LEED certification and support green building initiatives.

# Small system example

In a system of less than 100 units it is most likely that the only hardware required, other than the emergency units themselves, is a controller. All communication would occur wirelessly and installation would not vary greatly from a nonmonitored system. Once the units are in place, the system will establish the mesh network. The building itself could be quite large as each unit only needs to be able to communicate with its close neighbors and does not need to communicate directly with the controller.

# Large system example

The Nexus® RF system has been designed to be extremely flexible and provides for a range of system options. Each large site will need to be assessed for the best system solution with the assistance of ABB technical staff. The basic Nexus® RF system is designed to run on an Ethernet network which is present in most modern buildings however through a range of interface cards the backbone of the network could be WLAN. As with the small system example, site performance will be optimized through the careful selection and placement of area controller routers and the area controller to form efficient clusters. Building layout and materials will also play some role in determining the best solution to deliver a highly effective means of testing and maintenance requirements.



For Nexus® compatibility please refer to individual product pages for complete details. 8

INTRODUCTION

# **High output MR16 LED Emergency** lighting

# **MR16 LED illumination**

With the remarkable technology development in the last decade, the lightemitting diode (LED) is becoming the preferred solution in lighting applications. The emergency lighting industry is no exception: today virtually every new product introduced to market includes "white light" light LEDs for emergency illumination. Extremely efficient and long-lasting, LED lamps become the natural alternative to incandescent lamps due to three main advantages:

- Lamp efficacy: 50–100 lumens per watt compared to 15-30 lumens per watt of the best halogen lamp. Allowing for smaller batteries and units and/ or remote capacity
- Operational life: 30,000+ hours, equivalent to a lifetime warranty in emergency lighting.
- Lower lamp temperature: 80-120°C (176-248°F) is a huge benefit for lighting in hazardous locations.

# MR16 LED lamp benefits

- · Reduces total cost of ownership, uses few fixture due to superior illumination, thus reducing instillations cost and future maintenance of the entire system.
- UL-recognized components.
- Available for standard battery voltages 6V, 12V and 24V as well as 120V operation.
- Energy-efficient LED MR16 lamp provides equivalent lighting performance to a much higher watt halogen MR16 lamp.
- Reduces required battery capacity by 75%, for battery units and remote heads.
- · Small profile, compact white lighting is ideal for architectural applications.
- Typical 30,000 hours of operational life.
- · Vibration-resistant LED stands up to industrial environments.
- Ideal for indoor and outdoor use.

Photometry

# Description

# 200-220-Lumen 4W MR16 LED

Leading the technology trend, Emergi-Lite® offers a complete series of 4W MR16 LED lamps available for all the standard battery voltages: 6V, 12V, 24V and 120V. With up to 30,000 hours of operational life and a luminous flux of typically 200 to 220 lumens, they are available with most emergency heads designed to hold an MR16 lamp and meet the majority of illumination specifications. For example: one pair of LED emergency heads installed at a height of 7.5ft illuminates a 6ft by 55ft path of earess.



55-ft. path of egress 2 X 4W MR16 LED Based on an average of 1 foot candle



Lamp

# 340-Lumen 5W MR16 LED

Keeping pace with technology, in 2012 we introduced a 12V-5W MR16 LED lamp. With a typical luminous flux of 340 lumens, this lamp has the same lighting performance as a 20W high-output halogen MR16. A twin emergency head installed at a height of 7.5ft illuminates 70ft path of egress, 6V-5W MR16 has been introduced in January 2020, A twin emergency head installed at a height of 7.5ft illuminates 70ft path of egress 70 ft.



70-ft. path of egress 2 X 5W MR16 LED Based on an average of 1 foot candle



# 540-590 Lumen 6W MR16 LED

A 6W MR16 LED lamp delivers up to 590 lumens for an average spacing in emergency lighting of 106 feet with an efficacy of 98.3 Lm/w, it is over 6 times the efficacy of a MR16 35W halogen with similar light output. This lamp can deliver the highest linear foot of illumination per watt on a path of egress! (spacing in feet / watt) 8.83ft compare to 1.37ft for a MR16 35W.



106-ft. path of egress 2 X 6W MR16 LED Based on an average of 1 foot candle

# Highly efficient LEDs provide many cost-saving benefits



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# Circuitry

# Advanced Diagnostics circuitry

# Self-testing & monitoring diagnostic circuitry

- By incorporating diagnostics features with a high-powered 8-bit microprocessor, our Advanced Diagnostics system ensures unsurpassed reliability in one, totally contained system. In the event of a unit malfunction, the Advanced Diagnostics system produces an audible warning in the form of an intermittent beep and the LED indicator associated with the fault will illuminate continuously. When the problem is acknowledged by depressing the alarm/silence/test button, the alarm is silenced and the LED indicator changes to a flashing mode until the problem is corrected.
- Continually monitors system parameters
- Incorporates state-of-the-art microprocessor technology
- D includes audio and visual service alarms
- DNA non-audible version for visual service alarms only
- Self-testing in accordance with NFPA101, Life Safety Code minimum 30 seconds every 30 days, 30 minutes every six months and 90 minutes annually.

# Features

# **Battery failure**

• (Red) Illuminates if the battery is shorted or battery voltage drops below preset value. Will also detect incorrect battery (ie. 6VDC vs. 12VDC)

## **Battery disconnect**

• (Red) Illuminates if the battery circuit is open.

### **Charger failure**

 (Red) Illuminates when charger is not functioning properly by monitoring the charger current.

### Lamp failure

(Red) Illuminates when one or more emergency lamps fail. Also monitors remote lamps.

## Service alarm

 (Red) Illuminates when a fault is detected that requires a qualified service technician.

## AC-on

• (Green) Lit when line voltage is present.

### Charger on

• (Amber) Illuminates when charger is recharging the battery.

## Alarm silence / manual test switch

- Button is used to acknowledge and silence audible alarms.
- Also functions as a manual test switch to simulate a power failure.

## Self testing

- Unit tests itself every thirty days for a minimum 30 seconds, thirty minutes on the sixth month and ninety minutes annually.
- Advanced Diagnostics (AD or ADNA) includes a time delay function, if needed it can be enabled/disabled in the field (15 min) or it can be preset at the factory by including the suffix AD-D\* or ADNA-D\* (\*5 min., or \*10 min., or \*15 min.)

# Pulse Type circuitry

# Prolongs the life of a battery through pulse charging

- Emergi-Lite® PulseType circuitry utilizes the latest in solid state design to provide a technically advanced charger combined with features and functions that promote long reliable battery life and excellent unit performance.
- The design of the PulseType circuit takes into account the long periods of inactivity typical of standby emergency equipment. Batteries are kept at full capacity by a pulse charge that allows the battery to cycle continuously. This greatly reduces the problem of grid corrosion and dramatically increases battery performance.
- Emergi-Lite® computer-tests all active components on the circuit boards during assembly. Critical functions such as brownout, low voltage disconnect, and charge voltage are individually monitored and adjusted at the factory.

# Features

## 120/277V input

· Capability to operate with 120Vor 277V input.

## Fused output circuit for units with remote capacity

• Emergency units up to 54W have a single fused output circuit. Units over 54W have two fused output circuits supplied standard.

### **Dual diagnostic indicator lights**

• Dual indicators, red and amber continuously monitor the condition of the battery, charge circuit and presence of AC.

# Temperature compensation

- At high ambient temperatures, batteries need less charge voltage to recharge.
- At cold temperatures, batteries require a higher charge to maintain full capacity.
- The PulseType charger automatically adjusts the charge voltage to precisely what the batteries require at a given temperature.

## Sealed relay

· Sealed relay protects against environmental contaminants.

# Low voltage battery disconnect

• The lighting load is disconnected from the battery at 87.5% of nominal battery voltage. This prevents deep discharge damage to the battery.

### **Brownout protection**

• Emergency lamps energized when AC voltage falls to approx. 80% of nominal voltage, the level at which most fluorescent and HID fixtures extinguish.

## **Battery lockout**

• This labor saving feature prevents the battery from discharging when the unit is installed to a non-energized circuit. The battery is electronically locked out until the unit is energized with AC power. Contractors do not have to return to a job site to connect batteries when the building's main power is turned on. They can install the unit and connect the battery in one convenient operation.

# **Reverse polarity protection**

- A polarized plug is used to connect the battery to the circuit board, thus preventing damage from occurring to the system.
- Current limited output (not available on all items, see specification sheet)
  Extends battery life by preventing overheating and battery gassing during recharge.

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# **Popular options**

**Emergi-Lite®** Emergency Lighting Units and Exit Signs are available with a range of options that can be added to enhance performance, simplify testing or adapt emergency battery units or exit signs for use in specific environments. Please refer to individual product pages to verify availability of individual options on specific equipment.

# Voltmeter

Option provides a visual indication, in the test mode, of the unit's battery voltage. The good/check meter face allows maintenance personnel to recognize charger and battery function. Add suffix: -V

# Ampmeter

Option provides an indication of charge current when the unit is in the equalize mode. This verifies charger capability and the current acceptance of the battery. Add suffix: -A

# Dual circuit (exit signs)

Option provides two AC input circuits to permit 2 separate AC sources to energize the sign. Add suffix: -2CKT

# Tamper proof/vandal resistant screws

Tamper proof screws may be used on certain units to avoid unauthorized entry to circuitry or vandalism. Add suffix: -VR

# Lamp Disconnect switch

Option will disconnect lamp load when area is not in use during prolonged power failure. The switch may also be used to reactivate emergency power to remote or unit heads. Add suffix: -K

# Photocell test switch

Allows for testing of an emergency battery unit, a self-powered battery back-up exit sign or combination unit by means of illuminating, with a flashlight, a photocell mounted in the bottom of the battery unit. For product compatibility please contact the factory. Add suffix: -P or -PST depending on series

# Flasher

The flasher option is used within exit signs to draw additional attention to the exit discharge area. When there is an emergency situation, the exit legend will illuminate as well as begin to flash thus drawing additional attention to the exit sign leading to a exit discharge. Add suffix: -FA

# Flasher/buzzer

The flasher/buzzer option is used within exit signs to draw additional attention to the exit discharge area. When there is an emergency situation, the exit legend will illuminate as well as begin to flash and admit an audible buzzer thus drawing additional attention to the Exit Sign leading to a exit discharge. Add suffix: -FZ

# Fire alarm activated flasher

Fire alarm activated flasher option is for an exit sign that is wired into the fire alarm system of a building via 24 volt wire. When the fire alarm is activated the exit legend will flash to draw additional attention to the exit discharge area. This flashing option will only activate when the fire system is activated. Add suffix: -FA

# Fire alarm activated flasher/buzzer

Fire alarm activated flasher/buzzer option is for an exit sign that is wired into the fire alarm system of a building via 24 volt wire. When the fire alarm is activated, the exit legend will flash and the exit sign will buzz to draw additional attention to the exit discharge area. This option will only activate when the fire system is activated. Add suffix: -FBF

# Time delay

Option is designed to be used in areas where HID type lamps are used for normal lighting. As these lamps require several minutes to re-strike and to produce their nominal lighting output, it is necessary to also hold the emergency lighting on for this period, even after the AC utility has been restored. A time delay unit can be helpful in areas where it is difficult to directly access an emergency lighting unit's test switch. The power to the unit can be briefly switched off and on at the breaker panel, and the maintenance person can then return to the unit and observe a timed emergency operation. Add suffix: -D3 (15 minutes)

## Damp location

Option for environments that are subject to moderate amounts of moisture (humidity), and a temperature range between 10°C (50°F) and 40°C (104°F). Example: partially protected exterior areas such as canopies, stairwells, etc. Add suffix: -DL

# Advanced Diagnostic circuitry (for exit signs)

Option is designed to continuously monitor the charger assembly, battery and LED assembly current. If a fault is indicated, the external service required indicator will illuminate. The diagnostic/self test will self test for minimum 30 seconds every 30 days, 30 minutes every six months and 90 minutes annually. Meets NFPA 101 Life Safety Code requirements for periodic testing.

Advanced Diagnostic (audible) Add suffix: -AD Advanced Diagnostic (non-audible) Add suffix: -ADNA

For complete details refer to page 10.

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Architectural collection

**Special Wording Series** 

Preceptor™ **Remote Capacity Series** 66







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Industrial collection

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	EXIT		66	
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80	82	84	86	88
	EXIT	EXIT		EXIT
Survive-All <sup>™</sup> SVH Series	Survive-All <sup>™</sup> SVXH Series	Survive-All™ SVX-HZ Series	Survive-All™ EF41 Series	<b>EverLite™ Series</b>
90	92	94	96	97
		101	Ę	EXIT
		EXC LED Series	EFEP Series	EFXP Series
		98	100	102

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# SPEC GRADE PRODUCTS

To meet the different needs of applications ranging from high-visibility areas in retail spaces, high-traffic areas in hotel lobbies, and extreme conditions in industrial facilities, Emergi-Lite® Specification Grade products provide a range of specialty emergency lighting equipment and exit signs.

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# **Specification Grade** Emergency Lighting Equipment

Meets specific requirements in retrofit installations, major renovations, and new construction in architectural, commercial, and industrial applications.

- Provide code-compliant path of egress lighting
- Meet photometric requirements with a selection of battery options, lamp types,
- and configurations

  Maintain aesthetics with elegant designs
- available in a variety of finishes
- Accommodate challenging installations with flexible mounting options
- Provide NEMA-certified models, NSF-approved products, and explosion-proof units for heavy-duty industrial spaces and highly demanding environments.

- The Spec Grade product range includes:
- Architectural lighting
- Commercial lighting
- Industrial lighting

Make Emergi-Lite<sup>®</sup> your source for modern, stylish, high performance emergency lighting equipment and exit signs.







02

03

# **Spec Grade** Architectural collection

For specifiers and designers who need code-compliant emergency lighting that complements lighting plans and decor

- Use fewer fixtures to provide path of egress lighting with highly efficient LED lamps
- Hide battery units with recessed emergency lighting
- Accommodate challenging installations with T-Bar mounting options
- Complement decor with elegant edge-lit and brushed metal exit signs available in a variety of finishes

01 The new RA series battery unit or remote fixture are versatile emergency lighting devices built for architectural and commercial spaces. 01

See page 18 for more information about this product



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For more architectural lighting options, see the full section of Remote Fixtures in this catalog. To use existing lighting as emergency lighting, see Mini Inverters in this catalog.

# **Table of contents** Spec Grade Architectural



**New** product

# **RA** Series

# Recessed architectural battery unit

# Construction

- Thermoplastic rectangular fixture with additional round trim-plate, white finish
- All-metal backbox enclosure
- Optional black finish
- Fixed optics, optimized light distribution for ceiling heights up to 12 ft
- Four high-intensity LEDs with redundant connections; 140 lm/W, CCT 5000K

# Options

- Standard unit 680 lumens
- Square distribution unit 717 lumens
- Plenum-rated enclosure
- · Fixed, square distribution pattern up to 12 ft. ceilings

# Mounting

- Easily spring mounted in sheetrock ceilings
- Recessed installation in T-bar suspended ceilings

# **Photometry performance**

The **RA Series** has a fixed lighting distribution, optimized by design for ceiling heights up to 12 ft. The RA Series delivers a stable and optimal illumination easy to specify. Along an office corridor the space coverage ranges from 68 to 80 feet. The square distribution pattern covers a surface of more than 700 square feet.

Table A: Standard unit 6-ft wide corridor <sup>1</sup>					
Mounting height	Lumens	Spacing center-to-center			
9 ft		68 ft			
10 ft	680	80 ft			
12 ft		72 ft			



# Electronics

- Infrared remote test control (up to 30ft)
- Self-test and diagnostic functions operated by micro-controller
- Two-wire universal AC input: 120 277VAC 50-60 Hz
- Battery full recharge in 24 hours
- 90 minutes of emergency lighting
- Optional time delay: 15 minutes
- Optional Nexus<sup>®</sup>Pro IOT emergency lighting central monitoring system
- Optional Power over Ethernet (requires a dedicated PoE switch supplied by an unswitched AC line)

# Batterv

High-temperature rated lithium battery

# Approvals

- Listed UL-924 for damp locations: 50° to 104°F (10° to 40°C)
- NSF-certified for splash non food zones.
- BC California Energy Commission Title 20

# Warranty

- Unit has a five-year limited warranty
- · Detailed warranty terms located online at:

www.emergi-lite.com/usa/files/EL\_Warranty.pdf



# Power consumption and unit rating

AC	Input		Maximum		Stand-by
AC	(VAC) Current (A) Power (W) P		Power factor	power (W)	
	120	0.03	2.0	0.6	0.5
_	277	0.02	2.8	0.5	0.5
POE		DC supply		Maxi	mum
PUE		(V)		Current (A)	Power (W)
		44-57		0.08	3

Table B: Option "square distribution pattern" – single unit coverage <sup>1</sup>					
Mounting height	Lumens	Room size	Room surface		
10 ft	717	27 ft x 27 ft	729 square feet		

<sup>1</sup>Note: Illumination levels as per the Life Safety Code (NFPA 101): Average 1 fc, Minimum 0.1 fc, Max-to-min ratio 40:1





ARCHITECTURAL

Dimensions are approximate and subject to change.



# How to order

Color	Series	Input voltage	Unit type	Options
<b>B</b> = Black	RA= Recessed	Blank= 120 to 277VAC, 50/60Hz	Blank= standard charger	Blank= no options
W= Factory white	architectural	<b>POE</b> = power over ethernet	D= advanced diagnostics, non-audible NEXP= IOT Nexus®Pro	D3= 15 minute time delay P= plenum/type IC rated SQ= Square distribution pattern
Example: WRAPOE	DD3			

# Lux-Ray™ LED Series

Die-cast aluminum LED emergency lighting – interior or exterior



# Housing

- Indoor/outdoor suitable for wet location
- Die-cast aluminum housing
- UV-resistant (3" x 1.5") polycarbonate lens

# Mounting

- Wall mount
- 1/2" rigid conduit top entry
- Universal J-box mounting pattern

# Lamp type

- Patent-pending light engine: four power LEDs with redundant connections
- 400-640 Lumens
- Color temperature: 4000K
- Optional forward-throw light distribution, for applications of outdoor egress
- Optional high-lumen output
- Optional dual-mode operation: normal and emergency LED lighting with separate AC inputs

# Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Standard Advanced Diagnostics
- 120/277 60Hz

# Approval

- UL 924 listed
- NEMA-3R rated for indoor/outdoors cold-weather wet and damp locations: -20 to 40°C (-4 to 104°F)

NEMA-3R

Patent-Pending

# Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

# Power consumption

			AC Sp	oecs: 120/277VAC	
		Normal lighting	Er	nergency lighting	6-12VDC remote
Model	Current (max)	Power (max)	Current (max)	Power (max)	Power (max)
ACSD, SD, SD-H	0.12/0.06A	12W	0.05/0.02A	12W	-
SD-CW	_	_	0.15/0.07A	16W	-
ACSD-CWP, -CWRC <sup>1</sup>	_	_	0.22/0.10A	24W	-

<sup>1</sup>Note: ACSD cold weather models must be powered only from the unswitched emergency AC line

# Colors





Off-white



Dimensions

Dimensions are approximate and subject to change.



Photometric performance - Forward throw



Table A – Spacing for minimum illumination = 1FC (1 foot-candle)

				Width >	( length (ft)
Model type	Mounting height	Lumen	Color temperature	Single unit	Center-to- center
Standard	9'	400	4000K	4' x 28'	4' x 32'
With option -H	11'	550		4' x 32'	4' x 40'
With option -FT	12'	460		4' x 22'	_
With option -FTH	15'	640		4' x 27'	_

Photometric performance – Wide beam



Table B - Spacing for NFPA101 - Average = 1FC (1 foot-candle)

				Width X	( length (ft)
Model type	Mounting height	Lumen	Color temperature	Single unit	Center-to- center
Standard	9'	400	4000K	6' x 50'	4' x 32'
With option -H	11'	550		6' x 60'	4' x 40'
				_	3' x 70'
With option -FT	12'	460	-	6' x 40'	_
With option -FTH	15'	640		6' x 50'	_

## How to order

Color	Series	Model	Options
B= Black BZ= Dark bronze OW= Off-white PG= Platinum gray Example: BZLUX	LUX= Lux-Ray LED	SD= Self-powered & diagnostic [-4-122°F (-20-50°C)] ACSD= Dual-mode AC / self-powered & diagnostic -4-104°F (-20-40°C)	<ul> <li>-CW= Cold weather [-40-86°F (-40-30°C) not available with option -H]</li> <li>-D3= Time delay (15 minutes)</li> <li>-FT= Forward throw lighting</li> <li>-H= High lumen output (max. 86°F/30°C; model SD only)</li> <li>-P= Photocell (ACSD only)</li> <li>-RC= Remote control test switch - infrared<sup>1</sup></li> </ul>

<sup>1</sup>For ACSD model only, remote control keypad (TB-RC1-E) ordered separately

The unseen solution – generator capable 12V up to 100W capacities



# Housing

- Galvanized steel back-box
- Easy access to internal components
- Head assembly door and trim plate powder coated in a white finish
- Finish can be customized on site with paint or wallpaper
- Choice of various 12 volt MR16 LED lamp wattages
- Complete 360° head assembly door rotation
- Slip gear mechanism protects unit and objects against forcible stops

# Mounting

- Recessed mount into ceiling or wall with cavities
- Special bar hangers included for installation in sheet rock or T-bar ceilings
- Can be installed on the wall stud or ceiling beam with simple, U-shape bracket
- Head assembly includes keyhole slot and quick-connect plugs for easy installation

# Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Standard Advanced Diagnostics
- 120/277 60Hz

# Choice of sealed maintenance-free battery

- 12V lead-calcium battery
- 12V nickel-cadmium battery

# Approvals

- CSA-US (to UL 924 standards)
- NYC approved
- BC California Energy Commission Title 20

# Warranty

• Unit has a five-year limited warranty

Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



# Photometric performance

	Spacing center-to-cent		
Lamp	7' mounting height	15' mounting height	
LG	55'	43	
LI	71'	56	
LJ	100'	85	



ARCHITECTURAL

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# Dimensions

Dimensions are approximate and subject to change.

### Charger & battery compartment: For use in walls or ceilings with a cavity, no

For use in walls or ceilings with a cavity, not for use in block walls or solid ceilings.



# Power consumption

		Maximum		Stand-by <sup>1</sup>
Non-CEC models	Input current	Input power	Input current	Input power
120V	0.25A	30W	0.1A	11W
277V	0.12A	30W	0.05A	11W
		Maximum		Stand-by <sup>1</sup>
CEC models	Input current	Input power	Input current	Input power
120V	0.25A	30W		0.79W
277V	0.12A	30W		0.79W

<sup>1</sup>Stand-by power consumption is 50% lower for lead-calcium batteries

# Unit rating

	Watts to 87-1/2% of rated battery voltage <sup>1</sup>					
Model	1-1/2 hrs	2 hrs	4 hrs	8 hrs		
RTM40, RTN40	40	30	24			
RTM70, RTN70	70	50	40	24		
RTM100, RTN100	100	70	50	40		

Accessories (order as a separate item	Accessories	(order as a	separate item
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Description	Suffix
Remote test switch (metal face plate)	RTS
Remote test switch (plastic face plate)	RTS-1

<sup>1</sup>National Electrical Code specification

# How to order – Battery unit / AC remote fixture

Series	Battery type	Unit capacity	Lamp type/wattage	Options	Approval
RT	M= Lead-calcium	<b>40</b> = 12V-40W	-2 (LG)= 12V-4W, MR16 LED	<b>AD</b> = Advanced Diagnostics (audible) <sup>1</sup>	-CEC= CEC Title 20
	N= Ni-Cd	<b>70</b> = 12V-70W	-2 (LI)= 12V-5W, MR16 LED	ADNA= Advanced Diagnostics (non-audible) <sup>1</sup>	for California <sup>3</sup>
		<b>100</b> = 12V-100W	-2 (LJ)= 12V-6W, MR16 LED	DL= Damp location <sup>2</sup>	
Examp	le: RTM100-2(LJ)-D3			<b>X</b> = Back box shipped separately	

Series	Input voltage	Lamp type/wattage	Options
RTG= Remote AC	<b>1</b> = 120VAC, 60Hz	-2(LG)= 12V-4W, MR16 LED	<b>DL</b> = Damp location
generator	<b>2</b> = 277VAC, 60Hz	-2(LI)= 12V-5W, MR16 LED	<b>X</b> = Back box shipped separately
Example: RTG1-2(LG)		<b>-2(LJ)</b> = 12V-6W, MR16 LED	

<sup>1</sup>AD & ADNA include a time delay feature that can be enabled/disabled in the field or set by the factory <sup>2</sup>Available on all models except Ni-Cd 100W <sup>3</sup>Available with lead-calcium models only

# Mini-Revelation<sup>™</sup> Series

The full retrofit unseen solution – 12V-40W capacities



# Housing

- Galvanized steel back-box
- Easy access to internal components
- Head assembly door and trim plate powder coated in a white finish
- Finish can be customized on site with paint or wallpaper
- Choice of various 12 volt MR16 LED lamp wattages
- Complete 360° head assembly door rotation
- Slip gear mechanism protects unit and objects against forcible stops

# Mounting

- Recessed wall with cavity mount (retrofit into finished wall)
- Designed to install into an 8-1/4" by 5-3/4" inch opening
- Key-hole slot for ease of installation

# Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Standard Advanced Diagnostics
- 120/277 60Hz

# Choice of sealed maintenance-free battery

- 12V lead-calcium battery
- 12V nickel-cadmium battery

# Approvals

- CSA-US (to UL 924 standards)
- NYC approved
- BC California Energy Commission Title 20

# Warranty

- Unit has a five-year limited warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

# Photometric performance

	Spacing center-to-center (fo		
Lamp	7' mounting height	15' mounting height	
LG	55'	43'	
LI	71'	56'	
LJ	100'	85'	



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# **Power consumption**

			Maximum	Stand-	by (Ni-Cd, NiMH) <sup>1</sup>
Non-CEC models	AC input	Input current	Input power	Input current	Input power
MRT40	120VAC	0.25A	30W	0.1A	11W
MR140	277VAC	0.12A	30W	0.05A	11W
MRTG	120VAC	0.95A	110W <sup>2</sup>	_	_
	277VAC	0.45A	110W <sup>2</sup>	_	_
			Maximum		Stand-by
CEC model	AC input	Input current	Input power		Input power
MRTM40	120VAC	0.25A	30W		0.79W
MRTM40	277VAC	0.12A	30W		0.79W

<sup>1</sup>Stand-by power consumption is 50% lower for lead-calcium batteries

<sup>2</sup>Maximum power when equipped with 2 x 50W lamps (generator unit)

# Unit rating

	Watts	to 87-1/2% of	rated battery	/ voltage <sup>1</sup>
Model	1-1/2 hrs	2 hrs	4 hrs	8 hrs
MRT-40	40	30	24	_

		_

Description	Suffix
Remote test switch (metal face plate)	RTS
Remote test switch (plastic face plate)	RTS-1

<sup>1</sup>National Electrical Code specification

## How to order

Series	Battery type	Unit capacity	AC input	Lamp type/wattage	Options	Approval
Battery	M= Lead-calcium	<b>40</b> = 12V-40W		-2 (LG)= MR16 LED, 12V-4W	-AD= Advanced Diagnostics (audible) <sup>1</sup>	-CEC= CEC
unit= MRT	N= Nickel-Cd		120/277VAC	-2 (LI)= MR16 LED, 12V-5W	-ADNA= Advanced Diagnostics (non-audible) <sup>1</sup>	Title 20 for
				-2 (LJ)= MR16 LED, 12V-6W	<b>-DL</b> = Damp location (only MRTN40) <sup>2</sup>	California <sup>3</sup>
Generator	<b>G</b> = Remote AC	Blank= Max.	<b>1</b> = 120VAC	-2 (LG)= 12V-4W, MR16 LED	-DL= Damp location	
unit= MRT	generator		2= 277VAC	-2 (LI)= 12V-5W, MR16 LED		
	<u>j</u>			-2 (LJ)= 12V-6W, MR16 LED		
Example: I	MRTM40-2(LJ)-AD	NA				

<sup>1</sup>AD & ADNA include a time delay feature that can be enabled/disabled in the field or set by the factory <sup>2</sup>Available with nickel-cadmium only

<sup>3</sup>Available with lead-calcium models only

# Accessories (order as a separate item)

Designed for fully recessed installation in walls or ceilings





# Housing

- Steel housing
- Standard off-white finish, optional black finish
- Lighting heads, available in thermoplastic or decorative die-cast aluminum
- Choice of MR16 LED lamp wattages

# Mounting

- Fully recessed ceiling or wall-mount
- Hanger bars included for lay-in installation in T-bar grid
- Suitable for sheet rock installation

# Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- 120/277 60Hz

# Choice of sealed maintenance-free battery

- 6V or 12V lead-calcium battery
- 12V nickel-cadmium battery

# Approvals

- UL 924 listed
- NYC approved

# Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

# Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'
LG	55'	43'
LI	71'	56'
LJ	100'	85'



ARCHITECTURAL

# Dimensions

Dimensions are approximate and subject to change.



Unit rating

	DC				Battery capac	ity in watts
Sealed maintenance-free battery types	voltage	Model number	1 1/2 hrs	2 hrs	3 hrs	4 hrs
	6	RSM18	18	12	9	_
Lead-calcium	12	12RSM36	36	25	20	14
Nickel-cadmium	12	12RSC50	50	36	25	18

# Accessories (order as a separate item)

Description	Suffix
Wire guard	WG6-E
Remote test switch (metal face plate)	RTS
Remote test switch (plastic face plate)	RTS-1

# How to order

Color	Series/battery type	# of heads	Head style	Lamp type/wattage	Options
Blank= Factory	Lead-calcium	-0= No head	10= EF10 mini plastic	<b>LA</b> = 6V-4W, MR16 LED	Blank= No options
white	<b>RSM18</b> = 6V-18W	-2= Two heads	MR16	<b>LB</b> = 6V-5W, MR16 LED	-AD = Advanced Diagnostics
B= Black	12RSM36= V12V-36W		<b>150</b> = EF150 deco heads	LG= 12V-4W, MR16 LED	(audible)
enclosure			MR16	<b>LI</b> = 12V-5W, MR16 LED	-ADNA= Advanced Diagnostics
	Nickel-cadmium			<b>LJ</b> = 12V-6W, MR16 LED	(non-audible)
	12RSC50= 12V-50W				-D3= Time delay (15 minutes) <sup>1</sup>

Example: RSM18-2150LB-AD

<sup>1</sup>Time delay available with AD or ADNA models only.

AND NO

# **TS Series**

Designed for unobtrusive use in T-bar ceilings

# Housing

- Steel housing
- Standard off-white finish, optional black finish
- Lighting heads, available in thermoplastic or decorative die-cast aluminum
- Choice of MR16 LED lamp wattages

# Mounting

- Fully recessed ceiling
- Hanger bars included for lay-in installation in t-bar grid

# Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus<sup>®</sup> monitoring system
- 120/277 60Hz

# Choice of sealed maintenance-free battery

- 6V or 12V lead-calcium battery
- 12V nickel-cadmium battery

# Approvals

- UL 924 listed
- NYC approved

# Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

nexus AD

# Photometry performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'
LG	55'	43'
LI	71'	56'
LJ	100'	85'



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# Dimensions

Dimensions are approximate and subject to change.



Unit rating

			Battery capacity in watts			
Sealed maintenance-free battery types	DC voltage	Model number	1 1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-calcium	6	TSM18	18	12	10	7
Lead-calcium	12	12TSM36	36	25	20	14
Nickel-cadmium	12	12TSC50	50	36	25	18

# Accessories (order as a separate item)

Description	Suffix
Remote test switch (metal face plate)	RTS
Remote test switch (plastic face plate)	RTS-1

# How to order

Series	Series/battery type/capacity	# of heads	Head style	Lamp type/wattage	Options
Blank=	Lead-calcium	<b>-0</b> = No head	<b>10</b> = EF10 mini	<b>LA</b> = 6V-4W,	-AD= Advanced Diagnostics
Factory white	TSM18= 6V-18W lead-calcium	-2= Two heads	plastic MR16	MR16 LED	(audible) <sup>1</sup>
B=Black	12TSM36= 12V-36W lead-calcium		<b>150</b> = EF150	<b>LB</b> = 6V-5W,	-ADNA= Advanced Diagnostics
enclosure			heads MR16	MR16 LED	(non-audible) <sup>1</sup>
	Nickel-cadmium			<b>LG</b> = 12V-4W,	-D3= Time delay (15 minutes) <sup>2</sup>
	12TSC50= 12V-50W nickel-cadmium			MR16 LED	-NEX= Nexus® wired
				LI= 12V-5W,	(consult your sales
				MR16 LED	representative)
				<b>LJ</b> = 12V-6W,	-NEXRF= Nexus® wireless
				MR16 LED	(consult your sales representative)

# Example: BRSM18-210LA-AD

<sup>1</sup>Minimum lamp load required: 20% of unit capacity. <sup>2</sup>Time delay available with AD or ADNA models only.

# Prestige<sup>™</sup> Edge-Lit Series

Premium die-cast aluminum exit sign



# Mounting configurations





nexus **AD** 

Recessed ceiling mount

# Construction

- · Housing, trim plate, trim ring and canopy made of die-cast aluminum
- U-shaped clear acrylic Legend panel features laser-etched letters and chevrons
- 6 inch EXIT lettering legend, available in red or green
- 8 inch EXIT lettering legend, available in red
- Choice of finishes: white, black or brushed aluminum, polished brass, polished chrome or bronze

# Mounting

- Modular design allows for surface or recessed mount
- Canopy included for surface wall, end or ceiling mount applications
- Trim ring included for recessed wall or ceiling mount applications.
- Housing provided with conduit knock-out 1/2", top, back and end
- (C) circular or (A) angular trim plate used for surface or recessed wall or ceiling mount applications
- Hanger bars included for lay-in installation in T-bar grid

# Special wording panels

· Available. Contact your sales representative with your design requirements

# Electronics

- Optional Advanced Diagnostics
- Optional Nexus<sup>®</sup> monitoring system
- 120-277 50/60Hz

# Approvals

- UL 924 listed
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

# Warranty

· Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



Recessed wall mount

Ε



Surface ceiling mount

Surface end mount

# Surface wall mount **Trim plates**

**Recessed models** 









# Arrow (chevron) designation



left (L)

Arrow right & left (RL) represents arrow (D) each side of a double face panel

<EXIT

EXIT>

Wording and chevrons not to scale. For illustration purposes only.

Double

# **Housing color**

Arrow

riaht (R)







Dark bronze (painted)



30

Polished brass

Polished chrome

Angular trim plate

ARCHITECTURAL

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# Dimensions

Dimensions are approximate and subject to change.



# Power consumption

Model		AC specs		DC specs
AC-only	120 to 277VAC, 50/60Hz	Less than 1.4W	_	_
AC/DC-remote	120 to 277VAC, 50/60Hz	Less than 1.4W	6 to 24VDC	Less than 1.4W
Self-powered	120 to 277VAC, 50/60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes
Self-powered diagnostic	120/277VAC, 50/60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes

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Accessories (order as a separate item)

Description	Suffix <sup>1</sup>
White pendant	P*-WT
Black pendant	P*-BK
Gray pendant	P*-GY

<sup>1</sup>Custom pendant lengths and colors available, specify (12", 24", 36", etc.)

# How to order

Housing color	Series	Faces	Designation	Legend color	Background color	Arrows
Blank= Brushed aluminum W= White B= Black PB= Polished brass CH= Polished chrome BR= Bronze	LX= AC-only LXN= Self-powered	1= Single face 2= Double face	N= New design	R= Red G= Green	C= Clear (single face only) W= White M= Mirror	Blank= No arrow D= Double arrow L= Arrow left R= Arrow right RL= Right & left (double face) UA= Universal field installed arrows
Example: WLXN2N	Trim	Mounting	Options			Legend size
	-C= Circular -A= Angular IRWRL-A-D	Blank= Universal mount		vired <sup>1</sup> (consult you <sup>®</sup> wireless <sup>1</sup> (consu d diagnostic <sup>1</sup> note 6-24 VDC wuzzer <sup>1</sup>	ır sales representative) It your sales representative)	Blank= 6" EXIT legend -8= 8" EXIT legend (red only) -LP= Panel shipped separately -X= Back box shipped separately

# Prestige™ X40 Series

Edge-lit recessed ceiling-mount exit sign



# Construction

- Trim plate, trim ring and canopy made of die-cast aluminum
- U-shaped clear acrylic Legend panel features laser-etched letters and chevrons
- + 6 inch EXIT lettering legend, available in red or green
- 8 inch EXIT lettering legend, available in red
- Choice of finishes: white, black or brushed aluminum, polished brass, polished chrome or bronze

# Mounting

- Hanger bars included for lay-in installation in t-bar grid
- Housing provided with conduit knock-out 1/2", top, back and end
- Flat trim plate used for recessed ceiling mount only applications

# Special wording panels

• Available. Contact your sales representative with your design requirements

# Electronics

- Optional Advanced Diagnostics
- Optional Nexus<sup>®</sup> monitoring system
- 120-277 60Hz

# Approvals

- UL 924 listed
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

# Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Power consumption

Model		AC specs		DC specs
AC-only	120 to 277VAC, 60Hz	Less than 1.4W	-	_
AC/DC-remote	120 to 277VAC, 60Hz	Less than 1.4W	6 to 24VDC	Less than 1.4W
Self-powered	120 to 277VAC, 60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes
Self-powered diagnostic	120/277VAC, 60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes

# Housing color



White

Black





Dark bronze (painted)

nexus 🗚

Dimensions

Dimensions are approximate and subject to change.



# Arrow (chevron) designation



Wording and chevrons not to scale. For illustration purposes only.

# Accessories (order as a separate item)

Suffix <sup>1</sup>
Contact your sales representative
ТВН

<sup>1</sup>Bar hangers supplied with unit, order as replacement only

# How to order

Housing	Series	Faces	Designation	Legend color	Background color
Blank= Brushed aluminum	LX= AC-only	40= Less panel	N= New design	R= Red	<b>C</b> = Clear (single face only)
<b>W</b> = White	LSNX= Self-powered	42= Single face		G= Green	<b>W</b> = White
<b>B</b> = Black		43= Double face			<b>M</b> = Mirror
PB= Polished brass CH= Polished chrome	Arrows	Options			Legend size
BR= Bronze	Blank= No arrow	Blank= No option	1		Blank= 6" EXIT legend
	<b>D</b> = Double arrow	-AD= Advanced Diagnostics (non-audible) <sup>1</sup>			-8= 8" EXIT legend (red only)
	L= Arrow left	-NEX= Nexus® wired <sup>1</sup>			-LP= Panel shipped separately
	<b>R</b> = Arrow right	-NEXRF= Nexus <sup>®</sup> wireless <sup>1</sup>			-X = Back box shipped separately
	RL= Right & left	-DC= AC/DC remote 6-24 VDC			
	(double face)	-FA= Fire alarm <sup>1</sup>			
	<b>UA</b> = Universal field	-FZ= Flasher & bu	izzer <sup>1</sup>		
Example: WLSNX42NRWR-	installed arrows	-2CKT= Two circu	it, AC only		

# Prestige™ DX Series

Die-cast exit sign



# Construction

- Faceplate, backplate and canopy are made of die-cast aluminum
- 6 inch EXIT lettering legend, available in red or green
- 8 inch EXIT lettering legend, available in red
- Choice of finishes: white, black, brushed aluminum or dark bronze

# Mounting

- Surface mount
- Canopy included for end or ceiling mount applications
- Universal J-box mounting

# Special wording panel

• Available. Contact your sales representative with your design requirements

# Electronics

- Standard Advanced Diagnostics on DXN
- Optional Nexus® monitoring system
- 120-277 50/60Hz
- Compatible with Emergi-lite Mini Inverters (contact your sales representative for more information)

nexus AD

# • Approvals

- CSA-US (To UL 924 standards)
- Damp location optional (50°F to 104°F)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

# Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

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# Power consumption

Model 6"	AC specs	, in the second s	DC specs
AC/DC-remote	120 to 277VAC, 50/60Hz	6 to 48VDC	Less than 1.5W
Self-powered	120 to 277VAC, 50/60Hz	Nickel-cadmium battery	Min. 90 minutes
Model 8"	AC specs		DC specs
AC/DC	120 to 277VAC, 50/60Hz	6 to 24VDC	1.6W
Self-powered	120 to 277VAC, 50/60Hz	Nickel-cadmium battery	Min. 90 minutes

# Color frame/faceplate colors



Black







(painted)

ARCHITECTURAL

# Dimensions

Dimensions are approximate and subject to change.



# **Cabinet information**

	Dime		
Letters	А	В	
6"	8-7/8"	13-1/16"	
8"	10-1/2"	15-1/4"	

# Accessories (order as a separate item)

Description	Suffix
White pendant	PDW <sup>1</sup>
Black pendant	PDB <sup>1</sup>
Pendant mount gray	PDGY <sup>1</sup>
Wire guard (wall mount) (6 in.)	WG12-E
Wire guard (ceiling mount) (6 in.)	WG5-E
Wire guard (end mount) (6 in.)	WG5-E
1Specify pendant length (12" 24" 26" etc.)	

<sup>1</sup>Specify pendant length (12", 24", 36", etc.)

# How to order

Color frame/faceplate	Series	# of faces	Legend color	Letters
Blank= Black/brushed aluminum	DXN= Self-powered unit	1= Single face	R= Red	Blank= 6" letters
<b>WW</b> = White/white <b>WA</b> = White/brushed aluminum	DX= AC/DC <sup>1</sup>	2= Double face	<b>G</b> = Green	8= 8" letters
<b>BZ</b> = Bronze/bronze			Open face <sup>2</sup>	
<b>BB</b> = Black/black			RW= Red on white	
AA= All brushed aluminum			<b>GW</b> = Green on white	
	Diagnostic options	Options		Version
	Diagnostic options Blank= Standard	Options Blank= Standard		Version -N= New design <sup>3</sup>
		•		
	Blank= Standard	Blank= Standard	rews	
	Blank= Standard	Blank= Standard DL= Damp location VR= Vandal resistant so	rews ield with tamper proof screws	- <b>N</b> = New design <sup>3</sup>
	Blank= Standard	Blank= Standard DL= Damp location VR= Vandal resistant so VR1= Polycarbonate sh		- <b>N</b> = New design <sup>3</sup>

<sup>1</sup>Not available with Nexus® wired option <sup>2</sup>Open face required for special wording, only available on 6" models <sup>3</sup>Not required for 8" letters

# Prestige<sup>™</sup> Floor Proximity Series

Master with remote floor proximity LED exit



# Prestige™ DX, DXN "Master" & LL "Floor Proximity" Tandem Exit Signs (must be ordered together)

# Construction

- DX, DXN "Master" exit faceplate, backplate and canopy are made of die-cast aluminum
- DX, DXN offers 6 inch EXIT lettering legend, available in Red or Green
- LL "Floor Proximity" exit faceplate is made of die-cast aluminum; backbox is made of steel
- LL offers 6 inch EXIT lettering legend, available in red or green
- · Choice of finishes: white, black or brushed aluminum
- Red or green long-life light emitting diodes (LED) illumination

# Mounting

- DX, DXN surface mount
- Canopy included for ceiling mount applications
- · Backplate features universal knockouts for a standard 4 inch junction box, used in wall mount applications
- LL surface mount or recessed mount
- Single face model only

# Chevrons

- DX, DXN faceplate includes two field-selectable, knock-out chevron indicators
- LL faceplate does not include chevron indicators

# Self-Diagnostics

• DXN self-powered model standard with Advanced Diagnostics

# Special wording panel

Not available

# Electronics

- Standard Advanced Diagnostics on DXN
- Optional Nexus® monitoring system
- 120-277 60Hz
- · AC Models compatible with Emergi-Lite Mini Inverters to a maximum of 20% of the mini inverter's capacity

# Approvals

- CSA-US (to UL 924 standards)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards

# Warranty

· Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Color	Model		AC specs		DC specs
	AC-only	120/277VAC, 60Hz	1.3W	-	-
Red	AC-2 circuit	120/277 & 277/277VAC, 60Hz	2.6W	-	-
	Self-powered	120/277VAC, 60Hz	3.8W	Ni-Cd battery	Min. 90 minutes
	AC-only	120/277VAC, 60Hz	1W	-	-
Green	AC-2 circuit	120/277 & 277/277 VAC, 60Hz	3.3W	_	_
	Self-powered	120/277VAC, 60Hz	5W	Ni-Cd battery	Min. 90 minutes

# **Housing colors**

**Power consumption** 



Brushed aluminum

White
### Dimensions

Dimensions are approximate and subject to change.



### How to order for a typical application:

### Self-powered master with floor proximity unit



120/277 Volt input 2 circuit			AC-only master Example model #: DX1G-M-2CKT-N
			Low voltage wire
NOTE: Must install each floor proximity unit along with one master unit		E	Floor proximity Surface or recessed
_	<u>.</u>	Exam	ple model #: LLGS

Features (optional)

Description	Suffix	D
Vandal-resistant shield and screws	VR1	v

	-	-	
Descriptio	n		

Accessories (order as a separate item)

Suffix	Description	Suffix
VR1	Wire guard (for floor proximity recessed)	WG11-E

How to order - self-powered master (unit for above door)

Color option prefix	Series	Faces	Stencil face lamp color	Master unit	Standard series designator
Blank= Brushed alum. face, black body	DXN	1= Single face 2= Double face	<b>R</b> = Red <b>G</b> = Green	-м	-N
<b>WW</b> = All white <b>BB</b> = All black			<b>RW</b> = Red/white <b>GW</b> = Green/white		Example: DXN1G-M-N

How to order - AC-only master (unit for above door)

Color option prefix	Series	Faces	Stencil face	Master unit	Option	Standard series designator
Blank= Brushed alum. face, black body WW= All white BB= All black	DX	<b>1</b> = Single face <b>2</b> = Double face	<b>R</b> = Red <b>G</b> = Green <b>RW</b> = Red/white <b>GW</b> = Green/white	-M	Blank= AC only	-N Example: DX1G-M-N

How to order - floor proximity unit (unit on side of door)

Color option prefix	Series	Stencil face lamp color <sup>1</sup>	Mounting	Option
Blank= Brushed alum. face, black body W= All white B= All black	LL	<b>R</b> = Red G= Green <b>RW</b> = Red/white <b>GW</b> = Green/white	<b>R</b> = Recessed <b>S</b> = Surface	-VR1= Vandal-resistant screws/ polycarbonate shield Example: LLGS-VR1

<sup>1</sup>Open face required for special wording (please contact your sales representative)

### AC-only master with floor proximity unit 2 circuit application

# **Spec Grade** Commercial collection

Ideal for contractors, the commercial collection includes emergency lighting that meets performance and design criteria

- Provide a cohesive look with coordinating emergency lights, exit signs, and combination units in the same design series
- Offer durability and vandal resistance with thermoplastic housings and steel battery enclosure units
- Accommodate challenging installations with multiple mounting options
- · Complement decor and meet specialized requirements with elegant die-cast exit signs and special wording custom signage

01 JS-HP Series -Steel housing 12V up to 40W capacities lead-calcium or nickel-cadmium battery high performance LED heads, suitable for NEMA 1 location

See page 50 for more information





Ideal for commercial spaces such as

- Convenience stores
- Storage rooms
- Lobbies
- Offices
- Schools

# **Table of contents** Spec Grade Commercial

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COMMERCIAL

### **Premier™ Compact Series**

Thermoplastic Compact Housing



### Housing

- UV stabilized corrosion resistant thermoplastic enclosure
- Available in white or black
- Clear scratch resistant polycarbonate lens covers

### Mounting

- Wall mount
- Optional: ceiling mount and pendant mount
- Universal J-box mounting

### Lamp type

Choice of MR16 LED lamp wattages

### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus<sup>®</sup>Pro IoT monitoring system
- Optional Nexus<sup>®</sup> wired and wireless monitoring system
- 120/277 60Hz

### Choice of battery

- 6V or 12V lead-calcium battery
- 6V or 12V nickel-metal hydride battery

### Approvals

- UL 924 listed
- UL 94-5VA flame rated thermoplastic housing
- Damp location listed (50°F to 104°F) (10°C to 40°C)
- BC California Energy Commission Title 20

### Warranty

 Unit has a five-year warranty (excluding lamps and fuses)<sup>1</sup> Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

nexus 🗚 (BC) Nexus®Pro 🚯

<sup>1</sup>For LED lamps warranty, refer to page 202 paragraph 3.3

### Photometric performance

	Spacing center-to-center (feet)					
Lamp	7' mounting height	15' mounting height				
LA	39'	34'				
LB	74'	57'				
LG	49'	39'				
LI	68'	54'				
LJ	89'	80'				

### **Housing color**





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COMMERCIAL

Dimensions are approximate and subject to change.



### Unit rating - non-CEC models

		AC Specs				Batt	ery capacity	in watts
Series	AC input	Maximum	Battery type	Voltage	1-1/2 hrs	2 hrs	3 hrs	4 hrs
MPR10M		0.12 / 0.5A		6V-10W	10W	7.5W	5W	3.3W
12MPR12M		0.20 / 0.09A	Lead-calcium	12V-12W	12W	9W	6W	4W
12MPR20M	100/0770/06 600	0.20/ 0.09A		12V-20W	20W	15W	10W	6.5W
MPR12H	120/277VAC, 60Hz	0.21 / 0.5A		6V-12W	12W	9W	6W	4W
12MPR12H		0.12 / 0.5A	Nickel-metal hydride	12V-12W	12W	9W	6W	4W
12MPR24H		0.12 / 0.5A		12V-24W	24W	18W	12W	8W

### Unit rating - CEC models

					Watt	s to 87.5% of	rated battery	voltage1
Series	AC sp	ecs	AC power stand-by	Voltage	1-1/2 hrs	2 hrs	3 hrs	4 hrs
MPR10M		0.06 / 0.03A	0.5W	6V-10W	10W	7W	5W	_
12MPR12M	120/277VAC	0.1 / 0.05A	0.6W	12V-12W	12W	9W	6W	4W
12MPR20M		0.1 / 0.05A	0.6W	12V-20W	20W	15W	10W	6W

<sup>1</sup>National Electrical Code specification

#### How to order

Housing color	Series/capacity	# of lamps	Lamp type/wattage	Unit type	Options	Approval
Blank= White	MPR10M= 6V-10W	Blank= No head	<b>LA</b> = 2 X 6V-4W,	Blank= Standard	Blank= No option	-CEC= CEC
B= Black	lead-calcium	<b>2</b> = 2 heads	MR16 LED	-D = Advanced Diagnostics	-CM= Ceiling mount	Title 20 for
	12MPR12M= 12V-12W		<b>LB</b> = 2 X 6V-5W,	(non-audible)	-DL= Damp location <sup>2</sup>	California⁵
	lead-calcium		MR16 LED	-DA= Advanced Diagnostics	-D3= Time delay	
	12MPR20M= 12V-20W		LG= 2 X 12V-4W,	(audible)	(15 minutes)	
	lead-calcium		MR16 LED	-NEX= Nexus® wired <sup>1</sup>	-PM= Pendant mount <sup>3</sup>	
	MPR12H= 6V-12W		LI= 2 X 12V-5W,	-NEXP= Nexus®Pro IoT <sup>1</sup>	-LC= Line cord	
	nickel-metal hydride		MR16 LED	-NEXRF= NEXUS® wireless <sup>1</sup>	(maximum 120V only)	
	12MPR12H= 12V-12W		LJ= 2 X 12V-6W,		-15= 120/208/220-240V	
	nickel-metal hydride		MR16 LED		50/60Hz input⁴	
	12MPR24H= 12V-24W					
	nickel-metal hydride					
Example: 12M	IPR12M2LJ					

<sup>1</sup>Consult you sales representative

<sup>2</sup>Not available in MPR10M

<sup>3</sup>Pendant kit sold separately <sup>4</sup>Not available with -NEX, -NEXP and -NEXRF <sup>5</sup>Available with lead-calcium models only

### **Premier™ Series**

Designed with aesthetics, ease of installation and performance in mind

COMMERCIAL



### Housing

- White or black UV stabilized thermoplastic enclosure
- Clear polycarbonate lens covers
- Choice of MR16 LED lamp wattages

### Mounting

- Wall mount, ceiling mount and pendant mount (optional)
- Universal J-box mounting

### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus® monitoring system
- 120/277 60Hz

### **Choice of battery**

- 6V or 12V lead-calcium battery
- 6V or 12V nickel-cadmium battery

### Approvals

- UL 924 listed
- UL 94, 5VA flame rated thermoplastic housing
- Damp location optional (50°F to 104°F)

### Warranty

- Unit has a five-year warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

nexus AD

### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'



### **Housing color**





COMMERCIAL

### Dimensions

Dimensions are approximate and subject to change.



### Wire guards

Catalog number	Mounting
WG1-E	Wall mount
WG5-E	Ceiling mount

### Power consumption and unit rating

					Battery capacity in watts		
Model		AC specs	1-1/2 hrs	2 hrs	3 hrs	4 hrs	
60M	6V	120/277VAC, 60Hz	60	40	30	20	
40M	12V		40	30	20	15	
72M	12V		72	54	36	27	
20NC	6V	120 (277) (4 6 (0))-	20	15	10	8	
40NC	12V	120/277VAC, 60Hz —	40	30	20	15	

#### How to order

Housing color	Series/capacity	# of lamps	Lamp type/wattage	Unit type	Options
Blank= White	Lead-calcium	Blank= No head	<b>LA</b> = 6V-4W,	Blank= Standard	Blank= No option
B= Black	<b>PR60M</b> = 6V-60W	<b>2</b> = 2 heads	MR16 LED	<ul> <li>-D = Advanced Diagnostics</li> </ul>	-CM= Ceiling mount
	lead-calcium <sup>1</sup>		LB= 6V-5W,	(non-audible) <sup>2</sup>	-D3= Time delay (15 minutes)
	12PR40M= 12V-40W		MR16 LED	-DA= Advanced Diagnostics	-DL= Damp location
	lead-calcium		LG= 12V-4W,	(audible) <sup>2</sup>	50°F to 104°F (10°C to 40°C)
	12PR72M= 12V-72W		MR16 LED	-NEX= Nexus® wired	-PM= Pendant mount
	lead-calcium		LI= 12V-5W,	(contact your sales	
			MR16 LED	representative) <sup>2</sup>	
	Nickel-cadmium		<b>LJ</b> = 12V-6W,	-NEXRF= NEXUS® wireless	
	PR20NC= 6V-20W		MR16 LED	(contact your sales	
	nickel-cadmium			representative) <sup>2</sup>	
	12PR40NC= 12V-40W				
	nickel-cadmiun	า			
Example: PR6	60M2LA				

<sup>1</sup>Not available with damp location <sup>2</sup>Minimum lamp load required: 20% of unit capacity

### **Premier™ Combination Series**

Specification-grade, LED, thermoplastic, snap-together combination unit





01 Remote capable exit sign



### Construction

- White or black UV stabilized thermoplastic enclosure
- Clear polycarbonate lens covers
- Choice of MR16 LED lamp wattages
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

### Mounting

- Surface mount
- Canopy included for ceiling mount applications
- Universal J-box mounting

### **Choice of battery**

- 6V or 12V lead-calcium battery
- 6V or 12V nickel-metal hydride battery

### Special wording panels

• Available, contact your sales representative with your design requirements

### Electronics

- Optional Advanced Diagnostics
- Optional Nexus®Pro IoT monitoring system
- Optional Nexus<sup>®</sup> wired and wireless monitoring system
- 120/277 60Hz

### Approvals

- UL 924 standards listed
- Nickel-metal hydride battery combination units UL listed for damp location (50°F to 104°F, 10°C to 40°C)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards

### Warranty

• Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Photometric performance

	Spacing center-to-				
Lamp	7' mounting height	15' mounting height			
LA	39'	34'			
LB	74'	57'			
LG	49'	39'			
LI	68'	54'			
LJ	89'	80'			



### Housing color



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### Double face configurations

Convert single face to double face in the field					
Red/white	005715-E				
Red/black	005716-E				
Green/white	005717-E				
Green/black	005718-E				

#### Dimensions

Dimensions are approximate and subject to change.



# COMMERCIAL

### Power consumption and unit rating

Exit sign module	Battery type	AC specs		1-1/2 hrs	2 hrs	3 hrs	4 hrs
612M	Lead-calcium		0.11 / 0.05 A	12	8	-	-
624M	Lead-calcium		0.11 / 0.05 A	24	16	12	S
1224M	Lead-calcium		0.22 / 0.08 A	24	16	12	S
612H	Nickel-metal hydride	120/277VAC, 60HZ	0.11 / 0.05 A	12	9	-	-
1224H	Nickel-metal hydride	00112	0.22 / 0.08 A	24	18	12	ç
1240H	Nickel-metal hydride		0.22 / 0.08 A	40	30	20	15
1250H	Nickel-metal hydride		0.22 / 0.08 A	50	36	24	18

### Accessories (order as a separate item)

Description	Suffix
Wire guard (wall mount)	WG2-E
Pendant white	PRE-P-WH <sup>1</sup>
Pendant black	PRE-P-BK1

<sup>1</sup>Specify pendant length in inches

### How to order

<b>PR</b> = Series	Lead-calcium		1 - Circula fa an (ani		
			1= Single face (cei	<b>G</b> = Green legend	
	612M= 6V-12W, lead	-calcium	1N= Single face no	canopy (wall mount)	R= Red legend
624M= 6V-24W, lead-calcium			2= Double face (ce	iling mount)	
	<b>1224M</b> = 12V-24W, le	ad-calcium			
	Nickel-metal hydrid	e			
	612H= 6V-12W, NiMI	H, rated damp location			
	1224H= 12V-24W, Ni	MH, rated damp location			
	<b>1250H</b> = 12V-50W, N	iMH, rated damp location			
Lamp type/	wattage	Options			
LA= 6V-4W, I	MR16 LED	Blank= No option		-BA= Brushed alumir	num exit stencil
LB= 6V-5W, 1	MR16 LED	-AD= Advanced Diagnost	ics (audible)¹	-D3= Time delay (15	minutes)
LG= 12V-4W	, MR16 LED	-ADNA= Advanced Diagno	ostics	-FA= Fire alarm activ	ated flasher
LI= 12V-5W,	MR16 LED	(non-audible) <sup>1</sup>		-FBF= Flasher buzzer	r + fire alarm activated
LJ= 12V-6W,	MR16 LED	-NEX= Nexus® wired <sup>1</sup>		flasher	
		-NEXP= Nexus®Pro IoT <sup>1</sup>		-FL= Flasher	
		-NEXRF= Nexus® wireless	1	-FZ= Flasher buzzer	
				-VR= Tamper-proof s	crews <sup>2</sup>
				-VR1= Polycarbonate screws <sup>1</sup>	e shield with tamper-proo
	LA= 6V-4W, LB= 6V-5W, I LG= 12V-4W LI= 12V-5W,	<b>1224M</b> = 12V-24W, le <b>Nickel-metal hydrid</b> <b>612H</b> = 6V-12W, NiMI <b>1224H</b> = 12V-24W, Ni <b>1240H</b> = 12V-40W, N	1224M= 12V-24W, lead-calcium         Nickel-metal hydride         612H= 6V-12W, NiMH, rated damp location         1224H= 12V-24W, NiMH, rated damp location         1240H= 12V-40W, NiMH, rated damp location         1240H= 12V-40W, NiMH, rated damp location         1240H= 12V-40W, NiMH, rated damp location         1250H= 12V-50W, NiMH, rated damp location         1250H= 12V-50W, NiMH, rated damp location         Lamp type/wattage         Options         LA= 6V-4W, MR16 LED       Blank= No option         -AD = Advanced Diagnost         LG= 12V-4W, MR16 LED       -ADNA= Advanced Diagnost         LI = 12V-5W, MR16 LED       -NEX= Nexus® wired <sup>1</sup> LJ = 12V-6W, MR16 LED       -NEX= Nexus® pro loT <sup>1</sup>	1224M= 12V-24W, lead-calcium       4= Universal (2 faces, back p         Nickel-metal hydride       612H= 6V-12W, NiMH, rated damp location         612H= 6V-12W, NiMH, rated damp location       1224H= 12V-24W, NiMH, rated damp location         1224H= 12V-24W, NiMH, rated damp location       1220H= 12V-24W, NiMH, rated damp location         1250H= 12V-50W, NiMH, rated damp location       1250H= 12V-50W, NiMH, rated damp location         Lamp type/wattage       Options         La= 6V-4W, MR16 LED       Blank= No option         LB= 6V-5W, MR16 LED       -ADNA= Advanced Diagnostics (audible) <sup>1</sup> LG= 12V-4W, MR16 LED       -ADNA= Advanced Diagnostics         LI= 12V-5W, MR16 LED       (non-audible) <sup>1</sup> LJ= 12V-6W, MR16 LED       -NEX= Nexus® wired <sup>1</sup>	1224M= 12V-24W, lead-calcium       4= Universal (2 faces, back plate and canopy)         Nickel-metal hydride 612H= 6V-12W, NiMH, rated damp location 1224H= 12V-24W, NiMH, rated damp location 1240H= 12V-40W, NiMH, rated damp location

 $^1\text{Not}$  available with 1250H, must connect minimum 20% load capacity  $^2\text{Not}$  available with universal faces

4-7/8"

### Premier<sup>™</sup> Exit Series

Specification-grade, LED, thermoplastic, snap together exit sign

### Construction

- · White or black UV stabilized thermoplastic enclosure
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

### Mounting

- Surface mount
- · Canopy included for end or ceiling mount applications
- Universal J-box mounting

### Special wording panels

· Available. Contact your sales representative with your design requirements

### Electronics

- Optional Advanced Diagnostics
- Optional Nexus®Pro IoT monitoring system
- Optional Nexus® wired and wireless monitoring system
- 120/277 60Hz
- · Compatible with Emergi-Lite Min Inverters (contact your sales representative for more information)

### **Power consumption**

#### Model DC specs AC specs AC-only 120/277VAC, 60Hz Less than 2.5W AC/DC-remote 6 to 48VDC 120/277VAC, 60Hz Less than 2W Less than 1.5W Self-powered 120/277VAC, 60Hz Ni-Cd battery Min. 90 minutes Less than 3.3W Self-powered diagnostic 120/277VAC, 60Hz Less than 2.8W Ni-Cd battery Min. 90 minutes

### **Housing color**



White Black

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E

- UL 924 listed
- Damp location (32°F to 104°F)

(UL

• Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards

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- E-California Energy Commission Title 20
- ROHS compliant

### Warranty

· Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### **Dimensions**

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

Description	Suffix
Pendant white	PRE-P-WH <sup>1</sup>
Pendant black	PRE-P-BK1
Wire guard (wall mount)	WG1-E
Wire guard (ceiling mount and end mount)	WG5-E

<sup>1</sup>Specify pendant length in inches

#### How to order

Series	Unit type	Color	Options
<b>PREM</b> = LED plastic	AC= AC only (120/277V)	<b>R</b> = Red universal	Blank= No option
EXIT	2C1= Dual AC circuit (2x120V)	<b>G</b> = Green universal	BA= Brushed aluminum exit stencil
	2C2= Dual AC circuit (2x277V)		FA= Fire alarm activated flasher
	U= 120/277VAC & 6 to 48VDC	Open face	(AC, U, 2C1, 2C2 and DN models only)
	SNX= Self-powered Ni-Cd DN= Self-powered advanced	<b>RW</b> = Red on white universal	FBF= Flasher buzzer + fire alarm activated flasher (DN model only)
	diagnostic circuitry	GW= Green on white	FL= Flasher
	NEX= Nexus <sup>®</sup> wired <sup>1</sup>	universal (Open	FZ= Flasher buzzer (DN model only)
	NEXP= Nexus®Pro IoT <sup>1</sup>	face required with	1-VR= Single face vandal-resistant screws <sup>2</sup>
	NEXRF= Nexus® wireless <sup>1</sup>	special wording	2-VR= Double face vandal resistant screws <sup>2</sup>
		legends)	1-VR1= Single face polycarbonate shield with tamper proof screws <sup>2</sup>
			2-VR1= Double face polycarbonate shield with tamper proof screws <sup>2</sup>
	<b>PREM</b> = LED plastic	PREM= LED plastic       AC= AC only (120/277V)         EXIT       2C1= Dual AC circuit (2x120V)         2C2= Dual AC circuit (2x277V)       2C2= Dual AC circuit (2x277V)         U= 120/277VAC & 6 to 48VDC       SNX= Self-powered Ni-Cd         DN= Self-powered advanced diagnostic circuitry       NEX= Nexus® wired <sup>1</sup> NEXP= Nexus® to 1 <sup>1</sup> NEXRF= Nexus® wireless <sup>1</sup>	PREM= LED plastic       AC= AC only (120/277V)       R= Red universal         EXIT       2C1= Dual AC circuit (2x120V)       G= Green universal         2C2= Dual AC circuit (2x277V)       U= 120/277VAC & 6 to 48VDC       Open face         SNX= Self-powered Ni-Cd       NW= Red on white       universal         DN= Self-powered advanced       diagnostic circuitry       GW= Green on white         NEXP= Nexus® wired <sup>1</sup> NEXRF= Nexus® wireless <sup>1</sup> GW= Green on white         NEXRF= Nexus® wireless <sup>1</sup> special wording       legends)

<sup>1</sup> Consult your sales representative <sup>2</sup> Please specify single or double face, red or green

### Provider™ PRO-2N/PRO-3N Series

6V thermoplastic housing protected LED lamps



### Housing

- White or black UV stabilized thermoplastic enclosure
- Clear polycarbonate lens covers

### Mounting

- Surface mount
- Universal J-box mounting

### Lamp type

MR16 LED Lamp, 6V-4W or 6V-5W

### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus® monitoring system
- 120/277 60Hz

### Battery

• 6V lead-calcium battery

### Approvals

- UL 924 listed
- Damp location optional (50°F to 104°F)
- BC California Energy Commission Title 20

### Warranty

 Unit has a three-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

nexus Ă

### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'



### Housing color





COMMERCIAL

### Dimensions

Dimensions are approximate and subject to change.



### Fast and easy installation





Power consumption and unit rating (non-CEC models) – each unit furnished with one LED lamp per head

					Battery capa	city in watts
Sealed maintenance-free battery types	DC voltage	Model number	1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-calcium	6V	PRO-2N	10	8	-	-
	6V	PRO-3N	18	12	10	7

### Unit rating Chart

Rated					
1-1/2 hrs	2 hrs	3 hrs	4 hrs		
10	8	-	_		
		1-1/2 hrs 2 hrs			

\*National Electrical Code Specication

Accessories (order as a separate item)

Description	Suffix
Additional special bit for tamper-proof screws	690.0454-E
Replacement lamps	
580.0097-E	MR16 LED 6V-4W
580.0122-E	MR16 LED 6V-5W

#### How to order

Color	Series	Lamp type	Unit type	Options	Approval
Blank= Off white B= Black	<b>PRO-2N</b> = 6V-10.8W <b>PRO-3N</b> = 6V-18W	-LA= 6V-4W, MR16 LED -LB= 6V-5W, MR16 LED	Blank= Standard unit -AD= Advanced Diagnostics (audible) -ADNA= Advanced Diagnostics (non-audible) NEX= NEXUS® wired <sup>1</sup> NEXRF= NEXUS® wireless <sup>1</sup>	C= Line cord 120V 3 feet CM= Ceiling mount - supplied with metal harness DL= Damp location VR= Vandal-resistant screws	- <b>CEC=</b> CEC Title 20 for California <sup>2</sup>
Example: BPRO-	2N-LADL				

<sup>1</sup>Available with PRO-2N only <sup>2</sup>Available with PRO-2N-LA with AD, ADNA or NEXRF only



5-7/8"

### **JS-HP Series**

High performance and labor saving features normally found in higher voltage units



### 🔤 🕕 nexus 🗛 🛚

### Housing

- Steel housing
- Standard gray finish, optional black finish

### Lamp heads

- 6W (L6 lamp suffix), 10W (L10 lamp suffix) and 15W (L15 lamp suffix) high efficacy LED emergency heads outperform traditional 50W MR16-IR halogen
- Black heads available in 15W (L15 lamp suffix) only
- Innovative head design: four-LED and dual-driver provide illumination even in case of unexpected component failure
- Die-cast aluminum, LED heads

### Mounting

- Wall or ceiling mount
- Universal J-box mounting

### **Choice of battery**

- 12V lead-calcium battery
- 12V nickel-cadmium battery

### Electronics

- Pulse plus charger
- Low voltage disconnect
  - Automatic brownout protection
  - Battery lock-out
  - Fused output circuit
  - Optional Advanced Diagnostics
  - Optional Nexus® monitoring system
  - 120/277 60Hz

### Approvals

- UL 924 listed
- NYC approved
- BC California Energy Commission Title 20

### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Unit rating - equipment with remote capability (non-CEC models)

				Ba	Battery capacity in wa		
Sealed maintenance-free battery types	DC voltage	Model number	1 1/2 hrs	2 hrs	3 hrs	4 hrs	
Lead-calcium	12	12JSM36-2	36	25	20	14	
Nickel-cadmium	12	12JSC30-2	30	21	15	12	
NICKEI-Caumum	12	12JSC40-2	40	36	25	18	

### Unit rating - CEC model

					Watt	s to 87.5% of	rated battery	/ voltage1
Series	AC specs		AC power stand-by	Voltage	1-1/2 hrs	2 hrs	3 hrs	4 hrs
12JSM36-2	120/277VAC, 60HZ	0.14 / 0.07A	0.66W	12V 36W	36	27	18	13

<sup>1</sup>National Electrical Code specification

Dimensions are approximate and subject to change.







### Photometric performance

The JS-HP Series of LED emergency lights delivers a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the application, one may select and specify from three levels of lumen outputs and cross-reference these to traditional incandescent emergency lights below. Wall mounted equipment, reflectances: 10/10/10; 6-ft wide illumination path. 200 ft X 200 ft X 30 ft space.

Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1

### Illumination

LED head	Power	Total lumens	Out-perform spacing of the incandescent
L6	6W	565	35W PAR36, MR16 halogen
L10	10W	1000	50W PAR36, MR16 halogen
L15	15W	1300	50W MR16-IR halogen



### NEMA 1 environment - wall mounted equipment

		Spacing center-to-center (feet					
Mounting height	Lamp L6 / 6W, 565lm	Lamp L10 / 10W, 1000lm	Lamp L15 / 15W, 1300lm				
10 ft	80	110	140				
15 ft	70	105	135				
20 ft	60	100	130				
25 ft	50	95	120				

Accessories (order as a separate item)

Description	Suffix
Mounting bracket	BJ-E
Wire guard (front mounted heads)	WG10-E

### How to order

Color	Series/capacity	# of lamps	Head style	Head mounting	Options	Approval
B= Black <sup>1</sup>	Lead-calcium	-2= Two heads	<b>L6</b> = 12V-6W	FM= Front mount	-AD= Advanced	-CEC= CEC
<b>G</b> = Gray	12JSM36= 12V-36W, lead-calcium		(565 lumens)		Diagnostics	Title 20 for
			<b>L10</b> = 12V-10W		(audible)	California <sup>2</sup>
	Nickel-cadmium		(1000 lumens)		-ADNA= Advanced	
	12JSC30= 12V-30W, nickel-cadmium		L15= 12V-15W		Diagnostics	
	12JSC40= 12V-40W, nickel-cadmium		(1300 lumens)		(non-audible)	
					-NEX= NEXUS® wired	
					-NEXRF= NEXUS® wireless	
Example	: G12JSC30-2L15FM-AD				-C= Line cord 120V 3 feet	
					-D3= Time delay	
					(15 minutes) <sup>3</sup>	

Steel housing 6V & 12V up to 50W capacities







COMMERCIAL

- Steel housing
- Standard off-white finish, optional black finish
- Choice of MR16 LED lamp wattages
- Heads available in thermoplastic or decorative die-cast aluminum

### Mounting

- Ceiling or wall mount
- Universal J-box mounting

### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus® monitoring system
- 120/277 60Hz

### Choice of battery

- 6V or 12V lead-calcium battery
- 6V or 12V nickel-cadmium battery

### Approvals

- UL 924 standard
- NYC approved
- BC California Energy Commission Title 20

### Warranty

• Unit has a three-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### **Housing color**



### Dimensions

Dimensions are approximate and subject to change.

NW



nexus AD

### Photometric performance

	Spacing center-to-cent				
Lamp	7' mounting height	15' mounting height			
LA	43'	36'			
LB	81'	64'			
LG	55'	43'			
LI	71'	56'			
LJ	100'	85'			



### Unit rating - non-CEC models

				Battery capacity in				
Sealed maintenance-free battery types	DC voltage	Model number	1 1/2 hrs	2 hrs	3 hrs	4 hrs		
	6	JSM18	18	12	10	_		
Lead-calcium	6	JSM36	36	25	20	14		
-	12	12JSM36	36	25	20	14		
	6	JSC18	18	12	_	_		
Nickel-cadmium	12	12JSC36	36	21	15	12		
-	12	12JSC50	50	36	25	18		

### Unit rating - CEC models

				Watts to 87.5% of rated battery vo				
Series	AC specs		AC power stand-by	Voltage	1 1/2 hrs	2 hrs	3 hrs	4 hrs
JSM18	120/2770/06 6011-	0.00 ( 0.044	0.0214	6V 18W	18	12	9	6
JSM36	— 120/277VAC, 60Hz 0.0	0.09/0.04A 0.62W -	0.62W	6V 36W	36	24	18	13
12JSM36	120/277VAC, 60Hz	0.14 / 0.07A	0.66W	12V 36W	36	24	18	13
AND CONTRACTOR								

<sup>1</sup>National Electrical Code specification

### Accessories (order as a separate item)

Description	Suffix
Mounting bracket (S cabinet only)	BJ-E
Wire guard (S cabinet only)	WG1-E
Wire guard (front mounted heads)	WG10-EG

### How to order

Color	Series/capacity	# of lamps	Head style	Lamp type/wattage	Options	Approval
Blank= Off	Lead-calcium	-0= No head	<b>10</b> = Mini	<b>LA</b> = 6V-4W,	-AD= Advanced Diagnostics	-CEC= CEC
white	JSM18= 6V-18W, lead-calcium	-2= Two heads	plastic	MR16 LED	(audible)	Title 20 for
B= Black	JSM36= 6V-36W, lead-calcium		MR16	<b>LB</b> = 6V-5W,	-ADNA= Advanced Diagnostics	California <sup>1</sup>
	12JSM36= 12V-36W, lead-calcium		<b>150</b> = EF150	MR16 LED	(non-audible)	
			lamp	LG= 12V-4W,	-NEX= Nexus® wired	
	Nickel-cadmium		heads	MR16 LED	(contact your sales	
	JSC18= 6V-18W, nickel-cadmium			<b>LI</b> = 12V-5W,	representative)	
	12JSC36= 12V-36W, nickel-cadmium			MR16 LED	-NEXRF= NEXUS® wireless	
	12JSC50= 12V-50W, nickel-cadmium			<b>LJ</b> = 12V-6W,	(contact your sales	
				MR16 LED	representative)	
					-C= Line cord 120V 3 feet	
					-D3= Time delay (15 minutes) <sup>2</sup>	
					-FM= Front mounted heads	

### Example: JSC18-210LA

<sup>1</sup>Available with lead-calcium models with AD, ADNA or NEXRF only <sup>2</sup>Time delay available with AD, ADNA, NEX or NEXRF models only

### LC Series

Steel housing - 6V up to 100W, 12V up to 400W and 24V 400W capacities





### Housing

- Steel housing
- Standard off-white finish, optional black finish
- Choice of MR16 LED lamp wattages
- · Heads available in thermoplastic or decorative die-cast aluminum

### Mountina

- Ceiling or wall mount
- Universal J-box mounting

### Choice of battery

• 6V, 12V or 24V lead-calcium (sealed electrolyte) battery

### Photometric performance

	Spa	Spacing center-to-center (feet				
Lamp	7' mounting height	15' mounting height				
LA	43'	36'				
LB	81'	64'				
LG	55'	43'				
LI	71'	56'				
LJ	100'	85'				
LL	56'	44'				



### Housing color

Off white





### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus® monitoring system
- 120/277 60Hz

### Approvals

- UL 924 standard
- NYC approved

### Warranty

Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Dimensions





nexus AD

EF10 and EF150

### Cabinet information

			D	imensions
Cabinet size	А	В	с	D
С	18-3/8" // 16-3/4"	16-1/2"	7-1/4"	12-1/4"
D	18-3/8" // 16-3/4"	27"	7-1/4"	12-1/4"

• Unit has a three-year limited warranty

Dimensions are approximate and subject to change.

### Unit rating

Sealed maintenance-free			Battery capacity in watts					
battery types	DC voltage	Model number	1 1/2 hrs	2 hrs	3 hrs	8 hrs	# of load fuses	Cabinet size
	6	LC100	100	77	47	24	2	С
	12	12LC150	150	120	66	36	2	С
Lead-calcium (immobilized electrolyte)	12	12LC300	300	240	132	72	2	D
(IIIIIIODIIIZEU electrolyte)	12	12LC400	400	336	192	95	2	D
	24	24LC400	400	336	192	96	2	D

### Accessories (order as a separate item)

Description	Suffix
Mounting shelves (cabinet C)	MP6-EG
Mounting shelves (cabinet D)	MP12
Wire guard (cabinet C)	WG3-E
Wire guard (cabinet D)	WG4-E

#### How to order

Color	Series/capacity	# of lamps	Head style	Lamp type	Options
Blank= Off white	LC100= 6V-100W lead-calcium	-0= No head	<b>10</b> = EF10 (small	<b>LA</b> = 6V-4W,	Blank= No options
B= Black		<b>-2</b> = 2 heads	plastic MR16)	MR16 LED	-AD= Advanced Diagnostics (audible) <sup>1</sup>
	12LC150= 12V-150W lead-calcium		150= EF150 (MR16	LB= 6V-5W,	-ADNA= Advanced Diagnostics
	12LC300= 12V-300W lead-calcium		lamp heads)	MR16 LED	(non-audible)1
	12LC400= 12V-400W lead-calcium			LG= 12V-4W,	-NEX= Nexus® wired
				MR16 LED	(contact your sales
	24LC400= 24V-400W lead-calcium			LI= 12V-5W,	representative)1
				MR16 LED	-NEXRF= NEXUS® wireless
				LJ= 12V-6W,	(contact your sales
				MR16 LED	representative) <sup>1</sup>
				LL= 24V-4W,	-C= Line cord 120V 3 feet
				MR16 LED	-D3= Time delay (15 minutes) <sup>2</sup>

### Example: 12LC300-2150LJ

<sup>1</sup>Minimum load required: 20% of unit load capacity <sup>2</sup>Time delay available with AD, ADNA, NEX or NEXRF models only

### **LS Series**

6, 12 and 24 volt steel enclosure



### Housing

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- Steel housing
- Standard off-white finish, optional black finish
- Choice of MR16 LED lamp wattages
- Heads available in thermoplastic or decorative die-cast aluminum

### Mounting

- Ceiling or wall mount
- Universal J-box mounting

### Choice of battery

• 6V, 12V or 24V lead-calcium battery

### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'
LG	55'	43'
LI	71'	56'
LJ	100'	85'
LL	56'	44'



### Housing color



Off white

Black

### HIGH

- ElectronicsPulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- Optional Nexus<sup>®</sup> monitoring system
- 120/277 60Hz

### Approvals

- UL 924 standard
- NYC approved

### Warranty

• Unit has a three-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Dimensions

Dimensions are approximate and subject to change.





EF150 and EF10

### **Cabinet information**

			Di	imensions
Cabinet size	А	В	с	D
A	14-5/8" // 13"	12-3/4"	3-1/8"	8-1/2"
В	16-3/8" // 14-3/4"	16-1/8"	5-7/16"	10-1/4"
С	18-3/8" // 16-3/4"	16-1/2"	7-1/4"	12-1/4"





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### Unit rating

Sealed maintenance-free		· · ·			Battery capa	city in watts		
battery types	DC voltage	Model number	1 1/2 hrs	2 hrs	3 hrs	4 hrs	# of load fuses	Cabinet size
	6	LSM54	54	37	21	12	1	A
	6	LSM110	110	72	40	24	2	В
	6	LSM162	162	108	60	48	2	C
	12	12LSM54	54	37	21	12	1	A
Lead-calcium	12	12LSM110	110	72	40	24	2	В
	12	12LSM162	162	108	60	36	2	C
	12	12LSM220	220	144	80	48	2	C
	24	24LSM110	110	72	40	24	2	В
	24	24LSM220	220	144	80	48	2	C

### Accessories (order as a separate item)

Description	Suffix
Mounting bracket (cabinet A)	B1
Mounting bracket (cabinet B)	B2
Mounting shelves (cabinet B)	MP3-EG
Mounting shelves (cabinet C)	MP6-EG
Wire guard (cabinet A)	WG2-E
Wire guard (cabinet B & cabinet C)	WG3-E

#### \_

### How to order

Color	Series/capacity	# of lamps	Head style	Lamp type/wattage	Options
Blank= Off white B= Black	LSM54= 6V-54W lead-calcium LSM10= 6V-110W lead-calcium LSM162= 6V-162W lead-calcium 12LSM54= 12V-54W lead-calcium 12LSM10= 12V-110W lead-calcium 12LSM220= 12V-220W lead-calcium 24LSM10= 24V-110W lead-calcium 24LSM220= 24V-220W lead-calcium	- <b>0</b> = No head - <b>2</b> = 2 heads	10= EF10 (small plastic MR16) 150= EF150 (MR16 lamp heads)	LA= 6V-4W, MR16 LED LB= 6V-5W, MR16 LED LG= 12V-4W, MR16 LED LI= 12V-5W, MR16 LED LJ= 12V-6W, MR16 LED LL= 24V-4W, MR16 LED	Blank= No options -AD= Advanced Diagnostics (audible) <sup>1</sup> -ADNA= Advanced Diagnostics (non-audible) <sup>1</sup> -NEX= Nexus® wired (contact your sales representative) <sup>1</sup> -NEXRF= NEXUS® wireless (contact your sales representative) <sup>1</sup> -C= Line cord 120V 3 feet -D3= Time delay (15 minutes) <sup>2</sup>

Example: 12LSM162-210LJ

<sup>1</sup>Minimum load required: 20% of load capacity <sup>2</sup>Time delay available with AD, ADNA, NEX or NEXRF models only

### **X10 LED Series**

Steel LED exit and mini-system combination units







### Construction

- Steel housing
- · Standard off-white finish, optional black finish or brushed aluminum
- Choice of MR16 LED lamp wattages
- · Heads available in thermoplastic or decorative die-cast aluminum
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

### Mounting

- Surface mount
- · Canopy included for end or ceiling mount applications
- Universal J-box mounting

### **Combo units**

- SBX14 model, lead-calcium battery, 6V-30W total battery capacity
- STX14 model, nickel-cadmium battery, 6V-24W total battery capacity

### Exit sign

- X14 model, exit sign, AC-Only, 120/277VAC, 50/60Hz
- SNX14 model, nickel-cadmium battery

### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'

### Housing color





White

Textured aluminum

### Lamp head source

• MR16 LED 6V 4W or 6V 5W

### Electronics

- Optional Advanced Diagnostics
- Optional Nexus® monitoring system

### Special wording panels

· Available. Contact your sales representative with your design requirements

### Approvals

- UL 924 listed
- Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards
- E-California Energy Commission Title 20 (Exit sign only)

### Warranty

- · Unit has a three-year limited warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



### Dimensions

Dimensions are approximate and subject to change.



### Mini system model dimensions



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### Power consumption – LED exit signs

Model		AC specs		DC specs
AC-only	120 to 277 VAC	Less than 1.5W	-	-
AC/DC	120 to 277 VAC	Less than 1.5W	6 to 24 VDC	Less than 1.5W
Self-powered	120 to 277 VAC	Less than 3W	Nickel- cadmium	Min. 90 minutes

### Power consumption - Mini-system combination units1

	DC	Model	Bat	ttery ca	pacity in	watts
Battery type	voltage	number	1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-calcium	6	SBX14	30	20	15	10
Nickel-cadmium	6	STX14	24	18	12	9

<sup>1</sup>120/277VAC 60Hz, 03/0.15 Amp. Unit rating - Total DC power available for local and remote emergency lights.

Accessories (order as a separate item)

Description	Suffix
White pendant	P-WT <sup>1</sup>
Black pendant	P-BK <sup>1</sup>
Wire guard ceiling mount (exit only)	WG5-E
Wire guard end mount (exit only)	WG5-E
Wire guard for wall mount (AC only, AC/DC & self-powered exit signs)	WG12-E
Wire guard for wall mount (mini system or combo)	WG6-E

<sup>1</sup>Specify pendant length in inches

### How to order

Series	Housing color	Battery type	Legend colors	
L= LED exit sign	W= White	Exit sign models	R= Red	R1= Red, single face <sup>3</sup>
	B= Black	X14= AC only or AC/DC	G= Green	R2= Red, double face <sup>3</sup>
	A= Textured	SNX14= Ni-Cd 120/277VAC		<b>G1</b> = Green, single
	aluminum		Open face⁴	face <sup>3</sup>
		Mini system combination units	<b>RW</b> = Red/white	G2= Green, double
		SBX14= 6V-30W lead-calcium	WR= White/red	face <sup>3</sup>
		STX14= 6V-24W nickel-cadmium <sup>2</sup>	<b>GW</b> = Green/white	
		SXX14= 6V-20W nickel-cadmium <sup>2</sup>	WG= White/green	
Head style	Lamp type	Options		
10= EF10	LA= 6V-4W,	Blank= No option		
<b>150</b> = EF150	MR16 LED	-AD= Advanced Diagnostics (audib	ole)⁵	
	LB= 6V-5W,	-ADNA= Advanced Diagnostics (no	n-audible)⁵	
	MR16 LED	-NEX= NEXUS® wired⁵		
		-NEXRF= NEXUS® wireless⁵		
		-D3= Time delay (15 minutes)		
		-VR= Tamper-proof screws		
		-VR1 = Polycarbonate vandal resist	ant shield with tamp	er-proof screws
	L= LED exit sign Head style 10= EF10	L= LED exit sign W= White B= Black A= Textured aluminum Head style Lamp type 10= EF10 LA= 6V-4W, 150= EF150 MR16 LED LB= 6V-5W,	L= LED exit sign W= White B= Black A= Textured aluminum Wini system combination units SBX14= 6V-30W lead-calcium STX14= 6V-24W nickel-cadmium <sup>2</sup> SXX14= 6V-20W nickel-cadmium <sup>2</sup> SXX14= 6V-20W nickel-cadmium <sup>2</sup> LA= 6V-4W, Blank= No option MR16 LED LB= 6V-5W, A= Advanced Diagnostics (audib LB= 6V-5W, MR16 LED -AD= Advanced Diagnostics (no MR16 LED -NEXRF= NEXUS® wireless <sup>5</sup> -D3= Time delay (15 minutes) -VR= Tamper-proof screws	L= LED exit sign       W= White B= Black       Exit sign models X14= AC only or AC/DC       R= Red G= Green         A= Textured aluminum       SNX14= Ni-Cd 120/277VAC       Open face <sup>4</sup> RW= Red/white SBX14= 6V-30W lead-calcium STX14= 6V-24W nickel-cadmium <sup>2</sup> Head style       Lamp type       Options         10= EF10       LA= 6V-4W, MR16 LED       Blank= No option -AD= Advanced Diagnostics (audible) <sup>5</sup> -NEXRF= NEXUS® wired <sup>5</sup> -NEXRF= NEXUS® wireless <sup>5</sup> -D3= Time delay (15 minutes)

<sup>1</sup>Only available on exit sign models

<sup>2</sup>Available with -AD, -ADNA, -NEX or -NEXRF only

<sup>3</sup>Required when ordering tamper-proof screws or vandal-resistant shield <sup>4</sup>Open face required with special wording legends

<sup>5</sup>Available only in SNX14, SBX14 & SXX14

### Prestige<sup>™</sup> Economizer Series – Recessed ceiling mount

Edge-lit exit sign





### Construction

- Steel housing with extruded aluminum trim plate
- Panel features a curved contour for maximum illumination and clarity
- 6 inch EXIT lettering legend available in red or green
- Field installed stick-on chevrons
- Choice of housing and trim plate finishes, off white or textured aluminum

### Mounting

- Fully recessed ceiling mount
- Hanger bars included for lay-in installation in T-bar grid

### Special wording panels

• Available. Contact your sales representative with your design requirement

### Electronics

• 120/277 60Hz

### Approvals

- UL 924 listed
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Housing color

	and the second second
Off white	Textured aluminum



Dimensions are approximate and subject to change.





#### **Power consumption**

Model		AC specs		DC specs
AC-only	120 to 277VAC	Less than 1.5W	-	-
AC/DC- remote	120 to 277VAC	Less than 1.5W	6 to 24VDC	Less than 1.5W
Self-powered	120 to 277VAC	Less than 2.5W	Ni-Cd battery	Min. 90 minutes

How to order - Recessed mount series

Series	Trim	Face	Legend color
PE= AC	F= Recessed flat trim	1= Single face	RC= Red on clear <sup>1</sup>
PES= AC/DC		2= Double face	<b>RW</b> = Red on white
PEN= Self-powered			<b>RM</b> = Red on mirror
			GC= Green on clear <sup>1</sup>
			<b>GM</b> = Green on mirror
	PE= AC PES= AC/DC	PE= AC F= Recessed flat trim PES= AC/DC	PE= AC     F= Recessed flat trim     1= Single face       PES= AC/DC     2= Double face

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### Prestige™ Economizer Series – Slim profile surface mount

LED edge-lit exit sign



### Construction

- Die-cast aluminum housing
- Panel features a curved contour for maximum illumination and clarity
- 6 inch EXIT lettering legend available in red or green
- Field installed stick-on chevrons
- Choice of housing and trim plate finishes, off white or textured aluminum

### Mounting

- Surface mount
- Canopy included for wall, end or ceiling mount applications

### Special wording panels

 Available. Contact your sales representative with your design requirement

### Electronics

• 120/277 60Hz

### Approvals

- UL 924 listed
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### **Housing color**

	-
Off white	Textured aluminum

How to order – Surface mount series

### Dimensions

Dimensions are approximate and subject to change.



### Power consumption

Model		AC specs		DC specs
AC-only	120 to 277VAC	Less than 2W	-	-
AC/DC	120 to 277VAC	Less than 2W	6 to 24VDC	Less than 1.5W
Self-powered				Min. 90 minutes

Accessories (order as a separate item)

Suffix
PE-P-WH <sup>1</sup>
PE-P-BK <sup>1</sup>

<sup>1</sup>Specify pendant length

Housing color	Series	Face	Legend color
TA= Textured aluminum	PE= AC	1= Single face	RC= Red on clear <sup>1</sup>
<b>OW</b> = Off white	PES= AC/DC	2= Double face	<b>RW</b> = Red on white
	PEN= Self-powered		<b>RM</b> = Red on mirror
Example: TAPE1RC			GC= Green on clear <sup>1</sup>
Example: TAPEIRC			GM= Green on mirror

### Prestige<sup>™</sup> Accessibility Series

Slim Profile LED Edge-Lit Exit Sign



### Construction

- Housing made of extruded aluminum, canopy made of die-cast aluminum
- Legend panel features a curved contour for maximum illumination and clarity
- 6 inch EXIT lettering legend available in red with accessibility symbol
- Universal field selectable chevrons
- Choice of housing and trim plate finishes, off white or textured aluminum
- Choice of legend panel colors, red on clear, red on white, red on mirror

### Mounting

• Canopy included for wall, end or ceiling mount applications

### **Special Wording Panels**

• Available. Contact your sales representative with your design requirements

### Approvals

- UL 924 listed
- RoHs compliant
- Connecticut State Fire Safety Code PARA 1011.1.2:

1011.1.2 Accessible exits. Where exit signs are required by Section 1011.1 of this code, accessible exit doors at the level of exit discharge that lead directly to accessible paths of exit discharge shall additionally be marked by the International Symbol of Accessibility. Such symbol shall be not less than 6 inches high and shall be incorporated into the required exit sign or shall be located directly adjacent to it. Such symbol shall meet the requirements of Section 1011.

### Warranty (subject to proper installation and maintenance)

• Five-year warranty

Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Panel configuration



### **Housing color**

Off white Textured aluminum



### Dimensions

Dimensions are approximate and subject to change.



Power consumption

Model		AC specs		DC specs
AC only	120 to 277 VAC	Less than 2W	-	-
AC/DC	120 to 277 VAC	Less than 2W	6 to 24 VDC	Less than 1.5W
Self-powered	120 to 277 VAC	Less than 3W	Ni-Cd battery	Min. 90 minutes

How to order

Housing color	Series	Face	Legend color	Panel configuration
<b>OW</b> = Off white	PE= AC only	1= Single face	RC= Red on clear <sup>1</sup>	RISA= Right side,6" letters &
TA= Textured aluminum	PES= AC/DC	2= Double face	<b>RW</b> = Red on white	International Symbol of Accessibility
	PEN= Self-powered, minimum 90 minutes		<b>RM</b> = Red on mirror	LISA= Left side, 6" letters & International Symbol of Accessibility

Example: OWPEN1RWLISA

<sup>1</sup>Single face only

### **Preceptor™ Series**

Die-cast aluminum LED exit sign

### Construction

- Die-cast aluminum housing
- Panel features a curved contour for maximum illumination and clarity
- 6 inch EXIT lettering legend available in red or green
- Field-selectable chevrons
- · Choice of finishes: white, black or brushed aluminum

### Mounting

### Surface mount

- · Canopy included for end or ceiling mount applications
- Universal J-box mounting

### Special wording panels:

• Available. Contact your sales representative with your design requirements

### **Power consumption**

Model		AC specs		DC specs
AC-only	120/277VAC, 60 Hz	Less than 2.5W	-	-
AC/DC-remote	120/277VAC, 60 Hz	Less than 2W	6 to 48VDC	Less than 1.5W
Self-powered	120/277VAC, 60 Hz	Less than 3W	Ni-Cd battery	Min. 90 minutes
Self-powered with diagnostic	120/277VAC, 60 Hz	Less than 2.8W	Ni-Cd battery	Min. 90 minutes

### Housing color



### How to order

### Electronics

- Optional Advanced Diagnostics
- Optional Nexus<sup>®</sup> monitoring system
- 120/277 60Hz
- Compatible with Emergi-Lite Mini Inverters (contact your sales representative for more information)

nexus AD

### Approvals

### • UL 924 listed

- Damp location optional (50°F to 104°F)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

### Warranty

 Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Dimensions

Dimensions are approximate and subject to change.



Housing color	Series/models	# of faces	Legend color	Options
<b>BA</b> = Black body/aluminum face	<b>P</b> = AC only (120/277 volts )	1= Single face	R= Red	Blank= No options
WW= White body/white face	P2C1= Dual AC circuit (2 x 120V)	2= Double face	<b>G</b> = Green	DL= Damp location
WA= White body/aluminum face	P2C2= Dual AC circuit (2 x 277V)			FA= Fire alarm activated flasher
BB= Black body/black face	<b>PU</b> = 120/277VAC & 6 to 48VDC		Open face <sup>1</sup>	(Not available with PDN)
AA= Brushed aluminum body	PDN= Self-powered,		RW = Red on white	FBF= Flasher buzzer + fire alarm
and face	No Advanced Diagnostics		<b>GW</b> = Green on white	activated flasher <sup>2</sup>
	PXN= Self-powered			FL= Flasher <sup>2</sup>
	Advanced Diagnostics			FZ= Flasher buzzer <sup>2</sup>
	PNEX= Nexus® wired (contact your			VR= Tamper-proof screws
	sales representative)			VR1= Polycarbonate shield with
Example: BAPU2R	<b>PNEXRF</b> = NEXUS® wireless (contact			tamper-proof screws

your sales representative)

### **Preceptor™ Recessed Series**

Die-cast LED exit sign



### Construction

- Die-cast aluminum faceplate
- Panel features a curved contour for maximum illumination and clarity
- 6 inch EXIT lettering legend available in red or green
- Field-selectable chevrons
- Choice of finishes: white, black or brushed aluminum

### Mounting

Fully recessed mount

### Electronics

- Standard Advanced Diagnostics (self-powered models)
- 120/277 60Hz

### Power consumption

Model	AC specs			DC specs
AC-only	120/277VAC, 60Hz	1.4W	-	_
Self-powered	120/277VAC, 60 Hz	1.7W	Ni-Cd battery	Min. 90 minutes

### **Housing color**

White



Black

Brushed aluminum

### How to order

Recessed	Face color	Series	# of faces
<b>FR</b> = Fully recessed	<b>Blank</b> = Aluminum face <b>B</b> = Black face <b>W</b> = White face	LEDP= AC only LEDPXN= Self-powered Ni-Cd	1= Single face

Legend color	Options	Version
R= Red	DL= Damp location	-N= New design
<b>G</b> = Green	FA= Fire alarm activated flasher (self-powered)	
<b>RW</b> = Red on white (open face)	FZ= Flasher buzzer (self-powered)	
GW= Green on white (open face)	VR= Vandal-resistant screws	
	VR1= Polycarbonate shield with tamper-proof screws -2CKT= Dual circuit operation (AC models only)	Example: FRBLEDP1R-VR1-N

### Special wording panels:

 Available. Contact your sales representative with your design requirements

### Approvals

- CSA-US (To UL 924 standards)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



### Preceptor™ Remote Capacity Series

Die-cast aluminum remote capacity exit sign



### Construction

- Die-cast aluminum housing
- Panel features a curved contour for maximum illumination and clarity
- 6 inch EXIT lettering legend available in red or green
- Field-selectable chevrons
- Choice of finishes: white, black or brushed aluminum

### Mounting

- Surface mount
- Canopy included for end or ceiling mount applications
- Universal J-box mounting

### Electronics

- Optional Advanced Diagnostics
- 120/277 60Hz

### Choice of battery

• RCL model, (lead-calcium battery) 6V-9W remote load capacity

- RCN model, (nickel-metal hydride battery) 6V-12W remote load capacity
- RCX model, (nickel-metal hydride battery) 6V-24W remote load capacity

### Special wording panels

• Available. Contact your sales representative with your design requirements

### Approvals

- UL 924 listed
- Damp location optional (50°F to 104°F)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards

### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Power consumption

		AC specs					Battery capacit	ty in watts
Series	AC input	Maximum	Voltage	Battery	1-1/2 hrs	2 hrs	3 hrs	4 hrs
RCL			6V	Lead-calcium	9	-	_	
RCN	120/277VAC, 60Hz	0.13/0.06A 15W	6V	NiMH	12	9	_	_
RCX	-		6V	NiMH	24	18	12	9

### **Housing color**





Black

White

Brushed aluminum

COMMERCIAL

### Dimensions

Dimensions are approximate and subject to change.





**Back mount** 

### End mount



### Accessories (order as a separate item)

Description	Suffix
Wire guard, back mount	WG13-E
Wire guard, ceiling mount	WG14-E

### How to order

Housing color	Series	Battery type	# of faces	Legend color	Options
BA= Black body/	P= Preceptor	RCL= Sealed	1= Single face	R= Red	AD= Advanced Diagnostics (audible)
aluminum face		lead-calcium,	2= Double face	<b>G</b> = Green	ADNA = Advanced Diagnostics
BB= Black body/		9W remote		<b>RW</b> = Red on white	(non-audible)
black face		capacity		(Open face required	
<b>WW</b> = White body/		RCN= Sealed		for special wording)	
white face		nickel-metal		<b>GW</b> = Green on white	
WA= White body/		hydride,		(Open face required	
aluminum face		12W remote		for special wording)	
<b>AA</b> = Brushed aluminum		capacity			
body and face		RCX= Sealed			
-		nickel-metal			
		hydride, 24W			
Example: BAPRCL2R		remote capacity	/		

### **Special Wording Series**

Custom illuminated signage



### Features

• The same sturdy construction and electrical design used in our exit signs is used to produce our custom-worded, illuminated signage

**IN USE** 

NO

- Sign bodies are available in steel, extruded and die-cast aluminum, weatherproof, flame-retardant polycarbonate, high impact thermoplastic and recessed housing
- Also available with combination units

LADIES

- Custom wording with available in any style of lettering, any language and alphabet, any special characters
- Graphics can include logos, standard symbols and custom art
- Color choices for sign bodies, message and faceplate panel
- Ilumination from LED (light-emitting diodes); other light sources available
- Contact your local **Emergi-Lite®** sales representative to discuss your specific requirements

### Illuminated Signage

• Custom-worded, illuminated signage is available using the same sturdy construction and electrical design as **Emergi-Lite®** exit signage. A wide range of sign body options and color choices are available to suit any application.



SPECIFICATION GRADE COMMERCIAL APPLICATIONS

We deliver highly versatile emergency lighting solutions to a wide range of industries, with the protection and safety of human life being paramount. COMMERCIAL

# **Spec Grade** Industrial collection

Our high-performance emergency lighting units with NEMA-4X or classified location certifications are designed to withstand harsh, demanding environments.

- Meets specification criteria for humidity, corrosion, dust, water infiltration, and the risk of vandalism
- Uses highly efficient LED light sources for impressive, reliable illumination
- Available for the Nexus<sup>®</sup> emergency lighting management system

01 HPH Series – High-performance battery unit NEMA-4X for hazardous, damp & wet locations 01

See page 86 for more information



- Chemical plants
- Warehouse and cold storage facilities
- Heavy industrial plants
- Marine locations
- Hosedown areas
- Car washes
- Parking garages
- Transit platforms

# **Table of contents** Spec Grade Industrial



# Hazardous locations Important information

Hazardous locations are areas where a potential for explosion or fire exists due to the presence of certain gases, liquid vapors, combustible dusts or fiber particles suspended in the air. The National Electrical Code®, NEMA, OSHA, UL, NFPA Life Safety Standards, as well as State and Local codes prescribe the use of emergency lighting equipment. This equipment itself must not contribute to the ignition of flammable or explosive substances present in the location. Emergi-Lite® offers a complete line of emergency lighting equipment for use in hazardous locations.

### Hazardous location classifications

Class I (NEC-500-5)	Areas in which flammable gases or vapors may be present in sufficient quantities to be explosive or ignitable.
Class II (NEC-500-6)	Areas made hazardous by the presence of combustible dust.
Class III (NEC-500-7)	Areas in which there are easily ignitable fibers or flyings present, due to the type of material being handled, stored or processed-but in which such fibers or flyings are not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures.
Division 1 (NEC-500-5,6 & 7)	Normal Situation: A hazard is present in the everyday normal production operation or during frequent repair and/or maintenance activity.
Division 2 (NEC-500-5,6 & 7)	Abnormal Situation: Potentially hazardous material is expected to be safely confined within closed containers or closed systems, and will be present in the atmosphere only through accidental rupture, breakage, or abnormal operation.
Group A, B, C & D (NEC-500-3)	Gases and vapors in Class I locations are classified into four groups, by the code A, B, C, and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure and other flammability characteristics.
Groups E F & G (NEC-500-3)	Combustible dust in Class II locations are classified according to ignition temperature and the conductivity of the hazardous substance.

### Typical Class I locations:

- Petroleum refineries, and gasoline storage and dispensing areas.
- Industrial firms that use flammable liquids in dip tanks for cleaning parts or other operations.
- Petrochemical companies that manufacture chemicals from gas and oil.
- Dry cleaning plants where vapors from cleaning fluids can be present.
- Companies that have areas dedicated for spraying products with paint or plastics.
- Aircraft hangars and fuel servicing areas.
- Utility gas plants, and operations involving storage and handling of liquified petroleum gas or natural gas.

### Typical Class II locations:

- Grain elevators, flour and feed mills.
- Plants that manufacture, use or store magnesium or aluminum powders.
- Plants that have chemical or metallurgical processes, producers of plastics, medicines, and fireworks etc.
- Producers of starch or candies.
- Spice grinding plants, sugar plants and cocoa plants.
- Coal preparation plants and other carbon handling or processing areas.

### Typical Class III locations:

- Textile mills, cotton gins, cotton seed mills and flax processing plants.
- Clothing manufacturing plants.
- Any plant that shapes pulverizes or cuts wood and creates saw dust or shavings.

For more information consult the NEC Code.


### NEMA enclosure

Туре 1	Intended for use indoors primarily to prevent accidental contact of personnel with the enclosed equipment.
Туре 2	Intended for use indoors to protect the enclosed equipment against falling non-corrosive liquids and falling dirt.
Туре 3	Intended for use outdoors to protect the enclosed equipment against rain, windblown dust, sleet and external ice formation.
Type 3R	Intended for use outdoors to protect the enclosed equipment against falling rain, sleet and external ice formation.
Туре 4	Intended for use indoors and outdoors to protect the enclosed equipment against windblown dust, rain, splashing water and hose directed water.
Туре 5	Intended for indoor use primarily to protect against dust and falling dirt.
Туре б	Intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during occasion al temporary submersion at a limited depth.
Туре 6Р	Intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during prolonged s ubmersion at a limited depth.
Туре 7	Intended for use indoors in locations classified as Class I, Groups A, B, C, or D as defined in the National Electrical Code®.
Туре 8	Intended for indoor or outdoor use in locations classified as Class I, Groups A, B, C, & D as defined in the National Electrical Code®.
Туре 9	Intended for indoor locations classified as Class II, Groups E, F & G, as defined in the National Electrical Code®.
Type 10	Enclosures are constructed to meet the applicable requirements of the Mine Safety and Health Administration.
Type 11	Intended for indoor use primarily to provide, by oil immersion, a degree of protection to enclosed equipment against the corrosive effects of liquids and gases.
Type 12	Intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping noncorrosive liquids.
Type 12K	Enclosure with knockouts intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping non-corrosive liquids other than at knockouts.
Туре 13	Intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil, and noncorrosive coolant.

## **HP Series**

NEMA-4X, high-performance industrial battery unit



#### Housing

INDUSTRIAL

- Compact gray fiberglass housing with captive screws
- NEMA-4X rated
- All external fasteners and hardware are constructed of stainless steel
- Die-cast aluminum LED heads

#### Mounting

- Simple and easy to install on walls, poles, columns, struts also on vertical
- Pole or column installation bracket sold separately (order catalog number: PMK1-E)
- 1/2" NPT conduit entry on top or side

#### Performance

- High temperature lead-calcium battery operates 32°F to 122°F (0°C to 50°C) optional cold-weather -40°F to 122°F (-40°C to 50°C)
- Nickel-cadmium battery operates 50°F to 104°F (10°C to 40°C)
- 6W, 10W and 15W high efficacy LED emergency heads
- 15W head outperforms traditional 50W MR16 halogen
- Innovative head design: four-LED and dual- driver provide illumination even in case of unexpected component failure

#### Power consumption - Maximum current draw

Temperature	Specs
Standard temperature range	120/277VAC, 60Hz, 0.30/0.15A
Cold-weather option	120/277VAC, 60Hz, 0.70/0.35A

#### Unit rating - non-CEC models

		Batt	ery capacity	in watts¹
Model	1-1/2 hrs	2 hrs	3 hrs	4 hrs
12HPM30	30	20	15	10
12HPM60	60	40	30	20
12HPN40	40	36	24	18
24HPN90	90	72	48	36

<sup>1</sup>The cold-weather option is only rated for 90 minutes

#### Electronics

• Infra-red remote control tester included in all models: allows testing the equipment without the need to climb a ladder. Distance range up to 30 ft. Universal, one remote control tester may test all the units on the job

) nexus NEMA-4X 🗚

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Standard Advanced Diagnostics
- Optional Nexus® monitoring system
- 120/277 60Hz

#### Approvals

- UL 924 listed
- BC California Energy Commission Title 20

#### Warranty

- 5-year limited warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### **Remote test control**



#### Unit rating - CEC models

			7-1/2% of rate e: standard Tar	-
Model	1-1/2 hrs	2 hrs	3 hrs	4 hrs
12HPM30	30	20	15	10
12HPM60	60	40	30	20

<sup>1</sup>The cold-weather option is only rated for 90 minutes



Dimensions are approximate and subject to change.









#### Photometric performance

Whether installed indoors or outdoors, the **HP Series** of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the application, one may select and specify among three levels of lumen output. See cross reference to traditional incandescent emergency lights in table to the right.

565	35W PAR36, MR16 halogen
000	55W PARSO, MIRTO Halogen
1000	50W PAR36, MR16 halogen
1300	50W MR16-IR halogen

			Spacing center-to-center (feet)
Mounting height	Lamp L6 / 6W, 565LM	Lamp L10 / 10W, 1000LM	Lamp L15 / 15W, 1300LM
10 ft.	80	110	140
15 ft.	70	105	135
20 ft.	60	100	130
25 ft.	50	95	120

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft. wide illumination path. 200 ft. X 200 ft. X 30 ft. space. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1



How to order

Series	Battery type and capacity	# of heads	LED heads	Diagnostic	Options	Approval
12HP= High-	Lead-calcium	<b>0</b> = No head	<b>L6</b> = 12-24V, 6W	<b>D</b> = Advanced Diagnostic,	CW4= Cold-weather -	-CEC= CEC
performance	M30= 12V-30W, high temperature	1= One head	(565	non-audible <sup>1</sup>	40°F [-40°C] <sup>2</sup>	Title 20 for
	lead-calcium battery,	2= Two heads	Lumens)	DA= Advanced Diagnostic,	D3= Time delay	California <sup>3</sup>
	temperature= 32°F to 122°F		L10= 12-24V,	audible <sup>1</sup>	15 minutes	
	[050°C]		10W (1000	NEX= Nexus® wired	RFI = Radio frequency	
	M60= 12V-60W, high temperature		Lumens)	(contact your sales	interference filter	
	lead-calcium battery,		L15= 12-24V,	representative)1		
	temperature= 32°F to 122°F		15W (1300	NEXRF= NEXUS® wireless		
	[050°C]		Lumens)	(contact your		
				sales		
	Nickel-cadmium			representative) <sup>1</sup>		
	N40= 12V-40W, nickel-cadmium					
	battery, temperature= 50°F to	1				
	104°F [1040°C]					
<b>24HP</b> = 24V	N90= 24V-90W, nickel-cadmium					
high-	battery, temperature= 50°F to	1			Example: 12HP	
performance	104°F [1040°C]				Example: 12HP	HULLODE

<sup>1</sup>Standard - minimum load required: 20% of load capacity <sup>2</sup>Only 12V equipment <sup>3</sup>Available with lead-calcium models only NEMA-4X, high-performance industrial remote unit





#### Housing

- · Lightweight polycarbonate gray housing with captive screws
- NEMA-4X protection grade
- · All external fasteners and hardware are constructed of stainless steel
- Die-cast aluminum LED heads

#### Mounting

- Simple and easy to install on walls, poles, columns, struts also on vertical
- Pole or column installation bracket sold separately (order catalog number: PMK1-E)
- 1/2 NPT NPT conduit entry on top or side

#### Performance

- 6W, 10W and 15W high efficacy LED emergency heads
- 15W head outperforms traditional 50W MR16 halogen
- Innovative head design: four-LED and dual- driver provide illumination even in case of unexpected component failure

#### Approvals

- UL 924 Listed
- Can be installed in wide temperature range:
- -40°F to 131°F (-40°C to 55°C)

#### Warranty

· Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



NEMA-4X



#### Photometric performance

Whether installed indoors or outdoors, the **HP Series** of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the application, one may select and specify among three levels of lumen output. See cross reference to traditional incandescent emergency lights below.

LED head	Power	Total lumens	Out-perform spacing of incandescent lamps
L6	6W	565	35W PAR36, MR16 halogen
L10	10W	1000	50W PAR36, MR16 halogen
L15	15W	1300	50W MR16-IR halogen

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft. wide illumination path. 200 ft. X 200 ft. X 30 ft. space. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1

			Spacing center-to-center (feet)
Mounting height	Lamp L6 / 6W, 565LM	Lamp L10 / 10W, 1000LM	Lamp L15 / 15W, 1300LM
10 ft.	80	110	140
15 ft.	70	105	135
20 ft.	60	100	130
25 ft.	50	95	120



#### How to order

Series	Number of heads	LED head
HPRL= High-performance remote lightweight	Blank= Single head	<b>L6</b> = 12-24V – 6W (565 lumens)
	D= Double head	L10= 12-24V – 10W (1000 lumens)
Example: HPRLDL10		<b>L15</b> = 12-24V – 15W (1300 lumens)

## Survive-All<sup>™</sup> SV Series

NEMA-4X, NSF, vandal-resistant housing – 6V-18W & 12V up to 60W capacities



### Housing

- Full gasketed NEMA-4X die-cast aluminium housing
- Vandal-resistant UV stabilized polycarbonate cover
- Comes with both Phillips head for NSF location and tamper-proof screws

#### Mounting

- Universal J-box mounting
- Strut or I-beam installation bracket sold separately (order catalog number: PMK-E)

#### Lamp type

Choice of MR16 LED lamp wattages

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Magnetic test switch
- Standard Advanced Diagnostics (non-audible)
- Standard 15 minutes time delay
- Optional Nexus®Pro IoT monitoring system
- Optional Nexus<sup>®</sup> wired and wireless monitoring system
- 120/277 60Hz

#### Choice of battery

- 6V or 12V lead-calcium battery
- 12V nickel-cadmium battery
- 12V nickel-metal hydride battery

#### Approvals

- UL 924 listed
- UL listed for wet and damp location (50°F to 104°F)

NSF, nexus NEMA-4X 🗚 (BC) Nexus®Pro 🚯

- UL listed for cold weather option (-40°C to +40°C/-40°F to +104°F)
- NSF certified for use in food processing plants
- NEMA-4X rated
- BC California Energy Commission Title 20

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'



6ft

#### Housing color



Gray

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White

#### Dimensions

Dimensions are approximate and subject to change.







Universal bracket





PMK kit (screws included)

Beam mounting

Strut mounting

INDUSTRIAL

#### Unit rating - equipment with remote capability

Sealed maintenance-free	Battery capacity in v				
battery types	1-1/2 hrs	2 hrs	3 hrs	4 hrs	
	18	12	8	_	
Lood coloium	24	16	12	8	
Lead-calcium	36	24	20	14	
	54	36	27	20	
Nickel-cadmium	24	18	12	8	
Nickel-Caumum	40	27	20	14	
Nickel-metal hydride	60	40	30	20	

#### Accessories (order as a separate item)

Description	Part number
Additional special bit for tamper-proof screws	690.0454-E
Universal bracket (for mounting on poles,	
I-beams or strut metal framing)	PMK-E

#### How to order

Color	Series	# of lamps	Lamps	Diagnostics	Options	Approval
<b>B</b> = Black	Lead-calcium	-2= 2 Lamps	<b>LA</b> = 6V-4W,	-DA= Advanced Diagnostics	Blank= No options	-CEC= CEC
<b>G</b> = Gray	SV18M= 6V-18W lead-calcium		MR16 LED	(audible) <sup>2</sup>	CW4= Cold weather	Title 20 for
<b>W</b> = White	12SV24M= 12V-24W lead-calcium		LB= 6V-5W,	-D = Advanced Diagnostics	-40°F to 104°F	California⁴
	12SV36M= 12V-36W lead-calcium		MR16 LED	(non-audible) <sup>2</sup>	(-40°C to +40°C) <sup>3</sup>	
	12SV54M= 12V-54W lead-calcium		LG= 12V-4W,	-NEX= Nexus® wired <sup>2</sup>	-SMC= Surface ceiling	
			MR16 LED	-NEXP= Nexus®Pro loT <sup>2</sup>	mount	
	Nickel-cadmium		LI= 12V-5W,	-NEXRF= NEXUS® wireless <sup>2</sup>		
	12SV24N= 12V-24W nickel-cadmium <sup>1</sup>		MR16 LED			
	12SV40N= 12V-40W nickel-cadmium <sup>1</sup>		<b>LJ</b> = 12V-6W,			
			MR16 LED			
	Nickel-metal hydride					
	125V60H= 12V-60W NiMH <sup>1</sup>					

<sup>1</sup>Suitable for damp-locations 50°F to 104°F (10°C to 40°C) <sup>2</sup>Minimum lamp load: 20% of unit capacity and consult your sales representative

## Survive-All<sup>™</sup> SVX Combination Series

NEMA-4X, vandal resistant and harsh environment combination unit



#### Construction

- Full gasketed NEMA-4X housing
- Faceplate: heavy-duty, vandal-resistant polycarbonate
- Backplate: heavy-duty aluminum
- Heads protected by clear polycarbonate lens
- Comes with both Phillips head for NSF location and tamper-proof screws
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons
- Choice of finishes: white, black or gray

#### Lamp type

Choice of MR16 LED lamp wattages

#### Mounting

- Surface mount
- · Canopy included for end or ceiling mount applications
- Universal J-box mounting
- 1/2 inch conduit entry on top and sides

#### **Choice of battery**

- SVX12N model, nickel-cadmium battery, 6V-12W total battery capacity
- SVX24N model, nickel-cadmium battery, 12V-24W total battery capacity

#### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'

#### **Housing color**

White





#### Special wording panels

• Available. Contact your sales representative with your design requirements

#### Electronics

- Magnetically operated test switch
- Standard Advanced Diagnostics (non-audible)
- Standard 15 minutes time delay
- Optional Nexus<sup>®</sup>Pro IoT monitoring system
- Optional Nexus<sup>®</sup> wired and wireless monitoring system
- 120/277 60Hz

#### Approvals

- UL 924 listed
- UL listed for wet and damp location (50°F to 104°F)
- UL listed for cold weather option
- (-40°C to +40°C/-40°F to +104°F)
- CSA-US listed for Nexus<sup>®</sup> option
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards

#### Warranty

 Five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



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#### Dimensions

Dimensions are approximate and subject to change.





Double face

#### Unit rating

Sealed maintenance-		Bati	ery capacity	in watts
free battery types	1-1/2 hrs	2 hrs	3 hrs	4 hrs
Nickel-cadmium	12	9	-	_
Nickel-cadmium	24	18	12	9

#### Power consumption

Model		AC specs	DC specs (90	minutes)
SVX12N	120/277VAC	0.12/0.06A 13W	6V	12W
SVX24N	120/277VAC	0.17/0.08A 19W	12V	24W

#### Accessories (order as a separate item)

Description	Part number
Additional special bit for tamper-proof screws	690.0454-E
Additional test magnet	199.0133-E

#### How to order

Housing/face color	Series/capacity	Faces	Legend color	Diagnostics
<b>WW</b> = White/white	SVX12N= 6V-12W	1= Single face	R= Red legend	<b>DA</b> = Advanced Diagnostics (audible)
WB= White/black	SVX24N= 12V-24W	2= Doubleface	G= Green legend	D= Advanced Diagnostics (non-audible)
<b>WA</b> = White/aluminum				-NEX= Nexus <sup>®</sup> wired <sup>1</sup>
<b>BB</b> = Black/black				-NEXP= Nexus®Pro loT <sup>1</sup>
<b>BW</b> = Black/white				-NEXRF= Nexus <sup>®</sup> wireless <sup>1</sup>
<b>BA</b> = Black/aluminum				
<b>GA</b> = Gray/aluminum				
<b>GW</b> = Gray/white				
GB= Gray/black				

# of heads	Lamp type/wattage	Options
Blank= 0 heads1	<b>LA</b> = 6V-4W, MR16 LED	Blank= No options
2= Two heads	<b>LB</b> = 6V-5W, MR16 LED	CW4= Cold weather (-40°F/-40°C) <sup>2</sup>
	<b>LG</b> = 12V-4W, MR16 LED	<b>FA</b> = Flasher (fire alarm activated)
	LI= 12V-5W, MR16 LED	<b>FB</b> = Flasher/buzzer (AC power failure)
	<b>LJ</b> = 12V-6W, MR16 LED	<b>FL</b> = Flasher (AC power failure)
		-208V= 208VAC, 60Hz input
		-240V= 240VAC, 60Hz input
		-208V50HZ= 208VAC, 50Hz input
		-CM= Canopy pendant mount
	Blank= 0 heads1	Blank= 0 heads1         LA= 6V-4W, MR16 LED           2= Two heads         LB= 6V-5W, MR16 LED           LG= 12V-4W, MR16 LED         LI= 12V-5W, MR16 LED

<sup>&</sup>lt;sup>1</sup>Minimum load required: 20% of load capacity <sup>2</sup>Single face only

## Survive-All<sup>™</sup> SVX Series

NEMA-4X, vandal resistant and harsh environment exit sign



#### Construction

82

- Full gasketed NEMA-4X housing
- Frame: polyvinyl chloride enclosure, fully gasketed around the lens, backplate and canopy to prevent water infiltration
- Faceplate: heavy-duty, vandal-resistant polycarbonate
- Backplate: heavy aluminum
- Comes with both Phillips head for NSF location and tamper-proof screws
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons
- · Choice of finishes: black, white, gray or brushed aluminum

#### Mounting

- Surface mount
- Ceiling and wall mount are NEMA-4X
- End and pendant mount are not NEMA-4X
- · Canopy included for end or ceiling mount applications
- Universal J-box mounting
- 1/2 inch conduit entry on top and sides

#### Special wording panels

Available. Contact your sales representative with your design requirements

#### Electronics

(ŲL

(E)

- Magnetically operated test switch
- Standard Advanced Diagnostics (non-audible)
- Optional Nexus®Pro IoT monitoring system
- Optional Nexus<sup>®</sup> wired and wireless monitoring system

NSF. nexus NEMA-4X 🗚 Nexus®Pro 🚯

- 120/277 60Hz
- Compatible with Emergi-lite min inverters (contact your sales representative for more information)

#### Approvals

- UL 924 listed
- UL listed for wet and damp location self powered (50°F to 104°F), AC and AC/DC (-40°F to 104°F)
- Self powered model UL listed for cold weather option (-4°F to +104°F)
- Meets NFPA101 (Life Safety Code), NFPA 70 NEC, OSHA illumination standards
- E-California Energy Commission Title 20

#### Warranty

- Five-year limited warranty
  - Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Power consumption

Model	AC specs	DC specs
AC-only	120-277VAC, 50/60Hz (1.2W)	-
AC/DC	120-277VAC, 50/60Hz (1.2W)	6 to 24VDC (less than 1.5W)
Self-powered	120-277VAC, 50/60Hz (3.7W)	Ni-Cd battery (min. 90 minutes)

#### Housing color





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Double face

Single face

Accessories (order as a separate item)

Description	Part number
Tamper-proof bit	690.0454-E
Convert single to double face, red	DFKR <sup>1</sup>
Convert single face to double face, green	DFKG <sup>1</sup>
Additional test magnet	199.0133-E

<sup>1</sup>Colors available AL-BK-WT

#### How to order

Housing color	Series	Face	Legend	Charger type
BB= Black/black	SVX= AC only	1= Single	R= Red	Blank= AC only
<b>BW</b> = Black/white	SVXN= Self- powered Ni-Cd	2= Double	<b>G</b> = Green	-D= Diagnostic <sup>1</sup>
<b>BA</b> = Black/aluminum				-NEX= Nexus <sup>®</sup> wired <sup>1</sup>
<b>GB</b> = Gray/black				-NEXP= Nexus®Pro IoT <sup>1</sup>
<b>GW</b> = Gray/white				-NEXRF= Nexus® wireless <sup>1</sup>
<b>GA</b> = Gray/aluminum				
WB= White/black				
<b>WW</b> = White/white				
<b>WA</b> = White/aluminum		Housing	Options	
		-4X= Wet/damp	Blank= No	o options
		locations	-2CKT= D	ual circuit (AC only) <sup>2</sup>
			-CW= Col	d weather (Self-powered -4°F to 104°F )⁴
			-CM= Can	nopy pendant mount⁵
			<b>-DC</b> = 6 to	24VDC <sup>3</sup>
			-FA= Fire	alarm activated flasher <sup>2</sup>
			-FL= Flasl	her only²
			-FZ= Flas	her/buzzer (self-powered only)²
Example: BBSVXN1R-D-4X-FA				

<sup>1</sup>Available with self-powered models only <sup>2</sup>Not available with Nexus® option <sup>3</sup>Not available with self-power <sup>4</sup>Not required with AC model Survive-All<sup>™</sup> EF39 Series NEMA-4X & NSF Certified



#### Construction

84

- Choice of cast aluminum or plastic back plate
- Vandal resistant comes standard with Phillips head screws, optional tamper proof screws
- Available as single or double MR16 lamp size remote lighting fixture
- Includes clear polycarbonate UV and impact resistant cover
- Tool-less, fully adjustable, aiming swivel head and easy lamp replacement

#### Finish

• White, black or gray

#### Mounting

- Surface mount
- Includes a back plate for mounting to a standard 4" octagonal electrical box

NEMA-4X

#### Approvals

- UL listed
- NSF rated for food processing areas
- NEMA-4X certified

#### Warranty

• Five-year limited warranty. Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometry performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'
LL	51'	39'
LW	43'	39'



#### **Housing color**



Black

Gray

**Dimensions** Dimensions are approximate and subject to change.





## Accessories (order as a separate item)

Description	Part number
Additional special bit for	690.0454-E
tamper-proof screws	090.0454-E

#### How to order

Series	Lamp type/wattage	Color	Option
EF39P= All polycarbonate single head NEMA-4X	(LA)= 6V-4W, MR16 LED	Blank= White	SM= Mounting plate
EF39PD= All polycarbonate double head NEMA-4X	(LB)= 6V-5W, MR16 LED	-BK= Black	
	(LG)= 12V-4W, MR16 LED	-GY= Gray	
	(LI)= 12V-5W, MR16 LED		
	(LJ)= 12V-6W, MR16 LED		
	(LL)= 24V-4W, MR16 LED		
Example: EF39P(LG)-BK	(LW)= 120V-4W, MR16 LED (2 wire)		

Series	Lamp type/wattage	Color
EF39= Die-cast back plate single head NEMA-4X	(LA)= 6V-4W, MR16 LED	Blank= White
EF39D= Die-cast back plate double head NEMA-4X	(LB)= 6V-5W, MR16 LED	-BK= Black
·	(LG)= 12V-4W, MR16 LED	-GY= Gray
	(LJ)= 12V-6W, MR16 LED	
	(LI)= 12V-5W, MR16 LED	
	(LL)= 24V-4W, MR16 LED	
Example: EF39(LG)-BK	(LW)= 120V-4W, MR16 LED (2 wire)	

## **HPH Series**

Class I Division 2, Groups A, B, C and D, Class II Division 2 Groups F and G & Class III. NEMA-4X High-performance unit equipment for hazardous, damp and wet locations.



#### Housing

- · Class I, Div. 2, Groups A, B, C & D, Class II Div. 2, Groups F & G, Class III
- · Compact gray fiberglass housing with captive screws NEMA-4X rated
- · All external fasteners and hardware are constructed of stainless steel
- Die-cast aluminum LED heads

#### Mounting

- Simple and easy to install on walls, columns and struts
- · Column installation bracket sold separately (order catalog number: PMK1-E)
- 1/2" NPT conduit entry on top or side

#### Performance

- High temperature lead-calcium battery operates 32°F to 122°F (0°C to 50°C) and nickel-cadmium battery operates 50°F to 104°F (10°C to 40°C); optional cold-weather -40°F to 122°F (-40°C to 50°C)
- 15W high efficacy LED emergency heads outperform traditional 50W MR16-IR halogen
- Innovative head design: four-LED and dual- driver provide illumination even in case of unexpected component failure

nexus 🗚 NEMA-4X

#### Electronics

- Infra-red remote control tester included in all models: allows testing the equipment without the need to climb a ladder. Distance range up to 30 ft. Universal, one remote control may test all the units on the job
- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Standard Advanced Diagnostics
- Optional Nexus® monitoring system
- 120/277 60Hz

#### Approvals

- UL 924 listed
- Listed to the UL844 Standard for Class I, Division 2, Groups A, B, C & D, Class II, Division 2, Groups F & G and Class III
- BC California Energy Commission Title 20

#### Warranty

• Unit has five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### **Remote test control**



**Power consumption** 

#### Temperature Specs Standard temperature range 120/277VAC, 60Hz, 0.30/0.15A Cold-weather option 120/277VAC, 60Hz, 0.70/0.35A

#### Unit rating

		Battery capacity in watt		
Model	1-1/2 hrs	2 hrs	3 hrs	4 hrs
12HPHM30	30	20	15	10
12HPHM60	60	40	30	20
12HPHN40	40	36	24	18
24HPHN90	90	72	48	36

Classification for hazardous locations

		Maxim	um temperature
Lamp rating	Temperature code	Nickel-cadmium Ta= 104°F/40°C	Lead-acid Ta= 122°F/50°C
	Class I Division 2 Groups A, B, C and D	ТЗС	ТЗА
L15 (15W)	Class II Division 2 Groups F and G; Class III	T5	Τ5
No heads	Class I Division 2 Groups A, B, C and D		T4A
Noneads	Class II Division 2 Groups F and G; Class III		Т6

<sup>1</sup>The cold-weather option is only rated for 90 minutes

INDUSTRIAL

#### Dimensions

Dimensions are approximate and subject to change.



#### Photometric performance

Whether installed indoors or outdoors, the **HPH Series** of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights.

	Spacing center-to-center (feet)
Mounting height	Lamp L15 / 15W, 1300LM
10 ft.	140
15 ft.	135
20 ft.	130
25 ft.	120

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft. wide illumination path. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1

# Out-perform spacing of LED head Power Total lumens incandescent lamps L15 15W 1300 50W MR16 halogen

Installation



#### How to order

Series	Battery type and capacity	# of heads	LED heads	Diagnostic	Options	Approval
<b>12HPH</b> = 12V high-performance	Lead-calcium M30= 12V-30W, lead-calcium	0= No head 1= One head	15W (1300	<b>D</b> = Advanced Diagnostic, non-audible <sup>1</sup>	<b>D3</b> = Time delay 15 min.	CEC= CEC Title 20 for
Cl. I Div.2, Cl. II Div.2, Cl. III	battery 32°F to 122°F [0 50°C] <b>M60</b> = 12V-60W, lead-calcium battery 32°F to 122°F [0 50°C]	2= Two heads	Lumens)	DA= Advanced Diagnostic, audible <sup>1</sup> ND= No Advanced Diagnostic	RFI= Radio frequency interference filter CW4= Cold-weather	California <sup>2</sup>
	Nickel-cadmium N40= 12V-40W, nickel-cadmium battery 50°F to 104°F [10 40°C]			NEX= Nexus® wired (contact your sales representative) <sup>1</sup> NEXRF= NEXUS® wireless (contact your sales	package -40°C / -40°F	
<b>24HPH</b> = 24V high-performance	N90= 24V-90W, nickel-cadmium battery, temperature= 50°F to 104°F [1040°C]	-		representative) <sup>1</sup>		
Example: 12HPN4	02L15DRFI				To order separately: Universal mounting bracket: PMK1-E	

## **HPHRL Series**

Class I, Division 2, Groups A, B, C & D, Class II, Division 2, Groups F & G and Class III, NEMA-4X, damp & wet locations



# INDUSTRIAI

#### Housing

- Light weight polycarbonate gray housing and die-cast fully adjustable heads
- Class I, Div. 2, Groups A, B, C & D, Class II Div. 2, Groups F & G, Class III
- NEMA-4X protection grade
- All external fasteners and hardware are constructed of stainless steel

#### Mounting

- Simple and easy to install on walls, columns and struts
- Column installation bracket sold separately (order catalog number: PMK1-E)
- 1/2" NPT conduit entry on top or side

#### Performance

- 15W high efficacy LED emergency heads outperform traditional 50W MR16-IR halogen
- Innovative head design: four-LED and dual- driver provide illumination even in case of unexpected component failure

#### Approvals

- UL 924 listed
- Can be installed in wide temperature range: -40°F to 131°F (-40°C to 55°C)
- Listed to the UL 844 Standard for Class I, Division 2, Groups A, B, C & D, Class II, Division 2, Groups F & G and Class III

NEMA-

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### **Classification for hazardous locations**

Lamp suffix	Voltage	Power	Lumen flux	Ambient	Classification	Temp. code
L15	12-24VDC	15W	1.300 Lm	131°F / 55°C —	Class I Division 2 Groups A, B, C and D	T3C
LID	12-24000	1244	1,500 LIII	131 F / 55 C	Class II Division 2 Groups F and G; Class III	Т5

Dimensions are approximate and subject to change.



#### Photometric performance

Whether installed indoors or outdoors, the HPHRL Series of LED remote emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights.

LED head	Power	Total lumens	Out-perform spacing of incandescent lamps
L15	15W	1300	50W MR16-IR halogen

	Spacing center-to-center (fe	
Mounting height	Lamp L15 / 15W, 1300LM	
10 ft.	140	
15 ft.	135	
20 ft.	130	
25 ft.	120	

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft. wide illumination path. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1



How to order		
Series	Number of heads	LED head
HPHRL= High-performance hazardous location remote	<b>Blank</b> = Single head <b>D</b> = Double head	<b>L15</b> = 12-24

4V – 15W (1300 Lumens)

Example: HPHRLDL15

## Survive-All<sup>™</sup> SVH Series

Class I, Division 2 housing 6V-18W & 12V up to 72W capacities



#### Housing

- Class I Division 2, Groups A, B, C and D
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Front and back plates are of a heavy duty aluminum
- Stainless steel tamper-proof screws

#### Mounting:

- Surface wall mount only
- Includes mounting lugs on each side of the housing
- Universal J-box mounting
- 1/2 inch entry on both sides and top of housing

#### Lamp type

Choice of MR16 LED lamp wattages

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit

#### Photometric performance

	Spacing cent	
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'

- Magnetic test switch
- Standard Advanced Diagnostics (non-audible)

nexus<sup>.</sup>

- Optional Nexus® monitoring system
- 120/277 60Hz

#### Battery type

• 6 or 12V lead-calcium battery

#### Approvals

- CSA-US (to UL 924 standards)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Damp and wet location (50°F to 104°F)

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



Dimensions are approximate and subject to change.



#### Temperature codes

Lamp rating <sup>1</sup>	Temperature code	Max. temperature	Replacement part #
6V-4W	T4A	120°C	580.0097
6V-5W	T4A	120°C	580.0122
12V-4W	T4A	120°C	580.0080
12V-5W	T4A	120°C	580.0104
12V-6W	T4A	120°C	580.0106

<sup>1</sup>Use qualified replacement lamps to avoid risk of over-heating

#### Power consumption and unit rating

		, i construction de la construction				Battery capaci	ity in watts
Model		AC specs	1-1/2 hrs	2 hrs	3 hrs	4 hrs	8 hrs
SVH18		0.17 / 0.09 Amp	18	12	9	_	_
12SVH36	120 (277)/46	0.30 / 0.15 Amp	36	27	18	14	_
12SVH60	120/277VAC	0.30 / 0.15 Amp	60	45	30	24	12
12SVH72		0.30 / 0.15 Amp	72	54	36	28	14

#### How to order

Color	Voltage and power	# of heads	Lamps	Options
<b>G</b> = Gray	SVH18M= 6V-18W, lead-calcium 12SVH36M= 12V-36W, lead-calcium 12SVH60M= 12V-60W, lead-calcium 12SVH72M= 12V-72W, lead-calcium	-2= Two heads -0= No heads	LA= 6V-4W, MR16 LED LB= 6V-5W, MR16 LED LG= 12V-4W, MR16 LED LI= 12V-5W, MR16 LED LJ= 12V-6W, MR16 LED	Blank = Advanced Diagnostics (non-audible) <sup>1</sup> -DA = Advanced Diagnostics (audible) <sup>1</sup> -D3 = Time delay (15 minutes) -NEX = NEXUS® wired (consult your sales representative) <sup>1</sup> -NEXRF = NEXUS® wireless (consult your sales representative) <sup>1</sup>

#### Example: G12SVH72M-2MK-DA

## Survive-All<sup>™</sup> SVXH Series

Class I Division 2, Groups A, B, C and D hazardous location combination unit





#### Construction

- Fully gasketed housing frame
- Faceplate: heavy-duty, vandal-resistant polycarbonate
- Backplate: heavy-duty aluminum
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Stainless steel tamper-proof screws
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

#### Mounting

- Surface wall mount only
- Backplate features universal knockouts for a standard
   4 inch junction box, and four mounting eyelets used in wall
   mount applications
- 1/2 inch conduit entry on top and sides.

#### Lamp type

Choice of MR16 LED lamp wattages

#### Battery type

- SVXH Model, nickel-cadmium battery, 6V-20W total battery capacity
- SVXH12N Model, nickel-cadmium battery, 12V-24W total battery capacity

#### **Special Wording Panels**

• Available. Contact your sales representative with your design requirements

#### Electronics

- Magnetic test switch
- Standard Advanced Diagnostics (non-audible)
- Optional Nexus<sup>®</sup> monitoring system
- 120/277 60Hz

#### Approvals

- CSA-US (to UL 924 standards)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Damp and wet location (50°F to 104°F)
- Temperature code T4A (Max. temperature 248°F/120°C)
- Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards

#### Warranty

• Five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'



INDUSTRIAL

Dimensions are approximate and subject to change.



#### Power consumption and unit rating

				Maximum	Stand-by		Bat	tery capacity	ı in watts
Model	AC Input	Current	Power	Current	Power	1-1/2 hrs	2 hrs	3 hrs	4 hrs
SVXH	120/277VAC	0.15/0.07A	16W	0.09/0.03A	8W	20	15	-	
SVXH12N	120/277VAC	0.30/0.08A	29W	0.13/0.05A	10W	24	18	12	_

#### Temperature codes

Lamp rating <sup>1</sup>	Temperature code	Max. temperature	Replacement part #
6V-4W	T4A	120°C	580.0097
6V-5W	T4A	120°C	580.0122
12V-4W	T4A	120°C	580.0080
12V-5W	T4A	120°C	580.0104
12V-6W	T4A	120°C	580.0106

<sup>1</sup>Use qualified replacement lamps to avoid risk of over-heating

#### Accessories (order as a separate item)

Description	Part number
Additional special bit for tamper-proof screws	690.0454-E

#### How to order

Housing/face color	Series/capacity	Legend color	Diagnostics	# of heads	Lamp type/wattage <sup>1</sup>
<b>GG</b> = Gray/gray	<b>SVXH</b> = 6V-20W, Ni-Cd	R= Red	DA= Advanced Diagnostics	Blank= 0 head <sup>3</sup>	<b>LA</b> = 6V-4W, MR16 LED
	<b>SVXH12N</b> = 12V-24W, Ni-Cd	G= Green	(audible)	<b>2</b> = Two heads	<b>LB</b> = 6V-5W, MR16 LED
			D = Advanced Diagnostics		<b>LG</b> = 12V-4W, MR16 LED
			(non-audible)		LI= 12V-5W, MR16 LED
			<b>NEX</b> = NEXUS® wired <sup>2</sup>		LJ= 12V-6W, MR16 LED
Example: GGSVXH	RD2LG		NEXRF= NEXUS® wireless <sup>2</sup>		

<sup>1</sup>No other lamp option available

<sup>2</sup>Consult your sales representative <sup>3</sup>Minimum load required: 20% of load capacity

## Survive-All<sup>™</sup> SVX-HZ Series

Class I Division 2, Groups A, B, C and D, hazardous location exit sign





#### Construction

- Fully gasketed housing frame
- Faceplate: heavy-duty, vandal-resistant polycarbonate
- Backplate: heavy-duty aluminum
- Stainless steel tamper-proof screws
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

#### Mounting

- Surface mount
- Junction box included for wall, end or ceiling mount applications
- 1/2 inch conduit knock-out entry on top and sides.

#### Special wording panels

• Available. Contact your sales representative with your design requirements

#### Electronics

- Magnetic test switch
- Standard Advanced Diagnostics (non-audible)
- Optional Nexus® monitoring system
- 120 to 277 60Hz
- Compatible with Emergi-lite min inverters (contact your sales representative for more information)

### Power consumption<sup>1</sup>

#### Model DC specs AC specs AC/DC-only red 120 to 277VAC, 60Hz Less than 2W 6-24 VDC AC/DC-only green 6-24 VDC 120 to 277VAC, 60Hz Less than 1.5W Self-powered red 120 to 277VAC, 60Hz Less than 2W Ni-Cd battery Min. 90 minutes Self-powered green 120 to 277VAC, 60Hz Less than 2.5W Ni-Cd battery Min. 90 minutes

<sup>1</sup>Cold-weather option does not consume additional power

#### Approvals

- CSA-US (To UL 924 standards)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Self-powered model damp and wet location (50°F to 104°F)
- AC/DC model (-40°F to 104°F)
- Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards
- E California Energy Commission Title 20

#### Warranty

Five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf Dimensions are approximate and subject to change.



Accessories (order as a separate item)

Description	Part number
Tamper-proof bit (extra)	690.0454-E
Convert single to double face, red <sup>1</sup>	DFKR-GY
Convert single face to double face, green <sup>1</sup>	DFKG-GY
<sup>1</sup> In the field	

#### How to order

Color of body/face	Series	Face	Legend	Diagnostic	Options
GG= Gray/gray	SVXHZ= AC/DC only SVXNHZ= Self-powered Ni-Cd	<ul> <li>1= Single         <ul> <li>(ceiling/wall mount)</li> </ul> </li> <li>2= Double         <ul> <li>(ceiling mount only)</li> </ul> </li> </ul>	<b>R</b> = Red <b>G</b> = Green	Blank = AC/DC models -D= Diagnostic (self-powered only & non-audible) -NEX= NEXUS® wired -NEXRF= NEXUS® wireless	<b>CW</b> = Cold weather (-40°F to 104°F) <sup>1</sup>

<sup>1</sup>Self-powered model

## Survive-All<sup>™</sup> EF41 Series

Class I Division 2, Groups A, B, C and D certified remote fixture





#### Description

- Available with single or double lamp heads
- Die-cast aluminum back plate with gasket
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Comes standard with tamper-proof screws and bit
- Universal J-box mounting
- Extreme operational temperature range: -40°F to +104°F (-40°C to +40°C)

#### Mounting

- Surface mount
- Conduit entry 1/2" NPT

#### Approval

- CSA-US (to UL 924 standards)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D

#### Lamp selection chart and temperature code

#### Warranty

- Five-year limited warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



Lamp suffix	Voltage	Wattage	Lumens	Replacement #	Temperature code	Max temperature
LA	6	4	200	580.0097-E	T4A	120°C
LB	6	5	415	580.0122-E	T4A	120°C
LG	12	4	220	580.0093-E	T5	100°C
LI	12	5	340	580.0104-E	T4A	120°C
LJ	12	6	540	580.0106-E	T4	135°C
LL	24	4	220	580.0098-E	T5	100°C
LW	120	4	230	580.0113-E	T4A	120°C

#### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	39'	34'
LB	74'	57'
LG	49'	39'
LI	68'	54'
LJ	89'	80'
LL	51'	39'



#### How to order

Series	Lamp type/wattage		Color
EF41= Single	(LA)= 6V-4W, MR16 LED	(LJ)= 12V-6W, MR16 LED	-GY= Gray
EF41D= Double	(LB)= 6V-5W, MR16 LED	(LL)= 24V-4W, MR16 LED	-BK= Black
Example: EF41(MJ)-GY	(LG)= 12V-4W, MR16 LED (LI)= 12V-5W, MR16 LED	(LW)= 120V-4W, MR16 LED	

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## **EverLite™** Series

Non-electric self luminous tritium exit sign for use in harsh environments



#### Construction

- · Housing and frame are made of ABS molding
- Faceplate lens is .13 thick acrylic
- Legend is non-glare polycarbonate
- Tamper-proof assembly with no removable fasteners
- 6" EXIT lettering legend, background available in red or green

#### Mounting

- Surface mount
- Single face model includes (1) housing, (1) faceplate and (1) canopy
- Canopy included for wall, end or ceiling mount applications
- Double face model includes (2) housings, (2) faceplates and (1) canopy
- Canopy included for end or ceiling mount applications

Finishes – choice of white or black

Chevrons - two field-selectable direction chevrons

#### No power required

- Non-electric, uses no electrical power internally or externally to illuminate – No wiring needed to operate
- No need to be illuminated by absorbing light from another source
- Spark-free, no filament, suitable for use in humid, corrosive or explosive environments

#### Accessories (order as a separate item)

Description	Suffix
White pendant	P-WT <sup>1</sup>
Black pendant	P-BK <sup>1</sup>
Gray pendant	P-GY1
Wire guard-wall mount	WG13-E
Wire guard-ceiling mount	WG5-E
Wire guard-end mount	WG15-E

<sup>1</sup>Specify length in inches (12, 24, 36, etc.)

#### How to order

Illuminatio	n

- Provided by phosphor-coated borosilicate tubes filled with tritium gas
- Low energy beta emission of tritium striking the phosphor coating inside the glass tubes generates illumination for the life of the sign

#### Special wording panel - Not available

#### Approvals

- NFPA Life Safety Code 101 UL 924
- Approved for installation from -76°F to 212°F
- City of Los Angeles
   State of California
- Council of American Building Officials (ICBO, SBCCI)
- OSHA USNRC ISO 9001

Warranty (subject to proper installation and maintenance)

- Full warranty for life of sign
- 10 year sign=10 year warranty
- 20 year sign=20 year warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



Frame	Series	Signifie	# OF TACES	Legena	Options	New
W= Off white ABS frame	SLX= Series	<b>-10</b> = 10 years	61= Single face	<b>R</b> = Red	-PC= Polycarbonate shield	-N=NEW
B= Black ABS frame		<b>-20</b> = 20 years	62= Double face	G= Green		
<b>G</b> = Gray ABS frame						
<b>A</b> = Aluminum frame						

Example: WSLX-1061R-N

## **EXC LED Series**

Class I, Division 1 & 2, Group C & D; Class II, Division 1 & 2, Group E, F & G; Class III remote fixture for hazardous locations



#### Housing

- One-piece heavy gauge, corrosion resistant, copper-free cast aluminum
- · Consists of a housing with provisions for up to two lighting heads
- Spin-off gasketed cover prevents propagation of internally generated arcs
- Stainless steel vent/drain
- Lighting head fixtures are heavy cast aluminum with Pyrex<sup>®</sup> lens
- Exit faceplate: heavy-duty 20 gauge steel, baked enamel gray finish
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

#### Mounting

- Surface wall mount
- 3/4" NPT conduit entry on top and bottom of housing
- Single and double pendant mount heads include elbow swivel, conduit extension pipe (6" increments)

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- 120/277 60Hz

#### Lamp type

- · Heads offer a choice of MR16 LED lamp wattages
- Exit sign uses a 3 watt LED lamp

#### Battery type

• 6V or 12V, nickel-cadmium battery

#### Approvals

- CSA-US (to UL 924 standards)
- Manufactured in accordance with UL844, UL1203
- Class I, Division 1 & 2, Groups C & D
- Class II, Division 1 & 2, Groups E, F & G
- Class III
- NEC, OSHA and NEMA compliant for above Classes and Groups
- Temperature code T6



#### Warranty



• Unit has five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
2 x LA	43'	29'
2 x LB	70'	39'
2 x LG	55'	36'
2 x LI	67'	41'
2 x LJ	87'	62'



#### Dimensions

Dimensions are approximate and subject to change.



Housing: 12" X 12" X 9 1/2" (4) Mounting Lugs: 10" and 13- 1/2" on center

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INDUSTRIAL

#### Standard configurations for EXC Series

Unit		Catalog number examples	Description
		6EXC1	6 volt self contained hazardous location emergency battery unit 18 watts of remote capacity.
(F	Remote capability)	6EXC1-TS	6 volt self contained hazardous location emergency battery unit 18 watts of remote capacity. Transfer switch included for use with remote exit signs (maximum 5 exit signs per TS).
	) N	12EXC4-1LI	12 volt self contained hazardous location emergency battery unit with one head containing 2 X 12V 5W MR16 LED lamps, 30 watts of remote capacity.
			12 volt self contained hazardous location emergency battery unit with one head containing 2 X 12V 5W MR16 LED lamps, 30 watts of remote capacity. Transfer switch included for use with remote exit signs (maximum 5 exit signs per TS).
	<u> </u>	12EXC4-1LI-TS	
		6EXC3-2LA	6 volt self contained hazardous location emergency battery unit with two heads, each containing 2 X 6V 4W MR16 LED lamps, 14 watts of remote.
		6EXC3-2LA-TS	6 volt self contained hazardous location emergency battery unit with two heads, each containing 2 X 6V 4W MR16 LED lamps, 14 watts of remote capacity.
		6EXC3-2LA-15	Transfer switch included for use with remote exit signs (maximum 5 exit signs per TS).
í		6EXC1-TS-T1LR	6 volt self contained exit sign with 15 watts of remote capacity. Transfer switch included for use with integral exit sign and additional remote exit signs (maximum 5 exit signs per TS).
E	EXIT		
	FXIT	12EXC4-1LJ-TS-T1LR	12 volt self contained combination unit with 25 watts of remote capacity. Transfer switch included for use with integral exit sign and additional remote exit signs (maximum 5 exit signs per TS).

Note: Exit signs utilise a 3 watt bayonnet base LED bulb fabricated at our North American facility.

#### Unit rating - equipment with remote capability

Sealed maintenanc	e-		Bat	ttery cap	oacity in	watts
free battery type	D.C. voltage	Model number	1-1/2 hrs	2 hrs	4 hrs	8 hrs
	6	EXC1	8	12	9	6
Nickel-cadmium	6	EXC3	30	20	15	10
Nickel-cadmium	12	EXC2	24	18	12	9
	12	EXC4	40	30	20	15

#### Guards and reflectors

Part number	Description
145.0016-E	Dome reflector
145.0017-E	Angle reflector
330.0125-E	Aluminium guard

#### How to order

Series / capacity		# of heads and lamps	Lamp wattage/type	Battery unit option
6EXC1= 6Vdc battery unit/combo 18 6EXC3= 6Vdc battery unit/combo 3 12EXC2= 12Vdc battery unit/combo 12EXC4= 12Vdc battery unit/combo	0W (6V only) 24W (12V only)	<ul> <li>-0= No emergency head</li> <li>-1= Single head, two lamps</li> <li>-2= Two heads, two lamps each</li> </ul>	LA= 6V 4W MR16 LED LB= 6V 5W MR16 LED LG= 12V 4W MR16 LED LI= 12V 5W MR16 LED LJ= 12V 6W MR16 LED	Blank= No transfer panel -TS= Transfer panel (required to supply remote exit sign only)
Exit sign # of faces	Exit sign lamp		Exit sign letter color	
Blank= No exit sign	L= LED exit sign		Blank= No exit sign	
-T1 = Single face exit sign			R= Red	
Example: 12EXC4-1LJ-TS-T1LR			<b>G</b> = Green	

02

## **EFEP Series**

## Explosion proof LED remote unit





03







#### Description

- MR16 LED light source
- Available as wall ceiling or pendant mount
- Heavy cast aluminum
- Pyrex<sup>®</sup> lenses<sup>1</sup>

#### Finish

• Painted grey

#### Mounting

- Surface mount: wall or ceiling
- Pendant mount: single head or double head
- Pendant mount including hazardous location elbows, swivels and conduit extension pipe (6" increments)
- Combination hazardous location junction box/mounting plate with 1/2" NPT conduit entry

#### Approvals

- CSA US (to UL 924 standards)
- Class I, Division 1&2, Groups C and D
- Class II, Division 1&2, Groups E, F and G
- Class III, Division 1&2, (150W max)
- Complies with NEC, OSHA and NEMA for above classes and groups
- Suitable for wet and damp location
- Temperature code T6

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

<sup>1</sup>Pyrex<sup>®</sup> is a registered trademark of Corning Glass.

#### Photometric performance - with two lamps

	Spacin	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
2 x LA	43'	29'
2 x LB	70'	39'
2 x LG	55'	36'
2 x LI	67'	41'
2 x LJ	87'	62'
2 x LL	56'	29'
2 x LV	58'	39'



#### Dimensions

Dimensions are approximate and subject to change.



#### Standard configurations for EXC Series

Unit	Description	Suffix
	<b>Guard</b> One-piece aluminum casting construction, attaches to globe holder ring with four screws	GXP
	<b>Dome Reflector</b> Highly reflective white finish inside and out, attaches to globe holder ring with four screws	RD
	<b>Angle Reflector</b> Highly reflective white finish inside and out, attaches to globe holder ring with four screws	RA

#### — How to order

Series	Mounting	No. of lamps	Lamp type/wattage
EFEP= X-proof LED remote	<b>C</b> = Ceiling mount	<b>2</b> = 2 lamps per head	<b>LA</b> = 6V-4W, MR16 LED
	P= Pendant		<b>LB</b> = 6V-5W, MR16 LED
	<b>W</b> = Wall mount		<b>LG</b> = 12V-4W, MR16 LED
	D = Double pendant mount		<b>LI</b> = 12V-5W, MR16 LED
			<b>LJ</b> = 12V-6W, MR16 LED
Example: EFEPC(HB)-GXP			<b>LL</b> = 24V-4W, MR16 LED
Example: EFEFC(HB)-GXF			<b>LV</b> = 120V-4W, GU10 LED

**EFXP Series** 

Explosion-proof exit signs







XPP – Adjustable pendant mount



EFXPC – Ceiling mount



#### Construction

- Heavy-duty 20 gauge steel, baked enamel grey finish
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons

#### Mounting

- Ceiling, wall or pendant
- 3/4 inch conduit entry

#### Approvals

- CSA-US (to UL 924 standards)
- Class I, Division 1&2, Groups C and D
- Class II, Division 1&2, Groups E, F and G
- Class III
- Complies with NEC, OSHA and NEMA for above classes and groups
- Suitable for wet and damp location
- Temperature code T6

#### Warranty

 Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

- Transfer panel (to order separately with AC/DC exit signs)
- A transfer panel is only required for AC/DC hazardous location **EFXP** exit signs that are under constant operation as required by code. Transfer panels are not designed to be installed/mounted in a hazardous or explosive area. Transfer panels are to be mounted remotely from these types of areas.
- Transfer panel available for up to 100W
- To order a transfer panel the following information is required:
- 1) AC input: 120V or 277V
- 2) DC voltage
- The total load wattage of all EFXP lamp(s) to be supplied by transfer panel



#### Dimensions

Dimensions are approximate and subject to change.

#### AC-only and AC/DC exit signs



#### Power consumption

120/277VAC, 60Hz maximum 0.3/0.15A

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## How to order

Series	Mounting	Lamp	Faces	Legend color
EFXP= Exit series	C= Ceiling mount	LED6= 6V-3 watt LED	1= Single face	R= Red
	P= Pendant	LED12= 12V-3 watt LED	2= Double face	<b>G</b> = Green
	<b>W</b> = Wall	<b>LED24</b> = 24V-3 watt LED		
		<b>LED120</b> = 120V-5 watt LED		

#### Example: EFXPCLED61R

How to order - Transfer pane	l (required for the o	peration of AC/DC exit sign)
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AC voltage	DC voltage	Series	Watts	
120= 120V AC	-6= 6V DC1	-TS	<b>-25</b> = 25W	
<b>277</b> = 277V AC	-12= 12V DC		<b>-50</b> = 50W	
	<b>-24</b> = 24V DC		<b>-75</b> = 75W	
			<b>-100</b> = 100W	
Example: Transfer pane	l (needed for AC/DC operation): 120	-12-TS-25		

<sup>1</sup>50W maximum

## **Remote fixtures**

Remote fixtures are ideal for architectural, commercial, and industrial locations with limited space or where subtle, code-compliant lighting is required.

- Provides a range of lamp types to suit illumination and spacing requirements
- Offers compatibility with battery units or inverters
- Complements decor with a selection of styles and mounting options

01 EGNL Series Vandal resistant linear remote fixture 01

See page 108 for more information about this product

# **Table of contents** Remote fixtures



## **RAR Series**

## Remote recessed architectural fixture



### Construction

- Thermoplastic rectangular fixture with additional round trim-plate, white finish
- All-metal backbox enclosure
- Fixed optics, optimized light distribution for ceiling heights up to 12 ft.
- Four high-intensity LED with redundant connections; 140 lm/W, 5000K

#### Options

- Plenum-rated enclosure
- Black thermoplastic decorative trim-plates
- Fixed, square distribution pattern

#### Photometry performance

The **RAR Series** has a fixed lighting distribution, optimized by design for ceiling heights up to 12 ft. Along an office corridor the space coverage ranges from 68 to 80 feet. The square distribution pattern option covers a surface of more than 700 square feet.

Table A: Standard unit 6-ft wide corridor <sup>1</sup>		
Mounting height	Spacing center-to-center	
9 ft	68 ft	
10 ft	80 ft	
12 ft	72 ft	



#### Mounting

- Easily spring mounted in sheetrock ceiling
- Recessed installation in T-bar suspended ceilings

#### Electronics

- AC model compatible with Emergi-Lite® mini inverters
- DC model available with Emergi-Lite® 6-24 battery units

#### Approvals

- Listed UL-924 for damp locations: 50° to 104°F (10° to 40°C)
- Listed NSF, splash non-food zone

#### Warranty

 Unit has a five-year limited warranty Detailed warranty terms located online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



#### Power consumption and unit rating

Input (VAC)	Input current (A)	Input power (W)	Power factor
	AC	:	
120	0.060		
240	0.030	7.0	0.95
277	0.025		

Input voltage (VDC)	Input power (W)
DC	
6-24	6.5

Table B: Option "square distribution pattern" – single unit coverage <sup>1</sup>			
Mounting height	Room size	Room surface	
10 ft	27 ft x 27 ft	729 square feet	

<sup>1</sup>Note: Illumination levels as per the Life Safety Code (NFPA 101): Average 1 fc, Minimum 0.1 fc, Max-to-min ratio 40:1. Typical reflectance levels of walls/ceiling/floor: 80/50/20.



#### Dimensions

Dimensions are approximate and subject to change.



#### How to order

Color	Series	Input voltage	Options
<b>B</b> = Black	RAR= Recessed architectural	AC= 120 to 277VAC, 50/60Hz	Blank= No options
W= Factory white	remote fixture	<b>DC</b> = 6 to 24VDC	P= Plenum/type IC rated
			SQ= Square distribution pattern

Example: WRARDCP

#### New product

## **EGNL Series**

Vandal resistant linear remote fixture



#### Housing

- White high impact thermoplastic housing
- Frosted lens

#### Mounting

- Standard surface ceiling and wall mount
- Optional accessory: semi-recessed ceiling mount

#### **LED** information

- Easily adjustable LED strips for multiple beam angles
- Color temperature: 4000K
- 1200-1300 lumen output

#### Electronics

- Universal voltage 120V through 277V 60Hz. 12-24VDC
- Compatible with Emergi-Lite® 12 and 24V battery units

#### Approvals and ratings

- Rated for -4°F to 113°F (-20°C to 45°C)
- Suitable for wet locations
- Meets IP65 rating
- Meets IK10 rating requirements<sup>1</sup>
- ROHS compliant
- UL924 approved

#### Warranty

- Unit has a three-year warranty
- Detailed warranty terms located online at:
- www.emergi-lite.com/usa/files/EL\_Warranty.pdf

<sup>1</sup>IK ratings refer to impact tests. IK10= Protected against 20 joules of impact (equivalent to 11lbs. of mass dropped from 16" high)

#### Spacing

Mounting type	Spacing at 9ft mounting	Lumens
Ceiling mount	62'	1300
Wall mount	53'	1200


#### Dimensions

Dimensions are approximate and subject to change.



**Power consumption** 

	Voltage	Wattage
AC	120-277VAC	14 watts
DC	12-24VDC	13 watts

Accessories (	order	as a	separate	item)

Description	Suffix
Semi recessed mounting bracket	KIT-SR-E

#### How to order

#### Series

EGNL= remote linear

Example: EGNL-ACDC

-ACDC= ACDC 120-277VAC, -12-24VDC

# Lux-Ray<sup>™</sup> LED Series

Low-profile, sleek look light fixture



#### Description

- Die-cast aluminium housing
- UV resistant polycarbonate lens

#### Lamp type

- LED light engine with redundant connections
- Optional forward-throw light distribution, for applications of outdoor egress
- Optional dual-mode: normal and emergency LED lighting with separate AC inputs

#### • Optional high-lumen output

- Optional photo-switch: dusk-to-dawn control of normal lighting
- Optional remote test: infrared remote control
- 400-640 Lumens
- Color temperature: 4000K

#### Mounting

- Surface wall mount
- Universal J-box mounting

#### Approval

- UL listed
- NEMA-3R
- Damp and wet location listed (-40°F to 104°F, -40°C to 40°C)

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



#### Photometric performance

Table A – Spacing for minimum illumination = 1FC (1 foot-candle)

				Width X	( length (ft)
Model type	Mounting height	Lumen	Color temperature	Single unit	Center-to- center
Standard	9'	400	4000K	4' x 28'	4' x 32'
With option -H	11'	550		4' x 32'	4' x 40'
With option -FT	12'	460		4' x 22'	_
With option -FTH	15'	640		4' x 27'	_



				Width X	( length (ft)
Model type	Mounting height	Lumen	Color temperature	Single unit	Center-to- center
Standard	9'	400	4000K	6' x 50'	4' x 32'
With option -H	11'	550	-	6' x 60'	4' x 40'
					3' x 70'
With option -FT	12'	460	-	6' x 40'	-
With option -FTH	15'	640		6' x 50'	_





#### Dimensions

Dimensions are approximate and subject to change.







#### Power consumption chart

	Normal lighti	ng (120/277VAC)	Emergency light	ing (120/277VAC)	6-12VDC remote
Model type	Current (max)	Power (max)	Current (max)	Power (max)	Power (max)
AC, 2AC, ACDC, DC	0.12/0.08A	12W	0.12/0.08A	12W	8W
AC, 2AC, ACDC, DC, -H	0.18/0.11A	18W	0.18/0.11A	18W	14W

<sup>1</sup>Note: only unswitched AC input; normal lighting with photocell or remote control

#### How to order

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Color	Series	Model [(-40°F +122°F (-40°C +50°C)]	Options
<b>B</b> = Black	LUX= Lux-Ray LED	AC= AC-only	-FT= Forward throw lighting
BZ= Dark bronze		ACDC= AC/6-12VDC remote	-H= High lumen output (-40 86°F/-4030°C)
OW= Off-white		DC= 6-12VDC remote fixture	-P= Photocell (AC, ACDC only)
PG= Platinum gray		2AC = AC-only two circuits:	-RC= Remote control test switch- infrared <sup>1</sup>
		120/120 or 277/277V	(AC, ACDC only)
Example: BZLUXDC	-FTH		-

<sup>1</sup>Remote control keypad (TB-RC1-E) ordered seperately

# Literay<sup>™</sup> Series

Wall mount remote head for damp and wet locations



#### Description

- Indoor or outdoor use
- Die-cast aluminum construction
- Fully gasketed cover
- · Impact- and tamper-resistant polycarbonate lens

#### Mounting

- Surface wall mount
- Universal J-box mounting

Photometric performance

#### Lamp type

Lamp LG frosted lens

LG clear lens

Choice of MR16 LED lamp wattages

### Approval

- UL 924 listed
- NEMA-3R
- Damp and wet location listed (50°F to 104°F, 10°C to 40°C)

#### Warranty

- Unit has a three-year limited warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.





Example: LITE-2(LA)-WT-VR



Spacing center-to-center (feet)

7 ft. mounting height

16'

28'

#### **Housing color**

White

Black

Dark gray

— How to order				
Series	No. of lamps	Lamp type/ Wattage	Color	
LITE=	<b>-2</b> = 2 lamps	(LA)= 6V-4W,	-WT= White	
Exterior	(standard)	MR16 LED	-BK= Black	
remote		(LB)= 6V-5W,	-DG= Dark	
		MR16 LED	gray	
		(LG)= 12V-4W,		
		MR16 LED		
		(LI)= 12V-5W,		
		MR16 LED		

(LJ)= 12V-6W,

MR16 LED (LL)= 24V-4W, MR16 LED (LV)=120V-4W,

MR16 LED



NEMA-3R (U

REMOTES

# **Revelation<sup>™</sup> DC Series**

Virtually invisible, architecturally pleasing



#### Description

- Indoor use
- One-piece all-metal module design
- Complete 360° door rotation
- Slip gear mechanism protects the unit from objects that would cause the door rotation to be forcibly stopped.

#### Finish

- Flat door and frame are covered with a high-quality, powder coated textured off-white finish
- Surface finish can be customized on site with paint, wallpaper or other coverings.

#### Mounting

- The module includes the electrical junction box and is installed on the wall stud or ceiling beam with the help of a simple, U-shape bracket.
- · Key-hole slot for ease of installation

#### Photometric performance

	Spaci	ng center-to-center (feet)
Lamp	7 ft. mounting height	15 ft. mounting height
LG	55'	43'
LI	71'	56'
LJ	100'	85'
LL	56'	44'



#### Lamp type

Choice of MR16 LED lamp wattages

#### Approval

CSA-US (to UL 924 standards)

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



#### How to order

Input voltage	Series	# of lamps	Lamp type/ wattage	Options
<b>12</b> = 12VDC	RTR=	<b>2</b> = Two	<b>-LG</b> = 12V-4W,	Blank= No
<b>24</b> = 24VDC	Revelation	lamps	MR16 LED	options
	remote	standard	<b>-LI</b> = 12V-5W,	-DL= Damp
			MR16 LED	location
			-LJ= 12V-6W,	
			MR16 LED	
			-LL= 24V-4W,	
			MR16 LED	
Example: 12R	TR2-LG-DL	]		

# **Distinction<sup>™</sup> DC Series**

Remote recessed designer light fixtures



## Description

- Indoor use
- Powder-coated die-cast aluminum construction

#### Finish

• Choice of white, black, brushed nickel

#### Mounting

- Recessed ceiling mount
- Must order appropriate housing with decorative head selection for installation into new construction ceiling (EL-GRHR03) or non-insulated ceiling (EL-GRHR05) GU10 or insulated ceiling (EL-GRHR06)

#### Approval

• UL listed

#### Warranty

- · Unit has a three-year limited warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacing	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'
LG	55'	43'
LI	71'	56'
LJ	100'	85'
LL	56'	44'
LM	100'	85'
LV	43'	39'



#### Housing

Suffix	Description
EL-GRHR03	New construction
EL-GRHR04	Renovation housing
EL-GRH05	Non-insulated ceiling
EL-GRHR06	Insulated ceilings

### Dimensions

Dimensions are approximate and subject to change.



New construction housing.

EL-GRHR03

New construction housing for GU10



EL-GRHR05

**Renovation housing** 





#### Insulated ceilings housing Total height: 7.25"



REMOTES

Series				LED lamp suffix
		Description: Decorative adjustable lighting head	<b>LA</b> = 6V-4W, MR16 LED	LI= 12V-5W, MR16 LED
	EFR8R: concave	Dimensions: 4.0" diameter base	<b>LB</b> = 6V-5W, MR16 LED	<b>LJ</b> = 12V-6W, MR16 LED
Cart		Color suffix: -WH = White, -BN = Brushed nickel	<b>LG</b> = 12V-4W, MR16 LED	<b>LM</b> = 24V-6W, MR16 LED
(100)	(egress/regress)	or -BK= Black	<b>LL</b> = 24V-4W, MR16 LED	
		Requires recessed housing	<b>LV</b> = 120V-4W, MR16 LED	
		Description: Decorative adjustable lighting head	<b>LA</b> = 6V-4W, MR16 LED	LI= 12V-5W, MR16 LED
Mar		Dimensions: 4.0" diameter base	<b>LB</b> = 6V-5W, MR16 LED	<b>LJ</b> = 12V-6W, MR16 LED
(63)	EFR9: pop-out	Color suffix: -WH = White or -BK= Black	<b>LG</b> = 12V-4W, MR16 LED	<b>LM</b> = 24V-6W, MR16 LED
1341		Requires recessed housing	<b>LL</b> = 24V-4W, MR16 LED	
			<b>LV</b> = 120V-4W, MR16 LED	
0		Housing enclosure		_
		Description: New construction housing		
and the second second	EL-GRHR03	Dimensions: 5.6" x 14.2"		
100		New construction housing – MR16 6-24V		
		Housing enclosure		_
		Description: Renovating Housing		
	EL-GRHR04	<b>Dimensions:</b> 4.6" x 12.5"		
∫ <u>⊥</u> <u>H</u> _}		Renovation housing - MR16 6-24V		
		Housing enclosure		_
		Description: New construction housing		
<u> </u>		<b>Dimensions:</b> 5.6" x 14.24"		
	EL-GRHR05	New construction housing – MR16 120V (GU10)		
		Note: For MR16 halogen lamps,		
		please consult lamp data p. 140-141		
		Housing enclosure		-
100		Description: Insulated ceiling housing		
and the second se	EL-GRHR06	Dimensions: 7.25" x 14.24"		
2 .1		Insulated ceilings housing – MR16 6-24V		

How to order

Series	Color	Lamp type/ wattage
EFR8R EFR9	Choose color from the above table	(L_)= LED MR16

Example: EFR8RBK(LA)

# **Distinction<sup>™</sup> EF150 Series**

Surface mounted designer light fixtures



#### Description

- Indoor use
- Available as a single, double or triple MR16 LED size lighting head
- Die-cast aluminum construction

#### Finish

REMOTES

• Powder-coated off-white or black

#### Mounting

- Surface mount
- Universal J-box mounting

#### Approval

• UL 924 listed

#### Warranty

• Unit has a three-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacing center-to-cent	
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'
LG	55'	43'
LI	71'	56'
LJ	100'	85'
LL	56'	44'
LV	53'	42'







Dimensions are approximate and subject to change.







EF150T

#### -

#### Accessories (order as a separate item)

Description	Suffix
Wire guard for EF150, EF150D	WG8-E
Wire guard for EF150T	WG2-E

#### How to order

Series	# of heads	Color	Lamp type/ wattage
EF150=	Blank= Single	Blank= White	(LA)= 6V-4W, MR16 LED
Decorative	head	B= Black	(LB)= 6V-5W, MR16 LED
MR16 remote	<b>D</b> = Double		(LG)= 12V-4W, MR16 LED
head	head		(LL)= 24V-4W, MR16 LED
	<b>T</b> = Triple		(LI)= 12V-5W, MR16 LED
	head		(LJ)= 12V-6W, MR16 LED
			(LV)= 120V-4W, MR16 LED

Example: EF150D-B(MK)

# Surface Mounted EF10 & EF10D Series

Thermoplastic MR16 lamp head



#### Description

- Indoor use
- Available as a single, double or triple head
- Thermoplastic construction
- Snap-out lens for easy lamp replacement

#### Finish

Off-white or black

#### Lamp type

Choice of MR16 LED lamp wattages

#### Mounting

- Surface mount
- Universal J-box mounting

#### Approval

• UL 924 listed

#### Warranty

• Unit has a three-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacing	g center-to-center (feet)
Lamp	7' mounting height	15' mounting height
LA	43'	36'
LB	81'	64'
LG	55'	43'
LI	71'	56'
LJ	100'	85'
LL	56'	44'



## Dimensions

Dimensions are approximate and subject to change.











8-1/4"





#### How to order

Series	# of heads	Lamp type/ wattage	Color
EF10= MR16 PAR18 remote head	Blank= Single head D= Double head T= Triple head	(LA) = 6V-4W, MR16 LED (LB) = 6V-5W, MR16 LED (LG) = 12V-4W, MR16 LED (LI) = 12V-5W, MR16 LED (LJ) = 12V-6W, MR16 LED (LL) = 24V-4W, MR16 LED	Blank= Off- white BK= Black
Example: EF1		,,,	

# **EF12D-LED Series**

Thermoplastic square LED outdoor remote heads



#### Features

- Multi-volt 3.6, 6 or 12V, 3W in total
- Thermoplastic housing and aluminum canopy with fully adjustable LED heads
- Suitable for outdoor, wet location applications
- Wall or ceiling mount
- -4°F to 122°F (-20°C to 50°C)
- UL 924 Listed

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



#### EF12-LED Series



#### Photometric performance

#### How to order

	Spacing c	enter-to-center (feet)	Series	# of lamp
Lamp	7' mounting height	15' mounting height	EF12	Blank= Singl
EF12	13'	4'		<b>D</b> = Double he
Photometric sp for 1FC av	bacing	Mounting height	Exampl	e: EF12D-LED

# Series# of lampOptionsColorEF12Blank= Single head-LED= ThermoplasticBlank= GrayD= Double headsquare LED headBk= Black

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# HPRL Series High-Performance Industrial Remote

NEMA-4X, high-performance industrial remote unit



#### Photometry performance

Capable of being installed indoors or outdoors, the **HP Series** of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the required illumination levels need for the application, one choose between three level of lumen output using a 6W, 10W or 15W head. See cross reference to traditional MR16 halogen emergency lamp types.

#### Spacing center-to-center (feet)

Mounting height	Lamp L6/6W, 565Lm	Lamp L10/10W, 1000Lm	Lamp L15/15W, 1300Lm
10 ft	80	110	140
15 ft	70	105	135
20 ft	60	100	130
25 ft	50	95	120



Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft wide illumination path. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/ min< 40:1

LED head	Power	Total lumens	Out-perform spacing of MR16 halogen lamp types
L6	6W	565	37W PAR36, MR16 halogen (700 lumens)
L10	10W	1000	50W PAR36, MR16 halogen (950 lumens)
L15	15W	1300	50W MR16-IR halogen (1550 lumens)

#### Housing

- Lightweight polycarbonate gray housing with captive screws
- NEMA-4X protection grade
- All external fasteners and hardware are constructed of stainless steel

#### Mounting

- Simple and easy to install on walls, poles, columns, struts also on vertical
- Pole or column installation bracket sold separately (order catalog number: PMK1-E) 1/2 NPT conduit entry on top or side

#### Performance

- 6W, 10W and 15W high efficacy LED emergency heads outperform traditional 50W MR16 halogen
- 15W head outperforms traditional 50W MR16 halogen
- Innovative head design: four-LED and dual- driver provide illumination even in case of unexpected component failure

#### Approvals

- UL 924 listed
- Can be installed in wide temperature range: -40°F to 131°F (-40°C to 55°C)

**Warranty** (subject to proper installation and maintenance)

• Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.





Warning: The mounting column must be anchored at both ends: floor and ceiling.

NEMA-4X

6-1/2

#### How to order

Series	# of heads	LED head
HPRL= High-performance remote	Blank= Single head	<b>L6</b> = 12-24V – 6W (565 lumens) <b>L10</b> = 12-24V – 10W (1000 lumens)
Example: HPRLD6	<b>D</b> = Double head	<b>L15</b> = 12-24V – 15W(1300 lumens)

# Survive-All™ EF39 Series and EF40 Series

EF39 NEMA-4X & NSF certified EF40 vandal resistant



#### Description

120

- EF39 and EF39P NEMA-4X and NSF certified indoor or outdoor use
- EF39 and EF39P NEMA-4X and NSF certified with choice of fully gasketed cast aluminum or plastic back plate<sup>1</sup>
- EF40 and EF40P vandal resistant for Indoor USE with choice of fully gasketed cast aluminum or plastic back plate
- EF39 and EF39P NEMA-4X and NSF Certified comes standard with Phillips head screws and tamper proof screws
- Available as single or double MR16 LED lamp size remote lighting fixture Include clear polycarbonate UV and impact resistant cover
- Includes clear polycarbonate UV and impact resistant cover

#### Lamp type

Choice of MR16 LED lamp wattages

#### Photometric performance

	Spacing center-to-center (feet		
Lamp	7' mounting height	15' mounting height	
LA	39'	34'	
LB	74'	57'	
LG	49'	39'	
LI	68'	54'	
LJ	89'	80'	
LL	51'	39'	



#### Mounting

- Surface mount
- Universal J-box mounting approval

#### Approval

- UL 924 listed
- Vandal resistant<sup>1</sup>
- NEMA-4X<sup>1</sup>
- NSF Rated

<sup>1</sup>EF39P and EF39 units are NEMA-4X Certified when installed using a circular NEMA-4X rated junction box (sold separately by Thomas&Betts under product number 091647-E)

#### Warranty

• Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

NEMA-4X

#### Dimensions

Dimensions are approximate and subject to change.



#### Accessories

Description	Suffix
Additional special bit for tamper-proof screws	690.0454-E

#### How to order EF39 Series

Series	Lamp type/ wattage	Lamp type	Option
EF39P= All polycarbonate single head NEMA-4X	(LA)= 6V-4W, MR16 LED	Blank= White	SM= Mounting plate
EF39PD= All polycarbonate double head NEMA-4X	(LB)= 6V-5W, MR16 LED	<b>-BK</b> = Black	
	(LG)= 12V-4W, MR16 LED	<b>-GY</b> = Gray	
	(LI)= 12V-5W, MR16 LED	-	
	(LJ)= 12V-6W, MR16 LED		
Example: EF39P(LG)-BK	(LL)= 24V-4W, MR16 LED		

Series	Lamp type/ wattage	Lamp type
EF39= Die-cast back plate single head NEMA-4X	(LA)= 6V-4W, MR16 LED	Blank= White
EF39D= Die-cast back plate double head NEMA-4X	(LB)= 6V-5W, MR16 LED	-BK= Black
	(LG)= 12V-4W, MR16 LED	-GY= Gray
	(LI)= 12V-5W, MR16 LED	
	(LJ)= 12V-6W, MR16 LED	
Example: EF39P(LG)-BK	(LL)= 24V-4W, MR16 LED	

#### How to order EF40 Series

Series	Lamp type/ wattage	Lamp type	Options	
EF40P= All polycarbonate back plate single head	(LA)= 6V-4W, MR16 LED	Blank= White	Blank= No options	
EF40PD= All polycarbonate plate double head	(LB)= 6V-5W, MR16 LED	- <b>BK</b> = Black	T= Tamper proof	
	(LG)= 12V-4W, MR16 LED	<b>-GY</b> = Gray	screws	
	(LI)= 12V-5W, MR16 LED		SM= Mounting	
	(LJ)= 12V-6W, MR16 LED		plate	
Example: EF40P(LG)	(LL)= 24V-4W, MR16 LED			
	(			
Series	Lamp type/ wattage	Lamp type	Options	
		Lamp type Blank= White	Options Blank= No options	
Series	Lamp type/ wattage			
Series EF40= Die-cast back plate single head	Lamp type/ wattage (LA)= 6V-4W, MR16 LED	Blank= White	Blank= No options	
Series EF40= Die-cast back plate single head	Lamp type/ wattage (LA)= 6V-4W, MR16 LED (LB)= 6V-5W, MR16 LED	Blank= White -BK= Black	Blank= No options T= Tamper proof	
Series EF40= Die-cast back plate single head	Lamp type/ wattage (LA)= 6V-4W, MR16 LED (LB)= 6V-5W, MR16 LED (LG)= 12V-4W, MR16 LED	Blank= White -BK= Black	Blank= No options T= Tamper proof	

Example: EF40D(LJ)

## **HPHRL Series Hazardous Locations**

Class I Division 2, Class II Division 2, Class III high-performance remote fixture



#### Photometry performance

Whether installed indoors or outdoors, the HP Series of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the application, one may select and specify among three levels of lumen output. See cross reference to traditional incandescent emergency lights below.

#### Spacing center-to-center (feet)

	Spacing center-to-center (feet)
Mounting height	Lamp L15/15W, 1300Lm
10 ft	140
15 ft	135
20 ft	130
25 ft	120

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft wide illumination path. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/ min< 40:1

			Out-perform spacing of
LED head	Power	Total lumens	incandescent lamps
L15	15W	1300	50W MR16-IR halogen



#### Description

• Lightweight polycarbonate gray housing and fully adjustable

Die-cast aluminum heads designed for Class I Division 2 Groups A, B, C and D, Class II Division 2, Groups F & G and Class III applications facilities

- Can be installed in varied temperature conditions: -40°F to 131°F (-40°C to 55°C)
- High-efficacy LED emergency heads outperform traditional 50W incandescent lamps
- Innovative head design: four-LED and dual-driver provide illumination even in case of unexpected component failure
- Simple and easy to install on building walls, columns, struts, etc. On vertical position for columns use mounting bracket (order separately catalog number: PMK1-E)

#### Approvals

- UL 924 listed
- Listed UL 844 Standard for Class I Division 2 Groups A, B, C & D, Class II Division 2, Groups F & G and Class III

#### Warranty

 Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



#### How to order

Series	# of heads	Lamp type/ wattage
HPHRL= High-performance hazardous location remote	Blank= Single head D= Double head	<b>L15</b> = 12-24V – 15W (1300 lumens)
Example: HPHRLDL15		

# Survive-All<sup>™</sup> EF41 Series

Class I division II certified remote fixture



#### Photometric performance

	Spacing	Spacing center-to-center (feet)		
Lamp	7' mounting height	15' mounting height		
LA	39'	34'		
LB	74'	57'		
LG	49'	39'		
LI	68'	54'		
LJ	89'	80'		
LL	51'	39'		
LW	43'	39'		



#### Dimensions

Dimensions are approximate and subject to change.





#### Description

- Available with single or double lamp heads
- Die-cast aluminum back plate with gasket
- Vandal-resistant UV stabilized polycarbonate lamp cover
- · Comes standard with tamper-proof screws and bit
- Universal J-box mounting
- Extreme operational temperature range: -40°F to +104°F (-40°C to +40°C)

#### Mounting

- Surface mount
- Conduit entry 1/2" NPT

#### Approval

- CSA-US (To UL 924 standards)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D

#### Warranty

 Unit has a five-year limited warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf REMOTES

#### Lamp selection chart and temperature code

Lamp suffix	Voltage	Wattage	Lumens	Replacement number	Temp. code	Max. temp.
LA	6	4	200	580.0097-E	T4A	120°C
LB	6	5	415	580.0122-E	T4A	120°C
LG	12	4	220	580.0093-E	Т5	100°C
LI	12	5	340	580.0104-E	T4A	120°C
LJ	12	6	540	580.0106-E	T4	135°C
LL	24	4	220	580.0098-E	Т5	100°C
LW	120	4	230	580.0113-E	T4A	120°C

#### How to order

Series	Lamp ty	pe/ wattage	Color
EF41= Single	(LA)= 6\	/-4W, MR16 LED	-GY= Gray
lamp	(LB)= 6V	'-5W, MR16 LED	
EF41D= Double	(LG)= 12	V-4W, MR16 LED	
lamp	(LI)= 12	/-5W, MR16 LED	
	(LJ)= 12	V-6W, MR16 LED	
	<b>(LL)</b> = 24	V-4W, MR16 LED	
	(LW)= 12	20V-4W, MR16 LED (C/	/W wires)
Example: EF41	(MJ)-GY		

<sup>1</sup>Wattage doubles for "D" 2-lamp version

# **Distributor Select products**

Popular emergency lighting products are in stock and ready to ship from warehouses across North America for fast delivery.

- Deliver quickly with fast stock replenishment
- Easily specify the exact products you need from standard options
- Exceed your customers' expectations with a wide range of versatile emergency lighting solutions

— 01 Prestige™ Thin Series die-cast aluminum slim profile exit sign with long-lasting LED performance

01

See page 130 for more information



# **Table of contents** Distributor Select



#### **New** product

Vandal resistant linear dual-mode battery unit



#### Housing

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**EGNL Series** 

- White high impact thermoplastic housing
- Frosted lens

#### Mounting

- Standard surface ceiling and wall mount
- Optional accessory: semi-recessed ceiling mount

#### LED information

- Easily adjustable LED strips for multiple beam angles
- Color temperature: 4000K
- 1200-1300 lumen output in emergency

#### Electronics

- Dual-mode: normal lighting (field selectable) and emergency lighting
- Self-test and self-diagnostic
- Lithium-ion phosphate battery offering 120 minutes of emergency lighting
- Battery over/under charge protection
- Universal voltage 120V through 277Vac-60Hz

#### Spacing

Mounting type	Spacing at 9ft mounting	Lumens
Ceiling mount	62'	1300
Wall mount	53'	1200



- ApprovalsRated for 41°F to 113°F (5°C to 45°C)
- Suitable for wet locations
- Meets IP65 rating
- Meets IK10 rating requirements<sup>1</sup>
- ROHS compliant
- UL924 approved

#### Warranty

 Unit has a three-year warranty Detailed warranty terms located online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

<sup>1</sup>IK ratings refer to impact tests. IK10= Protected against 20 joules of impact (equivalent to 11lbs. of mass dropped from 16" high)

#### Dimensions

Dimensions are approximate and subject to change.



#### Power consumption and unit rating

Status	Voltage	Wattage	Battery	
Normal lighting	120-277 volt	16 watts	LifeP0 9.6 volt	
Emergency lighting	120-277 Volt	14 watts	3200mAh	

Description	Suffix
Semi recessed mounting bracket	KIT-SR-E

#### \_

#### How to order

Series

EGNL= Linear battery unit

**EM**= Dual-mode: normal lighting and/or emergency lighting

Example: EGNL-EM

# **EL-2RHL Series**

High output lithium LED battery unit



#### Housing

- UV stabilized thermoplastic body
- Two adjustable high output LED lighting heads
- White finish

#### Mounting

- Wall or ceiling mount
- Universal J-box mounting

#### Lamp type

• Two 9.6V-5.4W LED heads, 550 lumens per head

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Standard Advanced Diagnostics
- 120/277 60Hz

#### Dimensions

Dimensions are approximate and subject to change.



#### Approvals

- UL 924 Listed
- Damp location (50°F to 104°F)
- UL 94, 5VA flame rated
- Circle BC meet CEC title 20

#### Warranty

• Unit has a three-year warranty Detailed warranty terms located on page 202 of the catalog or online at:

www.emergi-lite.com/usa/files/EL\_Warranty.pdf

AD

(BC

#### Power consumption and unit rating

		DC specs	
Model	Battery type	Voltage	Units dual voltage
EL-2RHL-AD	Lithium-ion battery	9.6	120-277

#### How to order

Series	Heads
EL	-2RHL-AD= Two round high output LED heads with Advanced Diagnostics
Example: EL-2RHL-AD	

#### Photometry performance



# **Prestige™** Thin Die-Cast Series

Die-cast aluminum slim profile exit sign with long-lasting LED performance



#### Construction

- Die-cast aluminum
- 6 inch EXIT lettering legend, available in red or green
- Choice of finishes: all white or black with brushed aluminum faceplate: Field-selectable chevrons

#### Mounting

Dimensions

- Surface mount
- Canopy included for end or ceiling mount applications: Universal J-box mounting

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards
- Compatible with Emergi-Lite Min Inverters (contact your sales representative for more information)

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Dimensions are approximate and subject to change.



#### Faceplate

White

Brushed aluminum

#### Power consumption

Model			AC specs		DC specs
AC-only	120/277 VAC, 60Hz	Typical 1W	Less than 1.5W	-	-
Self- powered	120/277VAC, 60Hz	Typical 1W	Less than 1.5W	Ni-Cd battery	Min. 90 minutes

#### Accessories (order as a separate item)

Description	Suffix
Wire guard (wall mount)	WG1-E
Wire guard (ceiling mount and end mount)	WG5-E

#### How to order

Frame color/ Face plate	Series	No. of lamps	Legend color
<ul><li>BA= Black body/brushed aluminum face</li><li>WW= White/white</li></ul>	TX= AC only TXN= Self- powered unit (90 min.)	1= Single face 2= Double face	<b>R</b> = Red <b>G</b> = Green
Example: BATXN1R			

# **CPN6** Series

Extruded aluminum edge-lit combo



#### Construction

- Extruded aluminum housing and trim plate
- Brushed aluminum finish
- Trim plate includes two fully tool-free adjustable, 2.5W LED heads, 400 Lumens each
- Acrylic panel featuring 6 inch silk-screened EXIT legend with field selectable chevrons
- Single face red or green on clear, double face red or green on mirror

#### Mounting

- Wall and ceiling surface and recessed mount
- Universal mounting on wall or ceiling, for surface or recessed applications
- Adjustable bar hanger included for recessed applications

#### Electronics

- High temperature long life Nickel Metal Hydride battery provides 90 minutes of emergency operation
- 120/277VAC 60Hz
- Optional: Self-Diagnostics
- Approvals
- UL 924 listed
- Damp location 41°F to 104°F (5°C to 40°C)

#### Warranty

 Unit has a three-year limited warranty Detailed warranty terms located online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

	Spacing center-to-center (feet)
Series	7.5' mounting height
CPN*6	30'



#### Dimensions

Dimensions are approximate and subject to change.

#### Surface ceiling mount



#### Surface wall mount



#### Recessed ceiling mount

Recessed wall mount



2-1/8"

#### Power consumption

Series	AC input	Voltage	Battery
CPNR6-2HO	120/277VAC, 60Hz	2.04	NiHM 1800mAH
CPNG6-2HO			NiHM 1800mAH
CPNR6-2HO-AD		3.6V	NiHM 2500mAH
CPNG6-2HO-AD			NiHM 2500mAH

#### How to order

Model	Series	Legend color	Legend	Heads	Options
C = Combo Example: CPNR6-2HO	PN = Self-powered	<b>R</b> = Red <b>G</b> = Green	<b>6</b> = 6" EXIT single and double face with universal chevrons and mounting for surface or recessed	<b>2HO</b> = Two high output LED heads	Blank = Standard AD = Self-Diagnostics

# Total™ Edge Series

Single and double face, surface and recessed mount edge-lit exit sign



#### Construction

- Extruded aluminum housing
- High grade acrylic panel
- 6 inch EXIT lettering legend, available in red or green
- Field-selectable chevrons
- Satin aluminum housing
- Optional Advanced Diagnostics

#### Mounting

#### Universal mount model

- Pivoting panel design allows for recessed, surface, wall or ceiling mount installation
- A ratcheting mechanism allows the panel to be set in place from 0° to 180° for wall or sloped ceiling mounting
- Canopy included for surface wall, end or ceiling mount application
- Easy snap in backbox with securing trim plate allow for sheet rock ceiling installation
- Trim plate, 27 inch adjustable T-bar hangers and a junction box included for recessed application

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- Meets NFPA101 (Life Safety Code)
- NFPA 70 NEC and OSHA illumination standards
- Compatible with Emergi-Lite Min Inverters (contact your sales representative for more information)

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 of the catalog or online at:

www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Accessories (order as a separate item)

Description	Suffix
Battery	850.0107-E
Pendant white	P*WT
Pendant black	P*BK
Pendant adapter <sup>1</sup>	081886-E

<sup>1</sup>Required for use with pendant

**Dimensions** Dimensions are approximate and subject to change.





#### Power consumption

Model			AC specs		DC specs
	AC only	120VAC, 60Hz	2.0-2.6W	-	-
		277VAC, 60Hz	2.6-3.1W	_	_
Red	Self-powered	120VAC, 60Hz	2.0-2.6W	Ni-Cd battery	Min. 90 minutes
		277VAC, 60Hz	2.6-3.1W	Ni-Cd battery	Min. 90 minutes
	AC only	120VAC, 60Hz	2.8-3.3W	-	_
Green	AC only	277VAC, 60Hz	3.5-4W	-	_
	Self-powered	120VAC, 60Hz	2.8-3.3W	Ni-Cd battery	Min. 90 minutes
		277VAC, 60Hz	3.5-4W	Ni-Cd battery	Min. 90 minutes

### How to order

Series	Color	Legend	Options
<b>PA</b> = AC Only <b>PN</b> = Self-powered <b>PA2</b> = AC only dual circuit	<b>R</b> = Red on mirror <b>G</b> = Green on	<b>6</b> = 6" EXIT single and double face with universal chevrons	- <b>AD=</b> Advanced Diagnostics <sup>1</sup>
Example: PNR6-AD	mirror		

<sup>1</sup>Only available on self-powered models

# **EL-2LED Series**

Low energy, low maintenance emergency lighting for moderate budget applications





#### Construction

- UV stabilized thermoplastic body
- Fully adjustable Cluster™ LED glare-free heads
- Choice of white or black housing

#### Mounting

- · Ceiling or wall mount
- Universal J-box mounting

#### Lamp type

• White LED 3.6V-1.8W each, 70 lumens per head

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out installation
- Fused output circuit
- Optional Advanced Diagnostics
- 120/277 60Hz

#### Sealed maintenance-free battery

• 3.6V nickel-cadmium battery

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 94, 5VA flame rated (68°F to 86°F, 20°C to 30°C)
- EL-2LED is circle BC to meet CEC. Title 20

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Photometric performance

Spacing center-to-center (feet)	
7' mounting height	15' mounting height
15'	4'



#### Dimensions

Dimensions are approximate and subject to change.



#### Power consumption

Current (A) / P	
Model	120/277VAC, 60Hz
EL-2LED	0.103/0.10A
EL-2LEDR	0.13/0.16A
EL-2LEDR-AD	0.058/0.029A

#### — How to order

#### Color Series Lamp option Options Blank= White EL -2LED = round LED array Blank= No option B= Black R= 3.6W remote capacity to power one double head remote<sup>1</sup> R-AD= 3.6W remote capacity to power one double head dedicated remote with Example: EL-2LEDR Advanced-Diagnostics<sup>1</sup>

<sup>1</sup>Remote capacity can only be used to power the EF43D or EF44D remote fixtures or to extend the battery units emergency run time beyond the standard 90 minutes.

# **ELXN400 LED Series**

Low energy and low maintenance for moderate budget application



#### Housing

- UV stabilized thermoplastic body
- Fully adjustable and reversible Cluster<sup>™</sup> LED glare-free heads
- 6 inch EXIT lettering legend, available in red or green
- Universal faces (2 faceplates, 1 backplate)
- Field selectable chevrons

#### Mounting

- Surface mount
- Canopy included for ceiling mount applications
- Universal J-box mounting finishes

#### Type of battery

• 3.6V nickel-cadmium battery

#### Lamp head source

• White LED 3.6V-1.8W each

#### Electronics

- Optional Advanced Diagnostics
- 120/277 60Hz

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 94, 5VA flame rated

## Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

### Photometric performance



#### Dimensions

Dimensions are approximate and subject to change.



#### Power consumption

	Current (A) / Power (W)	
Model	120/277VAC, 60Hz	
ELXN400R-2LED	0.044/0.017A	
ELXN400G-2LED	0.032/0.015A	
ELXN400R-2LEDR	0.037/4.06A	
ELXN400G-2LEDR	0.036/3.8A	
ELXN400R_2LEDR-AD	0.038/0.017A	
ELXN400G_2LEDR-AD	0.038/0.017A	

Accessories (order as a separate item)

Description	Suffix
Wire guard	WG10-E
Battery	850.0110-E

#### How to order

Series	Legend color	Lamp	Options	Color
ELXN400= ELX	<b>R</b> = Red exit	-2LED= Round LED array	Blank= No option	Blank= White
Combo Series	<b>G</b> = Green exit		<ul> <li>R= 3.6W remote capacity to power one double head remote<sup>1</sup></li> <li>R-AD= 3.6W remote capacity to power one</li> </ul>	<b>B</b> = Black
			double head dedicated remote with	
Example: ELXN4	00R-2LED		Advanced-Diagnostics <sup>1</sup>	

<sup>1</sup>Remote capacity can only be used to power the EF43D or EF44D remote fixtures or to extend the battery units emergency run time beyond the standard 90 minutes.

# EF43D & EF44D Series

Low energy and low maintenance for moderate budget application



#### The Cluster™ LED EF43D-LED or EF44D-LEDWP

The Cluster<sup>™</sup> LED EF43D-LED or EF44D-LEDWP Remote head can ONLY be powered from the ELXN400 LED series combo or EL-2LED battery units of the same family. Used for internal or external applications, the indoor remote head draws 3.6V-3.6W and Weather-Proof head draws 3.6V-3.8W.

#### Photometric performance

Spacing center-to-center (feet)				
7' mounting height	15' mounting height			
15'	4'			
Photometric spacing for 1FC average	Center-to-center spacing Mounting height			

#### Dimensions

Dimensions are approximate and subject to change.





#### How to order

Series	# of lamps	Lamp	Option
EF43= Indoor series EF44= Outdoor weather-proof series	<b>D</b> = 2	<b>-LED</b> = round LED array	Blank= Indoor remote WP= Outdoor weather proof remote
Example: EF43D-LED	]		proorremote

# **EL-2SQL LED Series**

1W LED heads, thermoplastic 3.6V nickel-cadmium battery unit

**Battery type** 

ApprovalsUL 924 listed

• 3.6V maintenance free rechargeable

Warranty (subject to proper installation and maintenance)

Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

nickel-cadmium battery

• Damp location (50°F to 104°F)

• Unit has a three-year warranty

• UL 94, 5VA flame rated





#### Housing

- UV stabilized thermoplastic body
- Two fully adjustable glare-free square lighting heads
- White finish

#### Mounting

- Ceiling or wall mount
- Universal J-box mounting

#### Lamp type

Two 3.6V-1W LED heads, 100 lumens per head

#### Options

Remote capacity for EF12-LED or EF47DSQL available with optional

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional Advanced Diagnostics
- 120/277 60Hz

#### Photometric performance

Spacing center-to-center (feet)	
7' mounting height	15' mounting height
13'	4'



#### Dimensions

Dimensions are approximate and subject to change.





#### Power consumption

AC specs		DC specs		
Series	Units dual v	voltage1	Battery	Voltage
EL-2SQL	120/277 VAC, 60Hz	0.024A		
EL-2SQLR	120/277 VAC, 60Hz	0.028A	Nickel-cadmium battery	3.6V
EL-2SQLRAD	120/277VAC, 60Hz	0.028A		

#### Accessories (order as a separate item)

Description	Suffix
Replacement battery for EL-2SQL	022433-E
Replacement battery for EL-2SQLR & EL-2SQLRAD	2 X 022433-E
Wire guard (heads in any position)	WG10-E
Pendant black	P*BK
Pendant white	P*WT

#### How to order

Series	Head style	Option
EL= Self-powered	-2SQL	Blank= No option
		<b>R</b> = Remote capacity to power one double head remote <sup>1</sup>
		R-AD= Remote capacity to power one double head dedicated remote with Advanced-Diagnostics <sup>1</sup>
Example: EL-2SQLAD		

<sup>1</sup>To be used with EF47DSQL or EF12D-LED only

# **ELX400 SQL LED Series**

Combination unit with tool-less field-adjustable heads to accommodate top mount requirements



#### Construction

- UV stabilized thermoplastic body
- Fully adjustable Square LED glare-free heads
- 6 inch EXIT lettering legend, available in red or green
- Field selectable chevrons

#### Mounting

- Surface mount
- Canopy included for ceiling mount applications / end mount
- Universal J-box mounting

#### Finishes

White

#### Remote capacity/combination units

• ELXN400-2SQLR and ELXN400-2SQLRAD feature a 3.6V Ni-Cd battery with two 1W LED heads attached as well as 3W of remote capacity for EF12D-LED or EF47DSQL

#### Lamp head source

- 3.6V-1W LED head
- Lamp heads are fully adjustable to top or side with no tools required.
- 100 lumens per head

#### Electronics

- Optional Advanced Diagnostics
- 120/277 60Hz

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 94, 5VA flame rated

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

Spacing center-to-center (feet)		
7 ft. mounting height	15 ft. mounting height	
13'	4'	



#### Dimensions

Dimensions are approximate and subject to change.







#### Power consumption

Description	Description
120/277VAC, 60Hz, 0.048A	Wire guard (heads in any position)
	Replacement battery for ELXN400-2SOL

#### Accessories (order as a separate item)

Description	Suffix
Wire guard (heads in any position)	WG10-E
Replacement battery for ELXN400-2SQL	022434-E
Replacement battery ELXN400-2SQLR	022435-E
Replacement battery ELXN400-2SQLRAD	022435-E

#### How to order

Series	Legend	Heads	Options
ELXN400	R= Red	-2SQL= 1WLED	Blank= No option
	G= Green		R= Remote capacity to power one double head remote <sup>1</sup>
			R-AD= Remote capacity to power one double head
Example: ELXN400R-2	SQLR-AD		dedicated remote with Advanced-Diagnostics <sup>1</sup>

<sup>1</sup>To be used with EF47DSQL or EF12D-LED only

# **ELX Remote Capable Exit Series**

Economical, thermoplastic LED exit sign



#### Construction

- UV stabilized thermoplastic body
- 6 inch exit lettering legend, available in red or green
- Field selectable chevrons
- Standard universal faces

#### Mounting

- Surface mount
- Canopy included for end or ceiling mount applications
- Universal J-box mounting

#### Finishes

• White

#### Dimensions

Dimensions are approximate and subject to change.



#### Electronics

- Optional Advanced Diagnostics
- 120/277 60Hz
- Sealed maintenance free Nickel-Cadmium battery for self-powered models

### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 94, 5VA flame rated

Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Power consumption

Description	
120/277VAC, 60Hz maximum 2.5W	

#### \_

Accessories (order as a separate item)

Description	Suffix
Wire guard (wall mount)	WG1-E
Wire guard (ceiling mount and end mount)	WG5-E
Battery	820.0106-E
Pendant white	P*WT
Pendant black	P*BK

#### How to order

Series	Legend color	Options
ELX400= AC only	RN= Red	Blank= No options
ELXN400= Self powered	<b>GN</b> = Green	-AD= Advanced Diagnostics -RAD= Advanced Diagnostics with 3.6V-3.6W remote
Example: ELXN400RN-F	AD	capacity <sup>1</sup>

<sup>1</sup>Available with red legend only, compatible with EF47DSQL or EF12D-LED



# **EF47DSQL Series**

Thermoplastic square LED Indoor remote heads



## Photometric performance

	Spacing o	center-to-center (feet)
Lamp	7' mounting height	15' mounting height
EF47	13'	4
Photometric sp for 1FC av	acing	r-to-center spacing Mounting height

#### Features

- Thermoplastic dual head remote
- LED 3.6V, 2W total
- 6000K LED color
- Wall or ceiling mount
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 924 listed

Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



How to order – EF47DSQL Series

No. of lamp	Options
<b>D</b> = Double head	SQL= Thermoplastic square
	LED head

Example: EF47DSQL

# **EF12D-LED Series**

Thermoplastic square LED Outdoor remote heads





#### Photometric performance

	Spacing center-to-center (f		
Lamp	7' mounting height	15' mounting height	
EF12	13'	4'	
Photometric spac for 1FC aver	cing age	r-to-center spacing Mounting height	

## Features

Series EF47

- Multi-volt 3.6, 6 or 12V, 3W in total
- Thermoplastic housing and aluminum canopy with fully adjustable LED heads
- Available only in gray 2-heads configuration
- Suitable for outdoor, wet location applications
- Wall or ceiling mount
- -4°F to 122°F
- UL 924 Listed

Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Dimensions

Dimensions are approximate and subject to change.



How to order - EF12D-LED Series

Series	# of lamp	Options
EF12	<b>Blank</b> = Single h <b>D</b> = Double head	nead <b>-LED</b> = Thermoplastic square d LED head
Example: E	F12D-LED	

# **DLM-2 Series**

Thermoplastic housing 6V-12W capacity lead-calcium battery unit



#### Housing

- UV stabilized thermoplastic body
- White housing

#### Mounting

- Ceiling or wall mount
- Universal J-box mounting

#### Lamp Type

• 5.4W high intensity wedge base incandescent lamps

#### Electronics

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- 120/277 60Hz

#### Dimensions

Dimensions are approximate and subject to change.





#### Sealed maintenance-free battery

• 6V lead calcium battery

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 94, 5VA flame rated

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Power	consumption

	Batt.	DC	Battery capacity in watts		Units dual current		
Series	type	voltage	1-1/2 hrs	2 hrs	3 hrs 4 hrs	Voltage <sup>1</sup>	Max.
DLM-2	Lead-	6V	12			120VAC	08A
DLM-2	calcium	6V	12	-		277VAC	.04A

<sup>1</sup>Stand-by power consumption is 50% lower for lead-calcium batteries.

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#### Accessories (order as a separate item)

Description	Suffix
Wire guard	WG1-E

— Howto a

#### How to order

#### Series

DLM-2= DLM-2 battery-powered emergency lighting

Example: DLM-2


# **ELX Series**

Economical, thermoplastic LED black exit sign



# Construction

- UV stabilized thermoplastic body
- 6 inch exit lettering legend, available in red or green
- Field selectable chevrons
- Standard universal faces

# Mounting

- Surface mount
- Canopy included for end or ceiling mount applications
- Universal J-box mounting

# Finishes

Black

#### Dimensions

Dimensions are approximate and subject to change.



# Electronics

- 120/277 60Hz
- Sealed maintenance free Nickel-Cadmium battery for self-powered models

#### Approvals

- UL 924 listed
- Damp location 50°F to 104°F (10°C to 40°F)
- UL 94, 5VA flame rated

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Power consumption

Description
120/277VAC, 60Hz maximum 2.5W

#### Accessories (order as a separate item)

Description	Suffix
Wire guard (wall mount)	WG1-E
Wire guard (ceiling mount and end mount)	WG5-E
Pendant black	P*BK

#### How to order

Series	Legend color	Options
ELX400= AC only	RB= Red	Blank= No options
ELXN400= Self powered	<b>GB</b> = Green <sup>1</sup>	

Example: ELXN400RB

# ESCORT II

# **ELXC-LP Series**

Combination unit with light bar



#### Construction

- Off-white UV stabilized thermoplastic enclosure
- 6 inch EXIT lettering legend, available in red or green
- Universal single or double face
- Field selectable chevrons
- Light bar consumes 4.5 watts
- Adjustable lens for optimal light distribution
- 5VA Flame retardant thermoplastic
- Remote capacity for (1) EF12D/LED or (2) EF612/LED

# Mounting

- Surface and wall mount
- · Canopy included for end or ceiling mount application
- Universal J-box mounting

#### Electronics

- 120/27760 Hz
- 4.8V long life nickel cadmium battery
- Approvals

# • UL 924 listed

• Damp location 32°F to 122°F (0°C to 50°C)

#### Warranty (subject to proper installation and maintenance)

• Unit has a three-year warranty Detailed warranty terms located on page 202 of the catalog or online at:

www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Photometric performance

Spacing center-to-cer	nter (feet)	
7.5' mounting height		
12'		
		Mounting height
Photometric spacing for 1FC —— average		3ft

#### Power consumption

Model	AC specs	DC specs
ELXC-LPR	120/277VAC, 7.5W	4.8V nickel-cadmium battery (min. 90 minutes)
ELXC-LPG	120/277VAC, 7.5W	4.8V nickel-cadmium battery (min. 90 minutes)

Accessories (order as a separate item)

Description	Suffix
Wire guard (wall mount)	WG1-E
Wire guard (ceiling or end mount)	WG5-E
Pendant white	P*WT <sup>1</sup>

<sup>1</sup>Specify length when ordering

\_

# How to order

Series		Legend color	
ELXC-LP= Combination unit with light bar Example: ELXC-LPG		R= RED	
		<b>G</b> = GREEN	

8-1/4

5-1/2"

12-1/2"

# — EF12D-LED Series

Dimensions

Thermoplastic square LED Outdoor remote heads

Dimensions are approximate and subject to change.



# ~

# Photometric performance



# Features

←4-3/8" □

9-1/8"

- Multi-volt 3.6, 4.8, 6 or 12V, 3W in total
- Thermoplastic housing and aluminum canopy with fully adjustable LED heads
- Available in gray or black, single or double head
- Suitable for outdoor, wet location applications
- Wall or ceiling mount
- -4°F to 122°F
- UL 924 Listed

Warranty (subject to proper installation and maintenance)

- Unit has a three-year warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

# Dimensions

Dimensions are approximate and subject to change.

# EF12-LED Series





# How to order - EF12D-LED Series

Series	# of lamp	Options	Color
EF12	<b>Blank</b> = Single head <b>D</b> = Double head	<b>-LED</b> = Thermoplastic square LED head	<b>Blank=</b> Gray <b>-Bk=</b> Black
Examp	ole: EF12D-LED		

# Emergency

Self-contained battery-powered systems

Use emergency LED drivers or fluorescent ballasts to power new or existing fixtures as emergency lighting units. Emergency LED drivers and fluorescent ballasts are available in a range of lumen output capacities.

- Space-saving design mounts directly on or in a fixture
- Compact power source operates one or two lamps in a fixture
- Units do not interfere with the look of existing lighting



Emergency self-contained battery-powered systems



# About emergency fluorescent ballast packs

Emergency fluorescent ballast packs are completely self-contained battery-powered systems designed to invert DC battery current to AC current in order to operate AC lighting loads in the event of an emergency.

Under normal conditions: AC current flows into the ballast, keeping the DC batteries charged, and AC current continues to power the AC lighting fixture. In an Emergency situation: When AC current stops flowing into the ballast, the Inverter converts DC battery current into AC current to power the AC lighting fixture.

# Lumens and wattage capacities

Emergency fluorescent ballasts come in various lumen output capacities and are designed to operate only 1 or 2 lamps in a fluorescent fixture type.

# **Emergency fluorescent ballasts**

Designed to operate fluorescent lighting loads, these ballasts can be mounted directly on or in the existing fluorescent fixture and are meant to operate one or two lamps within that fixture.

Emergency fluorescent ballasts are selected based on the lumen output levels needed in an emergency situation and the lamp type being used in the fluorescent fixture during normal AC operation.



# Ballast/lamp reference chart

Model #	FPDL32	FPDL-28	FPDL13-42-N	FPDL/U	FPDL-HL-N
Lumens	500	750	750	1350	3000
Lamp type (# of lamps)			Linear lamps		
2'-4' Rapid, Instant, Energy Saving, T8 thru T12 (1)		1			
2'-4' Rapid, Instant, Energy Saving, T8 thru T12, HO & VHO (2)					
2'-8' Rapid, Instant, Energy Saving, T8 thru T12, HO & VHO (1)					
F15 T8 (1)					X
F17 T8 (1) F17 T8 (2)	X				x
F25 T8 (1)		x		x	~
F25 T8 (2)					
F28 T8 (1)					X
F32 T8 (1)	x	x		x	x
F32 T8 (2)		X		x	X
F40 T8 (1) F096 T8 59W (1)					x
14W T5 (1)		x		x	x
14W T5 (2)		X		x	x
21W T5 (1)		x		х	x
21W T5 (2)		X		х	X
24W T5 (1)		x		x	
28W T5 (1)	X	x		<u>x</u>	X
28W T5 (2) 39W T5 (1)	X	X X		x	x
39W T5 (1) 54W T5 HO (1)		x		x x	X
54W T5 HO (2)		x		~	x
F20 T12 (1)	x				x
F20 T12 (2)					x
F40 T12 (1)	x				x
F40 T12 (2)					X
F48 T12 (1)					
F96 T12 60W (1)					
Lamp type (# of lamps)		Con	npact lamps – Biax la	mps	
18W Long Compact (1)			x		X
18W Long Compact (2) 24W Long Compact (1)			X		x
24W Long Compact (2)			X		x
36W Long Compact (1)		x	X	x	x
36W Long Compact (2)		x	x	х	x
40W Long Compact (1)	x	x		х	x
40W Long Compact (2)				X	X
50W Long Compact (1)		x		x	X
50W Long Compact (2) 55W Long Compact (1)		X		x	X X
7W PL CF 2-Pin (1)					X
9W PL CF 2-Pin (1)					
13W PL CF 2-Pin (1)					
18W PL CF 2-Pin (1)					
26W PL CF 2-Pin (1)					
13W PL CF 4-Pin (1)			x		x
13W PL CF 4-Pin (2) 18W PL CF 4-Pin (1)			X		X
18W PL CF 4-Pin (1) 18W PL CF 4-Pin (2)			X		x
26W PL CF 4-Pin (1)			X		x
26W PL CF 4-Pin (2)			x		x
32W PL CF 4-Pin (1)		x	x	x	x
32W PL CF 4-Pin (2)		X	X	x	X
42W PL CF 4 Pin (1)			X		X
42W PL CF 4-Pin (2) 57W PL CF 4-Pin (1)					X
57W PL CF 4-Pin (1) 57W PL CF 4-Pin (2)					
70W PL CF 4-Pin (1)					
20W Circline (1)					
22W Circline T9 (1)					
22W Circline T5 (1)					
40W Circline T8 (1)					
40W Circline T5 (1)					
55W Circline T5 (1) F28 2D (1)					
F28 2D (2)					
F38 2D (1)					

# **LEDDR Series Emergency LED driver**

Convert new or existing LED fixtures into emergency lighting units with constant power emergency LED drivers



#### Housing

- High impact thermoplastic enclosure, 5VA flame retardant in black finish
- · LED illuminated remote test switch

#### Mounting

• Suitable for installation on top or remotely (up to 50 feet)

#### Lamp types

- LED lamps with 20VDC to 50VDC operating voltage
- Can be wired for normally-on, normally off or switched loads
- Lumen output depends on LED light source efficacy (Lumens/watts)

#### Electronics

- Universal 120/277, 50/60Hz input
- Provides 90 minutes of emergency operation
- Surge protection
- Output classification: Class 2 compliant
- Output and input overcurrent protection
- · Constant power supply in emergency mode

#### Battery

- Long-life maintenance free rechargeable nickel-cadmium battery
- 24 hour battery recharge time

#### Approvals

- Damp location listed 32°F to 125°F
- UL classified for field or factory installation
- UL 924 approved, NFPA 101 life safety code, NEC, and OSHA

Warranty (subject to proper installation and maintenance)

• Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



# Important note

# LEDDR SERIES System Coordination Guidelines

These guidelines were developed to allow the lighting system Designer/Specifier to predict the operating performance levels of LED luminaires when powered by an electrically compatible LEDDR Series model. It is ultimately the responsibility of the Designer/Specifier to ensure that the as installed system delivers code-compliant path of egress illumination.

# 1. Determine Electrical Compatibility

- a. Verify that the Luminaire LED Driver, where applicable, is Class 2 compliant.
- b. Verify that the Luminaire LED Lamp(s) have an operating voltage between 20Vdc and 50Vdc.
- c. Verify that the Luminaire LED Lamp(s) have a power rating equal to, or greater than, the emergency power rating of the LEDDR model under consideration.

# Calculate lumen output during emergency operation

- Lumen output = Efficacy (Lumen/watt) X emergency LED driver wattage
- In order to understand luminaire efficacy:
- Access luminaire data by logging onto Design Lites Consortium

# www.designlights.org

- Select 'Search the DLC Qualified Product List' on the DLC homepage
- Enter manufacturer name and P/N of luminaire under consideration in the 'search by keyword' text window
- Select 'Search' tab to open the 'Qualified Products List'
  Determine luminaire Lumens per Watt efficacy in 'Rated
- Data' specifications
- Multiply luminaire lumens per watt by emergency output of the 'LED Driver' model under consideration

#### **Electrical Information**

Series	Output	Input
LEDDR-5	5W	3.9W
LEDDR-7	7W	4.8W
LEDDR11	11W	5.7W
LEDDR-14	14W	6.9W
LEDDR-17	17W	7.9W

How to order		
Series	Wattage	
LEDDR-	5	
	7	
	11	
Example: LEDDR-7	14	
	17	

#### Dimensions

Dimensions are approximate and subject to change.

Series	Length	Width	Height
LEDDR-5	11.46"	2.63"	1.48"
LEDDR-7	15.35"	2.63"	1.48"
LEDDR11	15.35"	2.63"	1.48"
LEDDR-14	19.19"	2.63"	1.48"
LEDDR-17	19.19"	2.63"	1.48"

# **New** product

# LEDDR CEC Series Emergency LED driver

Convert new or existing LED fixtures into emergency lighting units with constant power emergency LED drivers



# Housing

- 20 gauge steel housing, red powder coated finish
- LED illuminated remote test switch

# Mounting

• Suitable for installation on top or remotely (up to 50 feet)

#### Lamp types

- LED lamps with 10VDC to 60VDC operating voltage
- Can be wired for normally-on, normally off or switched loads
- Lumen output depends on LED light source efficacy (lumens/watts)

#### Electronics

- Universal 120/277, 50/60Hz input
- Provides 90 minutes of emergency operation
- Surge protection
- Output classification: Class 2 compliant
- Output and input overcurrent protection
- Constant power supply in emergency mode

# Battery

- Long-life, lithium battery
- 24 hour battery recharge time

# Approvals

- Damp location listed
- UL classified for field 50F to 122F
- UL 924 approved, NFPA 101 life safety code, NEC, and BC-California Energy Commission Title 20

#### Warranty (subject to proper installation and maintenance)

 Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf



# Important note

# LEDDR SERIES System Coordination Guidelines

These guidelines were developed to allow the lighting system Designer/Specifier to predict the operating performance levels of LED luminaires when powered by an electrically compatible LEDDR Series model. It is ultimately the responsibility of the Designer/Specifier to ensure that the as installed system delivers code-compliant path of egress illumination.

# 1. Determine Electrical Compatibility

- a. Verify that the Luminaire LED Driver, where applicable, is Class 2 compliant.
- b. Verify that the Luminaire LED Lamp(s) have an operating voltage between 20Vdc and 50Vdc.
- c. Verify that the Luminaire LED Lamp(s) have a power rating equal to, or greater than, the emergency power rating of the LEDDR model under consideration.

# Calculate lumen output during emergency operation

- Lumen output = Efficacy (lumen/watt) X emergency LED driver wattage
- In order to understand luminaire efficacy:
  - Access luminaire data by logging onto DesignLites Consortium

# www.designlights.org

- Select 'Search the DLC Qualified Product List' on the DLC homepage
- Enter manufacturer name and P/N of luminaire under consideration in the 'search by keyword' text window
- Select 'Search' tab to open the 'Qualified Products List'
- Determine luminaire lumens per watt efficacy in 'Rated Data' specifications
- Multiply luminaire lumens per watt by emergency output of the 'LED Driver' model under consideration

# **Electrical Information**

How	to	order

Series	Output	Input
LEDDR-7-CEC	7W	5W
LEDDR-12-CEC	12W	7W

#### Dimensions

Dimensions are approximate and subject to change.



SeriesWattageApprovalLEDDR-7-CEC= CEC Title 20I212for California

# **FPDL Linear Emergency Fluorescent Battery pack**

Convert new or existing fluorescent fixtures into emergency lighting units with emergency ballasts



#### Housing

- Low profile steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Optional end caps available
- Operating temperature 68°F to 122°F (20°C to 50°C)

#### Mounting

· Internal or external mounting to a fluorescent fixture

#### Lamp type operation

• Refer to ballast/lamp reference chart for specific lamp type page 151

# Electronics

- · Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- Dual voltage 120/277VAC, 2.5W

#### Controls

· Momentary test switch allows for quick operational check of entire system

#### Sealed maintenance-free battery

- Nickel-cadmium battery
- Provides 90 minutes of emergency operation

#### Approvals

- UL 924 listed damp location (50°F to 104°F)
- Damp location listed

#### Warranty (subject to proper installation and maintenance)

 Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Accessories (order as a separate item)

Description		Suffix
External mounting kit include bundle cover	es wire	071139-E
Remote test switch (metal faceplate)		RTS
Remote test switch (plastic faceplate)		RTS-1
Recommended for inaccessible locations. Test switch and charging indicator on a single mounting plate.	Charging Indicator light Push button test switch	
Replacement test switch		TBTSP-E

#### Dimensions

Dimensions are approximate and subject to change.





#### How to order

Series		
FPDL-28		
FPDL-U		
FPDL32		
FPDL-HL-N		

Example: FPDL-HL-N

# **FPDL 4 Pin Series**

Convert new or existing fluorescent fixtures into emergency lighting units 750 lumen emergency ballast



#### Housing

- Steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Operating temperature 32°F to 122°F(0°C to 50°C)

#### Mounting

Internal or external mounting to a fluorescent fixture

#### Lamp type operation

• Refer to ballast/lamp reference chart for specific lamp type page 151

#### Lumen output

- (1) Lamp 350-750 lumens
- (2) Lamps 425-750 lumens

# Electronics

Dimensions

- Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection

Dimensions are approximate and subject to change.

• Battery connector prevents battery discharge during installation

#### Controls

- Red charger monitor LED indicates charging of the battery and AC present
- Momentary test switch allows for quick operational check of entire system

#### Sealed maintenance-free battery

- Nickel-cadmium battery
- Provides 90 minutes of emergency operation

#### **Power requirements**

• Dual voltage 120/277VAC, 60Hz, 1.8W

# Approvals

- UL 924 standards
- Damp location listed

Warranty (subject to proper installation and maintenance)

• Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

Accessories (order as a separate item)

Description	Suffix
Remote test switch (metal faceplate)	RTS
Remote test switch (plastic faceplate)	RTS-1
Replacement test switch	TBTSP-E

Series FPDL-13-42-N

# How to order



Example: FPDL-13-42-N

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# **Central & inverter systems**

Self-contained inverter systems are designed to meet the unique needs of emergency lighting loads. Inverters provide power to existing lighting to function as emergency lighting when main power fails.

- Minimizes maintenance required for testing
- Compact Mini Inverters are ideal for LED, incandescent, and fluorescent lighting, and are available in up to 1000W models
- Interruptible Power Systems (IPS) are available in single phase from 1500VA to 16700VA
- Uninterruptible Power Systems (UPS) are available in single phase models from 1500VA to 16700VA, and in three phase models from 4800VA to 50,000VA

01 Interruptible Unit Equipment 125W, 250W, 400W, 720W or 1000W Standard with Non Audible Advanced Diagnostics Circuitry & Lighting Control Override 01



# Table of contents

Central & inverter systems



# **EPC Fixture Mounted Series**

Emergency power control for generator and mini inverters. Supplies power to switched lighting fixtures.



# **Mechanical specifications**

- UL94-5VA rating
- Shipping weight: 8 oz
- Damp location
- Temperature: 32°F 140°F (0°C 60°C)
- Color: Black
- Body size: 4.9" x 0.9" x 1.2"

# Emergency Operation:

• The EPC-2-FM-E & EPC-2-FM-D-E will operate any lamp type in the designated fixture for the duration of the generator or mini inverter supply.

# Initial illumination:

• The EPC-2-FM-E & EPC-2-FM-D-E will operate the designated lamp at full light output

# Approval:

UL924 Listed

# Wiring diagrams:

• Visit our website: http://www.emergi-lite.com

# Mounting

NVERTERS



# Housing

• Compatible with LED, fluorescent and incandescent lamp types including standard, energy-saving, and electronic AC drivers and ballasts<sup>1</sup>

#### Mounting

Mounts directly to fixture or panel mount

# Options

- 0-10V Dimming standard on the EPC-FM-2-D-E model
- Advanced Diagnostics standard EPC-2-FM-E and EPC-2-FM-D-E

# Lamp types

- Filed selectable fire alarm, remote test option
- During utility power interruption, automatically connects generator or inverter circuit to emergency fixture and bypasses switching control to full light output for duration of inverter or generator supply

# Lumen output

- Allows switching control of emergency fixtures during normal operation
- Allows auxiliary generator power on a switched lighting fixture

#### **Power requirements**

• Dual voltage 120/277V 60Hz

# Approvals

- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements
- cULus certified

Warranty (subject to proper installation and maintenance) Unit has a five-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

<sup>1</sup>When using EPC-FM-2-E and EPC-FM-2-D-E to control more than 10 emergency ballasts with a high corrective power factor capacitor, consult factory for more information regarding inrush currents.



How to order

#### Series

- EPC-2-FM-E= Emergency transfer switch fixture mounted with Advanced Diagnostics
- EPC-2-FM-D-E Emergency transfer switch fixture mounted with Advanced Diagnostics and 0-10 dimming

Example: EPC-2-FM-E

# Note

When using an EPC in conjunction with an Emergi-lite miniinverter, the inverter must be non-self/self diagnostics model.



# Wiring diagram



# Specifications

Electrical	
Model number	EPC-2-FM
Sensing input	120V-277V
LED load rating	3A (120-277V)
Ballast load rating	5A (120-277V)
Incandescent load	360W (120V)/600W (277V)
Warranty	Five-year replacement warranty

Mechanical	
Mounting	Fixture mount, panel mount
Rating	UL94-5VA, Damp location rated
Shipping weight/Color	8 oz./Black
Temperature	32°F - 32°F (0°C - 60°C)
-	-
Body size	125mm X 25.4 mm X 30mm (L X H X W)

# **EPC 2 Series**

Emergency power control for generator and mini inverters. Supplies power to switched lighting fixtures.



# Mechanical specifications

- Mounts in 4-11/16" Junction box with single gang plaster ring
- UL94-5VA rating
- Shipping weight: 12oz
- Temperature: 32°F 140°F (0°C 60°C)
- Color: White
- Flush mounted single gang
- Body size: 3" x .7" x 1.2"

# **Emergency Operation:**

• The EPC-2-E & EPC-2-D-E will operate any lamp type in the designated fixture for the duration of the generator or mini inverter supply.

# Initial illumination:

 The EPC-2-E & EPC-2-D-E will operate the designated lamp at full light output

# Approval:

UL924 Listed

# Wiring diagrams:

Visit our website: http://www.emergi-lite.com

# Mounting





# Housing

- Thermoplastic UL94-5VA suitable for plenum installations
- Compatible with LED, fluorescent and incandescent lamp types including standard, energy-saving, and electronic AC drivers and ballasts<sup>1</sup>

# Mounting

• Wall and ceiling mount

# Options

- 0-10V Dimming standard on the EPC-2-D-E model
- Advanced Diagnostics standard on the EPC-2-E and EPC-2-D-E models

# Lamp types

• During utility power interruption, automatically connects generator or inverter circuit to emergency fixture and bypasses switching control to full light output for duration of inverter or generator supply

# Lumen output

- Allows switching control of emergency fixtures during normal operation
- Allows auxiliary generator power on a switched lighting fixture

#### **Power requirements**

• Dual voltage 120/277V 60Hz

# Approvals

- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements
- cULus certified

Warranty (subject to proper installation and maintenance)

- Unit has a five-year warranty
- Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

<sup>1</sup>When using EPC-2-E & EPC-2-D-E to control more than 10 emergency ballasts with a high corrective power factor capacitor, consult factory for more information regarding inrush currents.



# How to order

# Series

EPC-2-E= Emergency transfer switch EPC-2-D-E= Emergency transfer switch with Advanced Diagnostics and 0-10 dimming

Example: EPC-2-E

# Note

When using an EPC in conjunction with an Emergi-lite miniinverter, the inverter must be non-self/self diagnostics model.

#### Single line drawing



# Wiring diagram



# Specifications

Electrical	
Model number	EPC-2
Sensing input	120V-277V
LED load rating	120V-277V (20A)
Ballast load rating	20A (120-277V)
Incandescent load	1200W (120V)/1500W (277V)
Warranty	Five-year replacement warranty

Mechanical	
Mounting	4-11/16" Junction box with single gang plaster
Rating	UL94-5VA
Shipping weight/Color	12 oz. / White
Temperature	32°F - 140°F (0°C - 60°C)
Flush mounted size	Single gang size
Body size	1.7" X 3" X 1.2" (W X H X D body)



# **Mini Inverter Series**

Compatibility checklist

# 1) Input voltage

120VAC 🗆 277VAC 🗆

# 2) Output voltage

120VAC 🗆 277VAC 🗆

# 3) Type of load

EXIT 🗆	L	ED 🗆	LED Highbay		Incandescen	nt 🗆	Fluorescen	t (HID non	compatible	) 🗆
Compatible E Prestige DX Se Premier Preceptor Die- SVX Exit SVXHZ Exit Total Edge-Lit ELX Chicago Edge	eries Cast									
LED load spec	ifications:									
Total watts:										
Power factor:										
Input current: _										
Inrush current:										
Inrush length:										
4) mode of Opera	tion									
Normally ON $\Box$	Normally OFF	F🗆 Swi	tched loads 🗆	] Mix	ked □					

# 5) Options (refer to available options for each type system)

Diagnostics audible	Diagnostics non audible
No diagnostics	Nexus wired
🗆 Nexus Wireless	Time delay
Load shedding	□ Service alarm contact

# Low Capacity Mini Inverter Series

Interruptible unit equipment



#### Housing

- Heavy-duty steel cabinet
- White baked on powder paint coating provides scratch and corrosion resistance

#### Mounting

- Surface mount
- Recessed T-bar (plenum rated)

#### Lamp types operated

- LED
- Incandescent
- Fluorescent
- Operates switched, normally-on or normally-off fixture types, incandescent,
- LED, fluorescent and ballast combinations, including triac dimmable ballasts<sup>1</sup>

#### Load capacity

- 32W, 55W
- Allows for remote mounting of the emergency fixtures at distances of up to 1000 feet
- May accept load when load feature power factor range from 0.44 lead to 0.44 lag

#### Electronics

- Pure sine wave inverter
- Temperature compensated charger
- Low battery voltage disconnect
- Unit comes standard with electronic lockout and brownout circuits

<sup>1</sup>When using Hi-Bay fixtures or screw in type lamps, please consult the factory.

#### Controls

- Control panel with momentary test switch, AC-On, Charger-On and
- Inverter-On LED indicators
- Sealed maintenance-free battery
- 12V oversized valve regulated lead-calcium (VRLA) battery
- Provides 90 minutes of emergency operation

#### **Power requirements**

 Choice of voltage: 120V in/120V out or 277V in/277V out operation, 60Hz

#### Approvals

- UL 924 Standard
- Meets or exceeds all National Electric Codes and Life Safety Code
- Emergency lighting requirements

Warranty (subject to proper installation and maintenance)

- Unit has a three year full warranty (excluding lamps and fuses).
- Battery has a three-year full, plus an additional three year pro-rata warranty

Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

All Emergi-Lite® inverter products receive 100% quality inspection before shipment to insure proper and satisfactory operation.



#### Specifications

\_\_\_\_

Transfer time	Voltage regulation	Frequency reglation	Load power	Operating
	on emergency	on emergency	factor range	temperature
Less than 1 second	+/ -5%	60 Hz +/- 0.5%	0.44 lead to 0.44 lag	68° to 86°F (20° to 30°C)

#### Electrical characteristics and dimensions

					Cabinet d	imensions	No. of	Weight
System type	Power rating	Sine wave	Installation	Width	Height	Depth	battery	120V & 277V
EMILC32-S	32W/VA	Yes	Surface mount	14-3/4"	6-7/8"	3-1/8"	1	14 lbs
EMILC32-T	32W/VA	Yes	T-grid mount	23-7/8"	6-1/4"	4"	1	15 lbs
EMILC55-S	55W/VA	Yes	Surface mount	14-3/4"	6-7/8"	4-3/8"	1	18 lbs
EMILC55-T	55W/VA	Yes	T-grid mount	23-7/8"	6-1/4"	4"	1	19 lbs

NOTE: For wiring diagram, please refer to the specification sheets

#### Power consumption and unit rating

		Emergency power available
Model number	Input rating	for load (90min)
EMILC32	41VA	32W
EMILC55	64VA	55W

#### How to order

Series	Capacity	Voltage	Battery type	Mounting
EMILC	<b>32</b> = 32W/VA <b>55</b> = 55W/VA	<b>Blank</b> = 120/277VAC	Blank= Lead-calcium	<b>-S</b> = Surface mount housing <b>-T</b> = Plenum rated ceiling T-grid mount housing
Example: EMI	LC32-S			

# **Mini Inverter Series**

Interruptible unit equipment 125W, 250W, 400W or 720W



# Housing

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- 14-gauge steel
- White semi-gloss powered-coat paint finish

# Mounting

- Surface mount
- Optional recessed T-bar (125W unit only)

#### Lamp types operated

- LED
- Incandescent
- Fluorescent
- Operating switched, normally-on or normally-off fixture types
- Incandescent, LED, fluorescent lamps and ballast combinations, including triac dimmable ballasts (consult factory if DALI dimming)<sup>1</sup>

# Load capacity

- 125W, 250W, 400W or 720W
- Line voltage allows for remote mounting of the emergency fixtures at distances up to 1000 feet
- May accept load to it's full capacity when load feature power factor of 0.9 for 250W model and 0.8 for 125, 400 and 720W model

# Electronics

- High-efficiency pure sine wave inverter at 250W capacity or higher
- Temperature compensated charger
- Replaceable output fuse protection
- Low battery voltage disconnect
- Unit comes standard with electronic lockout and brownout circuits

<sup>1</sup>When using Hi-Bay fixtures or screw in type lamps, please consult the factory.

# Controls

- Standard with a non-audible self diagnostic/charger is fully self-contained, fully automatic microcontrollerbased system
- Optional audible auto diagnostic available
- Standard lighting control override for 0-10V dimming systems

# Load shedding (available in 250W only)

- During a power outage the emergency fixture is dimmed to 25% or 45% brightness output. Reducing wattage draw from the fixture will allow for more fixture to be connected to the Mini Inverter.
- Maxium 20 Emergency fixtures can be daisy chained per EMIU 250
- In standby mode, the maximum normally-on load that can be connected to EMIU-250-LD is 960 watts

#### **Nexus®** Option

 Units equipped with Nexus® self-testing monitoring system circuitry shall selftest, in accordance with NFPA101, Life Safety Code minimum 30 seconds every 30 days, 30 minutes every six months and 90 minutes annually as well as keep a history of all testing logs, plus feature a real-time diagnoses, as well as, be able to locate exact fixture location while notifying service personnel to the status of the fixture via email notification. Nexus® system interface with an improved minimum load lost detection of 10%

#### Sealed maintenance-free battery

- 12V oversized valve regulated lead-calcium (VRLA) battery
- Provides 90 minutes of emergency operation

#### Power requirements

Choice of voltage 120V in/120V out or 277V in/277V out operation, 60Hz

#### Approvals

- UL 924 Standard
- Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements
- BC California Energy Commission Title 20

#### Warranty (subject to proper installation and maintenance)

- Battery has a 3-year full, plus 7-year pro-rata warranty
- Unit has a three-year warranty (excluding lamps and fuses) Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

All Emergi-Lite® inverter products receive 100% quality inspection before shipment to insure proper and satisfactory operation.xc



#### Specifications

Transfer time	Voltage regulation on emergency	Frequency reglation on emergency	Load power factor range	Operating temperature
Less than 1 second	+/ -5%	60 Hz +/- 1%	250W model: .9 leading to .9 lagging	68° to 86°F (20° to 30°C)
-	_	-	125, 400 & 720W models: 8 leading to .8 lagging	-

#### Replacement battery

Description	Suffix
EMIU-125	860.0024-E
EMIU-250	2X 860.0024-E
EMIU-400	2X 860.0043-E
EMIU-720	2X 860.0096-E

#### Electrical characteristics and dimensions

		, i construction de la construction	Cabinet dimensions		imensions	No. of	Total weight	Weight w/o battery
Power rating	Sine wave	Installation	Width	Height	Depth	battery	120V & 277V	120V & 277V
125W	Modified	T-bar	24"	6.5"	8"	1	50 lbs	22 lbs
125W	Modified	Wall	23"	12.2"	7.3"	1	50 lbs	22 lbs
250W	Pure	Wall	27"	12.2"	7.3"	2	100 lbs	45 lbs
400W	Pure	Wall	24"	20"	10.5"	2	150 lbs	65 lbs
720W	Pure	Wall	24"	20"	14.5"	2	220 lbs	95 lbs

Note: For wiring diagram, please refer to the specification sheets

#### Power consumption and unit rating - non-CEC models

					Emergency power ava	ailable for load
Model number		AC specs	90 Min	2H	3H	4H
EMIU-125		1.15 / 0.70 Amps	125W	83W	62W	47W
EMIU-250	100 (077) (0 6	2.75 / 1.20 Amps	250W	167W	125W	94W
EMIU-400	120/277VAC	4.60 / 2.00 Amps	400W	300W	200W	150W
EMIU-720		9.60 / 4.00 Amps	720W	480W	360W	270W

#### Power consumption and unit rating - CEC models

Model					Emergeno	y power availat	ole for load
number		AC specs	AC power stand by	90 Min	2H	ЗН	4H
EMIU-125		1.15 / 0.70 Amps	1.44W	125W	83W	62W	47W
EMIU-250	120/277VAC	2.75 / 1.20 Amps	2.26W	250W	167W	125W	94W
EMIU-400		4.60 / 2.00 Amps	3.21W	400W	300W	200W	150W

#### — How to order

<b>HOW</b>	/ ιο	01	uer

Series	Capacity	Voltage	Diagnostic feature	Options	Approval
EMIU	<b>-125</b> = 125W	Blank= 120/120VAC or 277/277VAC	-Blank= Advanced Diagnostic, non-audible <sup>1</sup>	-D3= Time delay (15 minutes)	-CEC=CEC
	<b>-250</b> = 250W		-AD = Advanced Diagnostic, audible <sup>1</sup>	-LDC25 = Load shedding to	Title 20 for
	<b>-400</b> = 400W		-NAD= No auto test/	25% brightness²	California⁴
	<b>-720</b> = 720W		Advanced Diagnostics	-LDC45= Load shedding to	
			-NEX= Nexus® wired	45% brightness <sup>2</sup>	
			-NEXRF= Nexus <sup>®</sup> wireless	-SAC= Service alarm contact <sup>3</sup>	
Examp	ole: EMIU-720			-T= Recessed T-bar mounting	
				(125W unit only)	

<sup>1</sup> Minimum load required: 10% of unit capacity

<sup>2</sup> Available on 250W models only

<sup>3</sup> Service alarm contact (SAC) shall provide a 24V signal, the charger board will indicate a fault by choosing a contact.

<sup>4</sup> Available with 125, 250 and 400W capacities only

# **1000W High Capacity Mini Inverter Series**

Interruptible unit equipment 1000W



#### Housing

- 14-gauge steel
- White semi-gloss powdered-coat paint finish

#### Mounting

Surface mount

#### **Compatible loads**

- LED
- Incandescent
- Fluorescent
- Operating switched, normally-on or normally-off fixture types
- Triac dimming
- 0-10V Dimming
- DALI dimming consult factory<sup>1</sup>

#### Load capacity

- 1000W
- Line voltage allows for remote mounting of the emergency fixtures at distances up to 1000 feet

#### Electronics

- High-efficiency pure sine wave inverter
- Temperature compensated charger
- Replaceable output fuse protection
- Low battery voltage disconnect
- Unit comes standard with electronic lockout and brownout circuits

<sup>1</sup>When using Hi-Bay fixtures or screw in type lamps, please consult the factory.



# Controls

- Standard with a non-audible advanced self diagnostic & self-testing microcontroller- based system
- Optional audible Advanced Diagnostics available
- Optional Non-Advanced Diagnostics available
- Non-Advanced Diagnostics option for applications with emergency power controls
- Standard lighting control override for 0-10V dimming systems
- Optional 4 output circuits allow for multiple zone application
- Optional load shedding to dim 0-10V light fixtures connected to an emergency inverter system

#### Load shedding

- During a power outage the emergency fixture is dimmed at field selectable level of 25%, 40% or 45% brightness output. Reducing wattage draw from the fixture will allow for more fixture to be connected to the Mini Inverter.
- Emergi-lite 1000W Mini inverter with 4C-24V option must be used in conjunction with RTS load shedding control device (Ordered seperately)
- The EMIU-1000-4C-24V when in normal mode can accept a maximum of 1000watts per circuit.
- Maxium 20 Emergency fixtures can be daisy chained to each RTS
- One RTS required for each circuit (Ordered seperately)

For use of more than 4 RTS control devices contact factory

Note: May accept load to it's full capacity when load feature power factor a 0.8

#### Sealed maintenance-free battery

- 12V valve regulated lead-calcium (VRLA) batteries
- Provides minimum 90 minutes of emergency operation power requirements
- Choice of voltage 120V input/120V output or 277V input/277V output operation, 60Hz

#### Approvals

- UL 924 Standard
- Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements

# Warranty

 Unit has a three-year warranty Detailed warranty terms located on page 202 or online at: www.emergi-lite.com/usa/files/EL\_Warranty.pdf

#### Specifications

Transfer time	Voltage regulation on emergency	Frequency reglation on emergency	Load power factor range	Operating temperature
Less than 1 second	+/- 3%	60 Hz +/- 1%	0.8 at 120V 1 at 277V	68° to 86°F (20° to 30°C)

#### **Replacement battery**

Description	Part number
EMIU-1000	4X 860.0043-E

#### **Electrical characteristics and dimensions**

				Cabinet d	imensions	No. of	Total weight	Weight w/o battery
Power rating	Sine wave	Installation	Width	Height	Depth	batteries	120V & 277V	120V & 277V
1000W	Pure	Wall / floor	24"	40.75"	10.5"	4	266 lbs	114 lbs
1000W-4C	Pure	Wall/ floor	24"	40.75"	14.5"	4	350 lbs	198 lbs

#### Power consumption and unit rating

					Emergency pov	wer available for load
Model number		AC specs	90 Min	2H	3Н	4H
EMIU-1000	120/277VAC	12.8 / 5.3 Amps	1000W	807W	604W	489W

#### How to order

-AD= Advanced-diagnostic, audible <sup>1</sup> -NAD= No auto test/	Options
-NEX- NEXOS® wired -NEXRF= Nexus® wireless Example: EMIU-1000-4C	<ul> <li>-D3= Time delay (15 minutes)</li> <li>-SAC= Service alarm contact<sup>2</sup></li> <li>-4C= 4 output circuits</li> <li>-4C-24V= 4 output circuits plus 24VDC output<sup>3</sup></li> </ul>

<sup>1</sup> Minimum load required: 10% of unit capacity <sup>2</sup> Service alarm contact (SAC) shall be provided a 24V signal, the charger board will indicate a fault by closing a contact.

<sup>3</sup> Can only be used with RTS-0-10V-24-E for load shedding applications.

# **RTS Series**

# 0-10V dimming load shedding control



# Emerg-Power systems

# Features and benefits

#### Highlights

#### Performance

Emerg-Power Systems work with any type of lighting load to provide full light output for a minimum of 90 min. They are designed to support incandescent, fluorescent, HID\*, quartz re-strike, LED or halogen lamps. They will work to power into these loads at cold starts for all normally off circuits or normally on circuits<sup>1</sup>. <sup>1</sup>Except IPS systems

#### **True Sine Waveform**

Using a solid-state, pulse width modulation (PWM) inverter the systems produce pure sinusoidal output waveform with less than 3% maximum Total Harmonic Distortion (THD) for linear loads. Microprocessor and crystal controlled.

#### Reliability

Emerg-Power Systems use third generation inverter technology. The proven solid design and double ratings of all critical components. LVD (Low Voltage Disconnect) for long power outages eliminates battery drain.

#### Batteries

Front access connections for easy installation significantly reduce the footprint, installation and maintenance time while increasing safety. Automatic restart and recharge upon restoration of utility.

#### Applications

Emerg-Power Systems can be used in almost every type of building, and are well-suited for architecturally sensitive applications or areas where maintenance costs and individual testing of unit equipment becomes significant. Emerg-Power Systems are designed to work with power factor corrected as well as the most recent T5 and T5-HO electronic ballasts.

# Options

The full range of options available, such as integrated output circuit breakers, bypass relays, dry contacts, etc., makes Emerg-Power Systems an industry leader in emergency lighting central systems.

#### Approvals

UL listed to UL 924. Meets UL 924 Listed, NFPA101, NFPA70, NFPA 110, OSHA, UBC, SBCCI. New York City approved.



#### Features

#### Self-diagnostic / self-testing

- Programmable monthly and annual self-testing. Proven self-diagnostic with over 120 parameters stored in separate memory logs for Test, Event and Alarm.
- Microprocessor monitoring and control.

#### Low heat dissipation

- Very low heat loss technology in normal operating mode (see specificationsfor exact values). Convection cooling in normal mode with forced air during emergency mode.
- Battery cabinets: convection cooling only

#### **Maximum efficiency**

- Highest efficiency in the industry, 98% at 100% load with no requirement for cooling in normal operating mode.
- Low input harmonic distortion <10%</li>

#### Versatile installation

- Modular design, easy front access freestanding cabinets, fasten together when more than one cabinet is required.
- Optional seismic kit available.
- All wiring provided is pre-cut and terminated, along with the necessary hardware and electrical fittings, for proper installation.

# **Complete protection**

- Input circuit breaker and fused battery circuit are standard.
- Systems offer overload capacity, short-circuit protection, current-limiting, low-battery disconnect, reverse polarity and brownout protection as standard.

#### Thermal performance

- Bonded fin heat sink technology for maximum thermal performance.
- Cooling fans are energized only in inverter mode.

#### Monitoring and control

• User-friendly programmable interface with LED indicators and LCD display provides full metering values, easy program and control functions and a wide range of visual and audible alarms.

# Benefits

# Compliance with NFPA101

- Self-testing meets the requirements of NFPA and UL. User programmable time of testing.
- Test results, events and alarms can be downloaded from history logs. Load monitoring. Reduced testing/service time.

#### Less air-conditioning

- Reduced costs for air-conditioning required to ensure the optimum operating temperature when compared with equivalent systems that dissipate much more heat.
- Higher reliability of fans and the electronic components.

#### Lower energy bills

• Low consumption of the system itself will result in lower energy bills paid over the system life time. Comparative analysis available on request.

#### Easy to install

- Quick installation and connection through flexible cable entries and fast access terminal blocks.
- Reduced footprint for systems with stackable cabinets.
- Low MTTR (<15 min.) due to modular design, quick disconnect means and frontal access.

#### **Reduced damage risks**

• Full system protection eliminates damage created by external events and increases the lifetime of the electronics and batteries. Also will provide safety during maintenance

#### Increase MTBF

- Increased reliability and reduced preventative maintenance.
- No air filters needed.

#### Easy maintenance

- Easier diagnostic, troubleshooting, preventative maintenance and service through the indicators and display or by using the history logs.
- Remote versions available.

# **Emerg-Power Systems Compact Series**

Uninterruptible emergency lighting, 1PH, inverter system 500VA - 2000VA



#### Features

- 98% efficient at full load
- PWM/MOSFET technology
- Self-testing/self-diagnostic
- User programmable with password protection
- Standard input circuit breaker
- Standard output circuit breaker
- Micro-processor controlled
- Floor or wall mountable
- Field upgradeable (500VA steps)
- 90 min. standard run time
- Electronic and magnetic ballast compatible
- Automatic event, test and alarm log
- LCD display
- Small footprint (stackable cabinets)
- Maintenance-free standard batteries
- Forced air cooling during emergency mode only

UL listed to UL 924. Meets NFPA101, NFPA70, NFPA 110, OSHA, UBC, SBCCI. N.Y City approved.



Electrical/mechanical characteristics<sup>4</sup> (data provided for standard lead calcium batteries)<sup>1,4</sup>

Power rating <sup>1</sup>	Effic. at full load		. input ent (A)	Heat loss in normal mode	Batt.	Batt.	No. of		PS cab mens		dim		tery inet ns <sup>2,3</sup>	No. of batt.	Batt. cab. weight	UPS cab. weight	Batt weight	Total system weight
VA= W	%	120V	277V	(BTU/HR)	VDC	Α	Batt.	W"	Н"	D"	W"	Н"	D"	cab.	lbs	lbs	lbs	lbs
500	98	5.2	2.3	34	48	13.5	4	26	10	10	26	10	10	1	22 lbs	77 lbs	107 lbs	206 lbs
1000	98	10.5	4.5	68	48	26.5	8	26	10	10	26	10	10	2	22 lbs	77 lbs	214 lbs	335 lbs
1500	98	15.6	6.8	102	48	40	12	26	10	10	26	10	10	3	22 lbs	77 lbs	321 lbs	464 lbs
2000	98	20.8	9	136	48	52	16	26	10	10	26	10	10	4	22 lbs	77 lbs	428 lbs	592 lbs

<sup>1</sup>System capacity can be upgraded in the field up to 2000VA by adding more battery cabinets.Re-programming required by factory service technician.

<sup>2</sup>Batteries are installed in separate modular cabinets

<sup>3</sup>Battery cabinets are stackable. Must be installed under the electronics cabinet

<sup>4</sup>Special voltages can change the size, weight or number of cabinets

#### How to order

nput voltage <sup>1</sup>	Battery type	VA/W	System type	Output voltage²	Run time <sup>3</sup>	Input breaker	Output breakers⁴	<b>Options⁵</b>
120 277	SG= Lead-calcium	500 1000 1500 2000	-FTCM	-120 -277	-90	-ICB	-OCBxxxx= No trip alarm <sup>4</sup> -OCAxxxx= With trip alarm <sup>4</sup>	-NOFF= Normally OFF output -WB= Wall mount bracket -DCS= Dry summary alarm contacts -INVON= Inverter on dry contact -VTD= Variable time delay -BPR= Bypass relay -RMP= Remote metering panel -RSAP= Remote summary alarm panel -RS232= Communication interface -MOD= Modem

<sup>1</sup>Special voltages may change the size, weight or number of cabinets

<sup>2</sup>Special voltages may change the size, weight or number of cabinets

<sup>3</sup>Other run times available

<sup>4</sup>Max. 3 more additional output breakers for a total of 4. See page 183 for output breaker details

 $^{\circ}$ See page 183 for options description

# Specifications

# General

# Design

 Stand-by no break. PWM inverter type utilizing MOSFET technology with 2ms transfer time

# Control

- Microprocessor controlled, 2 x 20-character display with touch pad controls & functions
- 5 LED indicators & alarm with ring-back feature

# Metering

 Input and output voltage, battery voltage, battery and output current, output VA, temperature, inverter wattage

Communications Optional RS-232 port (DB9)

# Electrical input

# Voltage

120 or 277VAC, 1-phase 2-wire, +10%/ -15% Contact factory for all other voltage. Input power walk-in Limiting inrush current to less than 125%, 10 times for 1 line cycle Input frequency 60Hz, +/-3Hz Protection Standard input circuit breaker Harmonic distortion <10% Power factor 0.5 lag/lead

# Electrical output

# Voltage 120 or 277VAC, 1-phase 2-wire Contact factory for all other voltage

# Static voltage

- Load current change +/-2%, battery discharge +/-12.5% Dynamic voltage
- +/-2% for +/-25% load step change, +/-3% for a 50% load step change, recovery within 3 cycles

Harmonic distortion <3% THD for linear load

Output frequency 60Hz +/- 0.05Hz during emergency mode Load power factor 0.5 lag to 0.5 lead

Inverter overload 115% for 5 minutes

Protection Standard output circuit breaker (normally on) Crest factor 2.8

# Environmental conditions

# Storage/transport

- -4ºF to 158ºF (-20ºC to 70ºC) without batteries
- 0°F to 104°F (-18°C to 40°C) with batteries (max. 3 months at 104° F (40° C)

# Operating temperature

System operates safely from 32°F to 104°F (0°C to 40°C) but optimum operation is between 68° F and 86°F (20°C to 30°C). Battery performance can be affected by temperature **Altitude** <10,000 feet (above sea level) without de-rating **Relative humidity** 0 to 95% non-condensing **Audible noise** 45 dBA @ 1m from surface in emergency mode

# Cabinets

Modular design, freestanding or wall mount NEMA Type 1 steel cabinets powder coated for corrosion and scratch resistance. Front access design. Cabinets are stackable. Top and left side conduit entry with knockouts.

# Inverter

Using MOSFET/PWM technology the inverter converts the DC voltage supplied by the batteries to AC voltage of a precise stabilized amplitude and frequency, suitable for most sophisticated electrical equipment. True sinusoidal output waveform with very low distortion (less than 3% for linear loads). Overload capability of up to 150% for 12 line cycles.

# Charger

Fully automatic, temperature compensated, microprocessor controlled charger recharges fully discharged batteries in maximum 24 hours at nominal AC input voltage. AC input current limiting and over-voltage protection included.

# Battery

System is provided with 10 year, maintenance free, sealed valve regulated lead calcium batteries. 90 min. standard discharge time at full load under normal operating temperature. Low voltage disconnect protection included. No special ventilation required.

# Self-diagnostic

Automatic self-test consists of a 5-minute monthly and 90-minute annual function. The front-mounted control panel includes 5 LED indicators, a 2-line 20-character LCD display, a keypad to control and monitor the internal operation of the system. This allows the operator to easily "watch" system functions as they occur and check on virtually any aspect of the system's operation. Self-diagnostic function monitors, controls, generates alarms and memorizes events.

# Alarms

High/low battery charger voltage, high/low AC input voltage, near low battery, low battery, load reduction fault, output overload, high ambient temperature, inverter fault, output fault, optional output circuit breaker trip

# **Optional features**

Normally off output, output circuit breakers, output trip alarm, RS232 communication port, 12 Hours fast recharge, remote meter panel, remote summary alarm panel, summary alarm dry form C contact, inverter on dry contacts, variable time delay, modem, bypass relays, wall mount bracket

# Factory start-up

Includes one additional year of warranty. See warranty conditions

Warranty (full limited warranty conditions available upon request)

Limited manufacturer warranty is one-year, parts and labor, for system electronics or two-year with factory start-up program. Battery warranty is one year full plus 9 years pro-rata for a total of 10 years, under normal operating conditions. System must be put in service within 180 days from ship date in order to validate warranty.



Characteristics, specifications or dimensions subject to change without notice.

# **Emerg-Power Systems IPS**

# Single phase series



#### Features

- 98% efficient at full load
- PWM/IGBT technology
- Self-testing/Self-diagnostic
- User programmable with password protection
- Standard input circuit breaker
- Standard normally off and on output
- RS232 communication port
- Micro-processor controlled
- Automatic event and alarm log
- 90 min. standard run time
- Generator compatibility

- Electronic and magnetic ballast compatible
- Custom voltages available
- Automatic event, test and alarm log
- LCD display
- Reduced footprint (stackable cabinets
- Maintenance free standard batteries
- Forced air cooling during emergency mode only

# UL listed to UL 924. Meets NFPA101, NFPA70, NFPA 110, OSHA, UBC, SBCCI. N.Y City approved.



Electrical/mechanical characteristics<sup>4</sup> (data provided for standard lead calcium batteries)<sup>1,4</sup>

Power	Effic. at		. input ent (A)	Heat loss in normal					PS cab mens		din		ttery binet ons <sup>2,3</sup>	No. of	Batt. cab.	UPS cab.	Batt	Total system
rating¹ KVA= W	full load %	120V	277V	mode (BTU/HR)	Batt. VDC		No. of . Batt.	w"	H"	D"	W"	Н"	D"	batt. cab.	weight lbs	weight lbs	weight Ibs	weight lbs
1.5	98	16	7	102	48	39	4	30	47	25	N/A	N/A	N/A	N/A	N/A	250 lbs	296 lbs	546 lbs
2.25	98	24	11	153	72	38	6	30	47	25	N/A	N/A	N/A	N/A	N/A	265 lbs	444 lbs	709 lbs
3	98	32	14	204	96	38	8	30	47	25	N/A	N/A	N/A	N/A	N/A	295 lbs	592 lbs	887 lbs
3.75	98	39	17	255	120	37	10	30	47	25	N/A	N/A	N/A	N/A	N/A	305 lbs	740 lbs	1045 lbs
5	98	50	22	340	144	40	12	30	47	25	N/A	N/A	N/A	N/A	N/A	315 lbs	888 lbs	1203 lbs
6	98	63	27	408	180	40	15	30	47	25	30	47	25	1	210 lbs	350 lbs	1110 lbs	1670 lbs
8	98	84	36	544	240	39	20	30	47	25	30	47	25	1	232 lbs	375 lbs	1480 lbs	2087 lbs
10	98	105	45	680	144	82	24	30	47	25	30	47	25	1	420 lbs	435 lbs	1776 lbs	2631 lbs
12.5	98	131	57	850	180	82	30	30	47	25	30	47	25	2	420 lbs	465 lbs	2220 lbs	3105 lbs
16.7	98	174	76	1136	240	80	40	30	47	25	30	47	25	2	464 lbs	530 lbs	2960 lbs	3954 lbs

<sup>1</sup>System capacity can be upgraded in the field up to 2000VA by adding more battery cabinets. Re-programming required by factory service technician.

<sup>2</sup>Batteries are installed in separate modular cabinets

<sup>3</sup>Battery cabinets are stackable. Must be installed under the electronics cabinet

<sup>4</sup>Special voltages can change the size, weight or number of cabinets

#### How to order

Input voltage <sup>1</sup>	Battery type	VA/W rating	System type	Output voltage²	Run time <sup>3</sup>	Input breaker	RS232 port	Output breakers⁴	Options⁵	
120	SG= Sealed	1500	-IPS	-120	-90	-ICB	RS232	-OCBxxxx=	-20Y= 20 yr sealed	-INVON= Inverter on dry
208	lead-	2250		-277				No trip	batteries	contacts
240	calcium	3000		-208				alarm⁴	-12HR= 12 hr fast recharge	-VTD= Variable time delay
277		3750		-120/240				-OCAxxxx=	-MBYP= Internal bypass	-MOD= External modem
		5000		-120/277				With trip	switch	-FAX= Fax modem
		6000						alarm⁴	-EMBP= External bypass	-BPR= Bypass relays
		8000							switch <sup>6</sup>	-SEIS = Seismic mounting
		10000							-RMP= Remote metering	-ZONEM= Zone
		12500							panel	monitoring
		16700							-RSAP= Remote summary	-BATM= Battery cycle
									alarm panel	warranty monitor
Example	e: 277SG6000-	IPS-277-9	0-ICB-RS	232-OCB04	20-DCS	5-20Y			-DCS= Dry summary alarm contacts	-

<sup>1</sup>Special voltages may change the size, weight or number of cabinets

<sup>2</sup>Special voltages may change the size, weight or number of cabinets

<sup>3</sup>Other run times available

<sup>4</sup>Max. 12 unsupervised single pole positions or 8 with trip alarm. For more output breakers

please consult factory.. See page 183 for output breaker details

<sup>₅</sup>See page 183 for options description

<sup>6</sup>External bypass switch is not compatible with integrated output circuit breakers.

Input/output voltage has to be the same

# Specifications

# General

# Design

• Stand-by. PWM inverter type utilizing IGBT technology with 50ms transfer time.

# Control

- Microprocessor controlled, 2 x 20-character display with touch pad controls & functions
- 5 LED indicators & alarm with ring-back feature

# Metering

 Input and output voltage, battery voltage, battery and output current, output VA, temperature, inverter wattage
 Communications Optional RS-232 port (DB9)

# Electrical input

# Voltage

120 or 277VAC, 1-phase 2-wire, +10%/ -15%

Contact factory for all other voltage.

# Input power walk-in

Limiting inrush current to less than 125%, 10 times for 1 line cycle Input frequency 60Hz, +/-3Hz, available upon request Protection Input circuit breaker Harmonic distortion <10% Power factor 0.5 lag/lead

# Electrical output

Voltage 120 or 277VAC, 1-phase 2-wire Contact factory for all other voltage

# Static voltage

- Load current change +/-2%, battery discharge +/-12.5% Dynamic voltage
- +/-2% for +/-25% load step change
- +/-3% for a 50% load step change, recovery within 3 cycles
   Harmonic distortion <3% THD for linear load</li>

Output frequency 60Hz +/- 0.05Hz during emergency mode Load power factor 0.5 lag to 0.5 lead

**Inverter overload** 115% for 10 minutes, 150% for 16 line cycles

Protection Optional distribution circuit breaker Crest factor 2.8

# **Environmental conditions**

# Storage/transport

- -4ºF to 158ºF (-20ºC to 70ºC) without batteries
- 0°F to 104°F (-18°C to 40°C) with batteries (max. 3 months at 104° F (40° C)

# Operating temperature

System operates safely from 32°F to 104°F (0°C to 40°C) but optimum operation is between 68° F and 86°F (20°C to 30°C). Battery performance can be affected by temperature **Altitude** <10,000 feet (above sea level) without de-rating **Relative humidity** 0 to 95% non-condensing **Audible noise** Audible noise 45 dBA @ 1m from surface in emergency mode

# Cabinets

Modular design, freestanding NEMA Type 1 steel cabinets powder coated for corrosion and scratch resistance. Front access design through hinged lockable doors requires only 39" front clearance and 12" top clearance. Cabinets are stackable if required to further reduce the footprint. Top and left side conduit entry with knockouts.

# Inverter

Using IGBT/PWM technology the inverter converts DC voltage supplied by the batteries to AC voltage of a precise stabilized amplitude and frequency, suitable for most sophisticated electrical equipment. True sinusoidal output waveform with very low distortion (less than 3% for linear loads). Overload capability of up to 150% for 12 line cycles.

# Charger

Fully automatic, temperature compensated, microprocessor controlled charger recharges fully discharged batteries in maximum 24 hours at nominal AC input voltage. AC input current limiting and over-voltage protection included.

# Battery

System is provided standard with 10 year, maintenance free, sealed valve regulated, front terminals Lead-Calcium batteries. 20 year sealed Lead-Calcium battery also available. 90 min. standard discharge time at full load under normal operating temperature. Low voltage disconnect protection included. No special ventilation required.

# Self-diagnostics

Automatic self tests consist of a 5-minute monthly and 90-minute annual function. The front-mounted control panel includes 5 LED indicators, a 2-line 20-character LCD display, a keypad to control and monitor the internal operation of the system. This allows the operator to easily "watch" system functions as they occur and check on virtually any aspect of the system's operation. Standard RS232 diagnostic interface

# Alarms

High/low battery charger voltage, high/low AC Input Voltage, Near low battery, low battery, load reduction fault, output overload, high ambient temperature, inverter fault, output fault, optional output circuit breaker trip

# **Optional features**

Output circuit breakers, output trip alarms, 20 years sealed batteries, 12 hours fast recharge, internal/external maintenance bypass switch, remote meter panel, remote summary alarm panel, summary alarm dry form C contact, inverter on dry contacts, fax modem, bypass relays, auto dialer, seismic mounting.

# Factory start-up

Includes one additional year of warranty. See warranty conditions

# Warranty (full limited warranty conditions available upon request)

Limited manufacturer warranty is one-year, parts and labor, for system electronics or two-year with factory start-up program. Battery warranty is one year full plus 9 years pro-rata for a total of 10 years, under normal operating conditions. System must be put in service within 6 months from ship date in order to validate warranty 2-Consult factory for other type batteries than the standard one.



# **Emerg-Power Systems FTC Single Phase Series**

Uninterruptible emergency lighting inverter system 1.5KVA –16.7KVA



# Features

- 98% efficient at full load
- PWM/IGBT technology
- Self-testing/Self-diagnostic
- User programmable with password protection
- Standard input circuit breaker
- Standard normally off and on output
- RS232 communication port
- Micro-processor controlled
- Automatic event and alarm log
- 90 min. standard run time
- Generator compatibility

- Electronic and magnetic ballast compatible
- Custom voltages available
- Automatic event, test and alarm log
- LCD display
- Reduced footprint (stackable cabinets
- Maintenance free standard batteries
- Forced air cooling during emergency mode only

# UL listed to UL 924. Meets NFPA101, NFPA70, NFPA 110, OSHA, UBC, SBCCI. N.Y City approved.



Electrical/mechanical characteristics<sup>4</sup> (data provided for standard lead calcium batteries)<sup>1,4</sup>

Power rating <sup>1</sup>	Effic. at full load	curre	. input ent (A)	Heat loss in normal mode	Batt.		No. of	d	PS cab imens	ions		ca nensi		No. of batt.	Batt. cab. weight		Batt weight	Total system weight
KVA= W	%	120V	277V	(BTU/HR)	VDC	<u> </u>	Batt.	W"	H"	D"	W"	H"	D"	cab.	lbs	lbs	lbs	lbs
1.5	98	16	7	102	48	39	4	30	47	25	N/A	N/A	N/A	N/A	N/A	250 lbs	296 lbs	546 lbs
2.25	98	24	11	153	72	38	6	30	47	25	N/A	N/A	N/A	N/A	N/A	265 lbs	444 lbs	709 lbs
3	98	32	14	204	96	38	8	30	47	25	N/A	N/A	N/A	N/A	N/A	295 lbs	592 lbs	887 lbs
3.75	98	39	17	255	120	37	10	30	47	25	N/A	N/A	N/A	N/A	N/A	305 lbs	740 lbs	1045 lbs
5	98	50	22	340	144	40	12	30	47	25	N/A	N/A	N/A	N/A	N/A	315 lbs	888 lbs	1203 lbs
6	98	63	27	408	180	40	15	30	47	25	30	47	25	1	210 lbs	350 lbs	1110 lbs	1670 lbs
8	98	84	36	544	240	39	20	30	47	25	30	47	25	1	232 lbs	375 lbs	1480 lbs	2087 lbs
10	98	105	45	680	144	82	24	30	47	25	30	47	25	1	420 lbs	435 lbs	1776 lbs	2631 lbs
12.5	98	131	57	850	180	82	30	30	47	25	30	47	25	2	420 lbs	465 lbs	2220 lbs	3105 lbs
16.7	98	174	76	1136	240	80	40	30	47	25	30	47	25	2	464 lbs	530 lbs	2960 lbs	3954 lbs

<sup>1</sup>System capacity can be upgraded in the field up to 2000VA by

<sup>3</sup>Battery cabinets are stackable. Must be installed under the electronics cabinet <sup>4</sup>Special voltages can change the size, weight or number of cabinets

adding more battery cabinets.Re-programming required by factory service technician. <sup>4</sup>Special voltages can change the size, weight or number of cabinets <sup>2</sup>Batteries are installed in separate modular cabinets

#### How to order

Input voltage¹	Battery type	VA/W rating	System type	Output voltage <sup>2</sup>	Run time <sup>3</sup>	Input breaker	RS232 Port	Output breakers⁴	<b>Options⁵</b>	
120 208 240 277	SG= Sealed Lead- Calcium	1500 2250 3000 3750 5000 6000 8000 10000 12500 16700	-FTC	-120 -277 -208 -120/140 -120/277	-90	-ICB	-RS232	No trip alarm⁴	-20Y= 20 yr sealed batteries -12HR= 12 hr fast recharge -MBYP= Internal bypass switch -EMBP= External bypass switch <sup>7</sup> -RMP= Remote metering panel -RSAP= Remote summary alarm panel	-INVON= Inverter on dry contacts -NOFF= normally OFF output <sup>6</sup> -MOD= External modem -FAX= Fax modem -BPR= Bypass relays -SEIS= Seismic mounting -ZONEM= Zone monitoring -BATM= Battery cycle
Example	e: 277SG6000-	FTC-277	90-ICB-R	\$232-ОСВО	420-DC	CS-20Y			-DCS= Dry summary alarm contacts	warranty monito

<sup>1</sup>Special voltages may change the size, weight or number of cabinets

<sup>2</sup>Special voltages may change the size, weight or number of cabinets

<sup>3</sup>Other run times available

<sup>4</sup>Max. 12 unsupervised single pole positions or 8 with trip alarm. For more output breakers

please consult factory.. See page 183 for output breaker details

<sup>₅</sup>See page 183 for options description

<sup>6</sup>External bypass switch is not compatible with integrated output circuit breakers.

Input/output voltage has to be the same

<sup>7</sup>Normally off loads cannot exceed 20% of total KVA rating with any combination of H.I.D. loads

# Specifications

# General

# Design

• Stand-by. PWM inverter type utilizing IGBT technology with 2ms transfer time

# Control

- Microprocessor controlled , 2  $\times$  20-character display with touch pad controls & functions
- 5 LED indicators & alarm with ring-back feature

# Metering

• Input and output voltage, battery voltage, battery and output current, output VA, temperature, inverter wattage **Communications** RS-232 port (DB9)

# Electrical input

# Voltage

• 120 or 277VAC 1-phase 2-wire +10% - 15%. Contact factory for all other voltages

# Input power walk-in

• Limiting inrush current to less than 125%, 10 times for 1 line cycle

Input frequency 60Hz, +/-3%, 50Hz available upon request Protection Input circuit breaker Harmonic distortion <10% Power Factor 0.5 lag/lead

# Electrical output

Voltage 120 or 277VAC, 1-phase 2-wire Contact factory for all other voltage

# Static voltage

- Load current change +/-2%, battery discharge +/-12.5% Dynamic voltage
- +/-2% for +/-25% load step change
- +/-3% for a 50% load step change, recovery within 3 cycles
   Harmonic distortion <3% THD for linear load</li>

Output frequency 60Hz +/- 0.05Hz during emergency mode Load power factor 0.5 lag to 0.5 lead

**Inverter overload** 115% for 10 minutes, 125% for 5 minutes, 150% for 12 cycles

**Protection** Optional distribution circuit breaker **Crest factor** 2.8

# **Environmental conditions**

# Storage/transport

- -4ºF to 158ºF (-20ºC to 70ºC) without batteries
- 0°F to 104°F (-18°C to 40°C) with batteries (max. 3 months at 104° F (40° C)

# Operating temperature

System operates safely from 32°F to 104°F (0°C to 40°C) but optimum operation is between 68° F and 86°F (20°C to 30°C). Battery performance can be affected by temperature **Altitude** <10,000 feet (above sea level) without de-rating **Relative humidity** 0 to 95% non-condensing **Audible noise** Audible noise 45 dBA @ 1m from surface in emergency mode

# Cabinets

Modular design, freestanding NEMA Type 1 steel cabinets powder coated for corrosion and scratch resistance. Front access design through hinged lockable doors requires only 39" front clearance and 12" top clearance. Cabinets are stackable if required to further reduce the footprint. Top and left side conduit entry with knockouts.

# Inverter

Using IGBT/PWM technology the inverter converts the DC voltage supplied by the batteries to AC voltage of a precise stabilized amplitude and frequency, suitable for most sophisticated electrical equipment. True sinusoidal output waveform with very low distortion (less than 3% for linear loads). Overload capability of up to 150% for 12 line cycles.

# Charger

Fully automatic, temperature compensated, microprocessor controlled charger recharges fully discharged batteries in maximum 24 hours at nominal AC input voltage. AC input current limiting and over-voltage protection included.

# Battery

System is provided standard with 10 year, maintenance free, sealed valve regulated, front terminals Lead Calcium batteries. 20 year sealed Lead Calcium battery also available. 90 min. standard discharge time at full load under normal operating temperature. Low Voltage Disconnect protection included. No special ventilation required.

# Self-diagnostics

Automatic self tests consist of a 5-minute monthly and 90-minute annual function. The front-mounted control panel includes 5 LED indicators, a 2-line 20-character LCD display, and a keypad to control and monitor the internal operation of the system. This control panel allows the operator to easily "watch" system functions as they occur and check on virtually any aspect of the system's operation. Standard RS232 diagnostic interface.

# Alarms

High/low battery charger voltage, high/low AC input voltage, near Low battery, low battery, load reduction fault, output overload, high ambient temperature, inverter fault, output fault, optional output circuit breaker trip

# **Optional features**

Output circuit breakers, output trip alarms, 20 years sealed batteries, 12 hours fast recharge, internal/external maintenance bypass switch, remote meter panel, remote summary alarm panel, summary alarm dry Form C contact, inverter on dry contacts, normally off output, fax/ modem, bypass relays, auto dialer, seismic mounting.

# Factory start-up

Includes one additional year of warranty. See warranty conditions

# Warranty (full limited warranty conditions available upon request)

Limited manufacturer warranty is one-year, parts and labor, for system electronics or two-year with factory start-up program. Battery warranty is one year full plus 9 years pro-rata for a total of 10 years, under normal operating conditions. System must be put in service within 6 months from ship date in order to validate warranty. 2-Consult factory for other type batteries than the standard one.



# **Emerg-Power Systems 3FTC Three Phase Series**

Uninterruptible emergency lighting inverter system 4.8KVA – 50KVA



# Features

- 98% efficient at full load
- PWM/IGBT technology
- Self-testing/self-diagnostic
- User programmable with password protection
- Standard input circuit breaker
- Standard normally off and on output
- RS232 communication port
- Micro-processor controlled
- Automatic event and alarm log
- 90 min. standard run time

- Generator compatibility
- Available in Y or  $\Delta$  input configuration
- Custom voltages available
- Automatic event, test and alarm log
- LCD display
- Reduced footprint
- Maintenance free standard batteries
- Forced air cooling during emergency mode only

UL listed to UL 924. Meets NFPA101, NFPA70, NFPA 110, OSHA, UBC, SBCCI. N.Y City approved.

 $\textbf{Electrical/mechanical characteristics}^{4} \ (data \ provided \ for \ standard \ lead \ calcium \ batteries)^{1.4}$ 

Power rating <sup>1</sup>	Effic. at full load	curr	c. input ent (A) 277V/	Heat loss in normal mode	Batt.	Batt.	No. of		PS cab imens		dim		tery oinet ons <sup>2,3</sup>	No. of batt.	Batt. cab. weight	UPS cab. weight	Batt weight	-
KVA= W	%	208V	480V	(BTU/HR)	VDC	Α	Batt.	W"	Н"	D"	W"	Н"	D"	cab.	lbs	lbs	lbs	lbs
4.8	98	17	7	326	144	39	12	30	47	25	30	47	25	1	N/A	535 lbs	888 lbs	1633 lbs
6	98	21	9	408	180	39	15	30	47	25	30	47	25	1	N/A	535 lbs	1110 lbs	1855 lbs
8	98	28	12	544	240	39	20	30	47	25	30	47	25	1	N/A	535 lbs	1480 lbs	2247 lbs
10	98	35	15	680	144	81	24	30	47	25	30	47	25	1	N/A	639 lbs	1776 lbs	2835 lbs
12.5	98	43	19	850	180	81	30	30	47	25	30	47	25	2	N/A	639 lbs	2220 lbs	3279 lbs
16.7	98	58	25	1136	240	81	40	30	47	25	30	47	25	2	210 lbs	639 lbs	2960 lbs	4063 lbs
24	98	84	36	1632	240	117	60	30	47	31	48	72	31	1	232 lbs	1250 lbs	4440 lbs	6390 lbs
33	98	115	50	2244	240	160	40	30	47	31	48	72	31	2	420 lbs	1250 lbs	6080 lbs	8630 lbs
40	98	139	60	2720	240	194	100	30	47	31	48	72	31	2	420 lbs	1450 lbs	7400 lbs	10150 lbs
50	98	174	75	3400	240	243	60	30	47	31	48	72	31	2	464 lbs	1450 lbs	9120 lbs	11980lbs

<sup>1</sup>Consult factory for 20 year type batteries. <sup>2</sup>KVA=KW <sup>3</sup>Battery cabinets are stackable. Must be installed under the electronics cabinet <sup>4</sup>Special voltages can change the size, weight or number of cabinets

#### How to order

Input voltage <sup>1</sup>	Battery type	VA/W rating	System type	Output voltage²	Run time <sup>3</sup>	Input breaker	RS232 Port	Internal Bypass Switch	Output breakers⁴	<b>Options⁵</b>	
120/208 277/480	Sealed lead- calcium	4800 6000 8000 12500 16700 24000 33000 40000 50000	-3FTC	120/208 277/480 277/480-90-1		-ICB	-RS232	-MBYP= Internal bypass switch	-OCBxxxx= No trip alarm <sup>4</sup> -OCAxxxx= With trip alarm <sup>4</sup>	-20Y= 20 yr sealed batteries -12HR= 12 hr fast recharge -EMBP= External bypass switch <sup>7</sup> -RMP= Remote metering panel -RSAP= Remote summary alarm panel -DCS= Dry summary alarm contacts	-INVON= Inverter on dry contacts -NOFF3= normally OFF output 3PH <sup>6</sup> -NOFF= normally off output 1PH <sup>6</sup> -MOD= External modem -FAX= Fax modem -BPR= Bypass relays -SEIS= Seismic mounting -ZONEM= Zone monitoring -BATM= Battery cycle

<sup>1</sup>Special voltages may change the size, weight or number of cabinets

<sup>2</sup>Special voltages may change the size, weight or number of cabinets

<sup>3</sup>Other run times available

<sup>4</sup>Max. 12 unsupervised single pole positions or 8 with trip alarm16.7kVA systems.

24 unsupervised or 16 with trip alarm for systems 24kVA to 50kVA.

For more output breakers please consult factory.

See page 183 for output breaker details

<sup>5</sup>See page 183 for options description

<sup>6</sup>External bypass switch is not compatible with integrated output circuit breakers.

Input/output voltage has to be the same

<sup>7</sup>Normally off loads cannot exceed 20% of total KVA rating with any combination of H.I.D. loads
# Specifications

# General

# Design

• Stand-by. PWM inverter type utilizing IGBT technology with 2ms transfer time

# Control

- Microprocessor controlled , 2  $\times$  20-character display with touch pad controls & functions
- 5 LED indicators & alarm with ring-back feature

# Metering

 Input and output voltage, battery voltage, battery and output current, output VA, temperature, inverter wattage
 Communications RS-232 port (DB9)

# Electrical input

# Voltage

120/208 or 277/480 3 phase 4-wire +10% - 15%.
 Contact factory for all other voltages

# Input power walk-in

• Limiting inrush current to less than 125%, 10 times for 1 line cycle

Input frequency 60Hz, +/-3%, 50Hz available upon request Protection Input circuit breaker Harmonic distortion <10% Power factor 0.5 lag/lead

# Electrical output

Voltage 120/208 or 277/480VAC, 3-phase 4-wire Contact factory for all other voltage

# Static voltage

- Load current change +/-4%, battery discharge +/-4% **Dynamic voltage**
- +/-3% for +/-25% load step change
- +/-6% load step change, recovery within 3 cycles

Harmonic distortion <3% THD for linear load

**Output frequency** 60Hz +/- 0.05Hz during emergency mode **Load power factor** 0.5 lag to 0.5 lead

**Inverter overload** 115% for 5 minutes, 125% for 10 minutes, 280% for line cycles

Protection Optional Distribution Circuit Breaker Crest factor 2.8

# **Environmental conditions**

# Storage/transport

- -4°F to 158°F (-20°C to 70°C) without batteries (max. 3 months at 104° F (40° C)
- $0^{\circ}$ F to  $104^{\circ}$ F (- $18^{\circ}$ C to  $40^{\circ}$ C) with batteries

# Operating temperature

System operates safely from 32°F to 104°F (0°C to 40°C) but optimum operation is between 68° F and 86°F (20°C to 30°C). Battery performance can be affected by temperature **Altitude** <10,000 feet (above sea level) without de-rating **Relative humidity** 0 to 95% non-condensing **Audible noise** 45 dBA @ 1m from surface in emergency mode

#### Cabinets

Modular design, freestanding NEMA type 1 steel cabinets powder coated for corrosion and scratch resistance. Front access design through hinged lockable doors requires only 39" front clearance and 12" top clearance. Cabinets are stackable up to 16.7kVA, if required to further reduce the footprint. Top and left side conduit entry with knockouts up to 16.7kVA. Left side only for 24kVA and up.

#### Inverter

Using IGBT/PWM technology the inverter converts the DC voltage supplied by the batteries to AC voltage of a precise stabilized amplitude and frequency, suitable for most sophisticated electrical equipment. True sinusoidal output waveform with very low distortion (less than 3% for linear loads). Overload capability of up to 150% for 12 line cycles

#### Charger

Fully automatic, temperature compensated, microprocessor controlled charger recharges fully discharged batteries in maximum 24 hours at nominal AC input voltage. AC input current limiting and over-voltage protection included.

#### Battery

System is provided standard with 10 year, maintenance free, sealed valve regulated, front terminals Lead Calcium batteries. 20 year sealed Lead Calcium battery also available. 90 min. standard discharge time at full load under normal operating temperature. Low Voltage Disconnect protection included. No special ventilation required.

#### Supervision

Automatic self tests consist of a 5-minute monthly and 90-minute annual function. The front-mounted control panel includes 5 LED indicators, a 2-line 20-character LCD display, a keypad to control and monitor the internal operation of the system. This allows the operator to easily "watch" system functions as they occur and check on virtually any aspect of the system's operation. Standard RS232 diagnostic interface.

#### Alarms

High/low battery charger voltage, high/low AC input voltage, near low battery, low battery, load reduction fault, output overload, high ambient temperature, inverter fault, output fault, optional output circuit breaker trip

#### **Optional features**

Output circuit breakers, output trip alarms, 20 years sealed batteries, 12 hours fast recharge, external maintenance bypass switch, remote meter panel, remote summary alarm panel, summary alarm dry form C contact, inverter on dry contacts, normally off output, fax/modem, bypass relays, auto dialer, seismic mounting.

Factory start-up Includes one additional year of warranty. See warranty conditions

Warranty (full limited warranty conditions available upon request)

Limited manufacturer warranty is one-year, parts and labor, for system electronics or two-year with factory start-up program. Battery warranty is one year full plus 9 years pro-rata for a total of 10 years, under normal operating conditions. System must be put in service within 6 months from ship date in order to validate warranty. 2-Consult factory for other type batteries than the standard one.



# Emerg-Power Systems FTC3R and 3FTC3R

Outdoor uninterruptible emergency lighting inverter system 3KVA-8KVA



#### Features

- 98% efficient at full load
- PWM/IGBT technology
- Self-testing/self-diagnostic
- Standard input circuit breaker
- Standard internal bypass switch
- RS232 communication port
- Standard seismic zone 4 brackets
- Standard summary dry contacts
- Automatic event and alarm log
- NEMA 3R cabinet for outdoors
- 90 min. standard run time

- Generator compatibility
- Available in Y or  $\Delta$  input configuration
- Custom voltages available
- Automatic event, test and alarm log
- LCD display
- One size cabinet
- Maintenance free standard 5 year batteries
- Temperature controlled cooling fans

UL listed to UL 924. Meets NFPA101, NFPA70, NFPA 110, OSHA, UBC, SBCCI. N.Y City approved.

Electrical/ Mechanical characteristics<sup>4</sup> - (data provided for standard Lead Calcium batteries)<sup>1,4</sup>

Power rating <sup>1</sup>	Effic. at full	Heat loss	Batt.	Batt.	No. of		UPS ca dimen		UPS cab.	Batt. cab.	Total system
KVA= W	load %	(BTU)	VDC	A	Batt. <sup>2</sup>	W"	Н"	D"	weight lbs	weight lbs	-
3 (1PH)	98	255	120	37	10	48	76	30	535 lbs	888 lbs	1633 lbs
4 (1PH)	98	340	144	40	12	48	76	30	535 lbs	1110 lbs	1855 lbs
5 (1PH)	98	408	180	40	15	48	76	30	535 lbs	1480 lbs	2247 lbs
6.5 (1PH)	98	544	240	39	20	48	76	30	639 lbs	1776 lbs	2835 lbs
8 (1PH)	98	680	144	82	24	48	76	30	639 lbs	2220 lbs	3279 lbs
4 ( 3PH)	98	326	144	39	12	48	76	30	639 lbs	2960 lbs	4063 lbs
5 ( 3PH)	98	408	180	39	15	48	76	30	1250 lbs	4440 lbs	6390 lbs
6.5 (3PH)	98	544	240	39	20	48	76	30	1250 lbs	6080 lbs	8630 lbs
8 (3PH)	98	680	144	81	24	48	76	30	1450 lbs	7400 lbs	10150 lbs

<sup>1</sup>Factory installed floor mount brackets; add 2.5" to each side (total 53") <sup>2</sup>Standard batteries are 5 year life expectancy. Batteries are installed in the same cabinet with electronics

<sup>3</sup>UL rated for 90 min. run time for temperatures: 50°F to 104°F (10°C to 40°C) or -4°F to 104°F (-20°C to 40°C) with optional heater

#### How to order

NVERTERS

Input voltage <sup>1</sup>	Battery type	VA/W rating²	System type	Output voltage <sup>3</sup>	Run time⁴	Input breaker	RS232 Port	Internal bypass switch	Output breakers⁵	Options <sup>6</sup>	
120, 1PH 208, 1PH 240, 1PH 277, 1PH 120/208, 3PH 277/480, 3PH	<b>SG</b> = Sealed lead- calcium	3000 4000 5000 6500 8000	FTC3R= single phase 3FTC3R= 3 phase	120 208 277 120/208 277/480	90	ICB	RS232	МВҮВ	-OCBxxxx= No trip alarm <sup>5</sup> -OCAxxxx= With trip alarm <sup>5</sup>	NOFF= normally off output <sup>7</sup> EMBP= external bypass switch <sup>8</sup> RMP= remote metering panel	HTR= heater INVON= inverter on dry contacts MOD= external modem FAX= fax modem BPR= bypass relays SS= stainless steel
Example	: 1205G4000-F	TC3R-12	0-90-ICB-R	S232-MBYI	B-OCBO	420-10Y				RSAP= remote summary alarm panel	enclosure

<sup>1</sup>1PH are input voltages available for 1 phase systems. 3PH are input voltages

available for 3phase systems.

<sup>5</sup>Max. 14 unsupervised single pole positions or 8 with trip alarm. For more output breakers please consult factory. See page 183 for output breaker option details

<sup>6</sup>See page 183 for options description Summary alarm dry contacts and seismic brackets are standard.

<sup>7</sup> Normally off loads cannot exceed 20% of total KVA rating with any combination of H.I.D. loads

<sup>8.</sup>Not available in 3 phase version.

<sup>&</sup>lt;sup>4</sup>NEMA type 3R, freestanding, two-door powder coat cold rolled steel cabinet standard. Stainless steel enclosure is optiona

<sup>&</sup>lt;sup>2</sup>Not available in 3 phase version

<sup>&</sup>lt;sup>3</sup>1PH are input voltages available for 1 phase systems. 3PH are input voltages

available for 3 phase systems.

<sup>&</sup>lt;sup>4</sup>Other run times available

# **Emerg-Power Systems**

# Options details

#### Integrated output circuit breakers:

-OCB	12	20			
<b>Trip alarm</b> OCB - No breaker trip alarm	Number of circuit breakers Combination of 1 pole, 2 pole and 3 pole	Breaker rating (Amps)	Number of poles	<b>Breaker voltage</b> <b>Blank-</b> matches system output voltage	Operation mode Blank: Normally-on
<b>OCA -</b> With breaker trip alarm	breakers available. *For max. number of circuit breakers available please consult factory	*Various ratings available	Blank - 1 pole -2P - 2 poles -3P - 3poles	-120VAC -208VAC -240VAC -277VAC -480VAC	<b>-NOFF:</b> Normally-off

Distribution circuit breakers are for output load protection. Protection for the normally on and/or for the normally off loads. All circuit breakers are rated for 10,000 AIC. If ordered, an audible and visual alarm activates when an output distribution circuit breaker is open or has tripped

#### (-20YR) 20 year old sealed lead calcium batteries

Maintenance free battery requires no addition of water over the life of the battery. The battery cells are housed in protective, modular steel trays. Life expectancy is designed for 20-years at  $77^{\circ}F$  (25°C).

#### (-12HR) 12 hour fast recharge

Battery charger upgrade option which decreases the time required to return a fully discharged battery to the fully charged state. The normal 24 hour recharge cycle is reduced to a 12 hour period.

#### (-MBYP) Internal maintenance bypass switch

Internally mounted device permits maintenance personnel to easily bypass the protected equipment directly to the AC utility power. The manual make beforebreak switch isolates the system to perform routine maintenance or servicing without interruption of utility power to the connected load.

#### (-EMBP) External maintenance bypass switch

The external maintenance bypass switch is mounted in a 20"H x 16"W x 9"D NEMA 1 separate enclosure, used to completely isolate the inverter system from the connected load and AC utility input. This option allows the system to be safely powered down for maintenance or service. The option may not be used on systems with more than one single pole output circuit breaker which must be sized for the total system output current.

#### (-RMP) Remote meter panel

The panel allows monitoring of parameters and control from remote locations up to 150 feet away from the inverter system. Also, the remote panel provides a complete touch pad interface allowing the user to monitor, control and program the inverter system.

#### (-RSAP) Remote summary alarm panel

Wall mountable box provides visual and audible alarms with silent switch. The panel consists of LED indicators and built-in audible alarm and may be located up to 1,000 feet away from the inverter system.

#### (-DCS) Summary alarm dry contacts

Form C dry contacts for remote monitoring purposes. Rated at 5 amps max. (250VAC/30VDC), the contacts will change state when any of the following alarms: are tripped High/Low Battery Charger Voltage, High/Low AC Input Voltage, Near Low Battery Voltage, Low Battery Voltage, Load Reduction Fault, High Ambient Temperature, Inverter Fault, Output Fault, Output Overload or Optional circuit breaker.

#### (-INVON) Inverter on dry contacts

Form C dry contacts that will change state when the system transfers to battery operation

#### (-VTD) Time delay, 15 minutes (for normally off circuits)

After a return of AC utility power, delays retransfer of the inverter for up to 15 min. and continues to supply emergency power to the normally off circuits.

#### (-NOFF) Normally off output

This output circuit is dedicated for the "emergency only" equipment. Emergency only equipment operates during power outages and when the system is on battery back up. This option leaves the normally off load circuits off during normal utility power conditions. A 1-pole circuit breaker is provided. For 3 phase systems, 3 pole normally off circuits are available as well.

#### (-MOD) External modem

External modem device is designed to boost the signal level of the RS-232 diagnostic interface to remote monitoring locations located more than 100 feet away from the system.

#### (-FAX) Internal fax modem

The internal fax modem enables the system to send a fax automatically to several pre-programmed numbers when one of the following conditions occurs: utility failure, output failure or any alarm. The Fax Modem option requires a user supplied dedicated phone line.

#### (-BPR) Bypass relays

Internal bypass relays will allow overriding circuits that can be switched on/off, so in case of a power failure the emergency circuits will be supplied from the inverter system whatever the position of the switching device. Please consult factory for more details.

#### (-SEIS) Seismic mounting kit

The seismic mounting kit option is designed to prevent system movement during seismic events. Heavy-duty brackets are provided to secure system cabinetry to floor surfaces. Meets Zone 4 requirements.

#### (-ZONEM) Zone monitoring

Allows voltage monitoring of different circuits than the standard AC utility input. When the voltage of one of these circuits drops, the inverter system will go into battery back-up operation mode. Number and voltage of the monitored circuits to be specified.

#### (-RS232) Diagnostic interface

A microprocessor-based data acquisition system designed to monitor all the system parameters remotely. Monitors alarm log, event log and automatic test log. User can command the system to perform a battery test and review all system parameters. Access is through a DB9 connector and transmits at 9600 baud.

#### (-BATM) Battery cycle warranty monitor

Device providing battery monitoring at string level or cell level. Please consult factory for more details.

# **Emerg-Power Systems**

Control panel & display



#### System testing

Manual tests of system may be performed at any time using the control panel test key. Automatic self-diagnostic tests consist of a 5-minute monthly and 90-minute annual function (the user can program the date and time of day the test is to take place). The microprocessor automatically records the last 75 test events in its own separate test result log.t result log.

# **Emerg-Power Systems**

Central systems request data

#### 1) Input voltage

Single phase (2 wire + ground)	120VAC 🗆	208VAC 🗆	240VAC 🗆	277VAC 🗆
Three phase (4 wire + ground, Y)	120/208VAC 🗆	277/480V 🗆		
Three phase (3 wire + ground, $\Delta$ )	208VAC 🗆	480VAC 🗆		
2) Output voltage				
Single phase (2 wire + ground)	120VAC 🗆	208VAC 🗆	277VAC 🗆	
Single phase (3 wire + ground)	120/240V 🗆	120/277 🗆		
Three phase (4 wire + ground, Y)	120/208VAC 🗆	277/480V 🗆		

#### 3) System capacity

KVA rating:\_\_\_\_

\_\_\_\_ System series type\_\_\_\_\_

- a) Please consider power consumption and maximum current of the complete lamp fixture not just the lamp wattage (ie: ballasts consumption)
- b) Please consider loads power factor

□ BATM – battery cycle warranty monitor

c) Even if the systems can run with 100% load, it is recommended as standard practice to use a system with a capacity at least 10% over maximum connected load

#### 4) Type of loads

ncandescent 🗆	Fluorescent 🗆	H.I.D (metal halide, high pressure sodium, etc.)
---------------	---------------	--

Other \_\_\_\_

#### 5) Mode of operation

Normally ON (24/7) □ Normally OFF (emergency only) □ Switched loads ON/OFF □

a) Please consider internal bypass relays or external override relays for switched On/Off loads. Each switched output circuit will require a bypass relay. Maximum 20 A per circuit.

6) Integrated output circuit bre	akers			
# of CB Amps Volta	ge # of poles		NOFF□	Trip alarm 🗆
#of CB Amps Volta	age # of poles		NOFF 🗆	Trip alarm 🗆
7) Type of batteries (check avai	ilability for each type s	ystem)		
10 yr sealed lead calcium $\Box$	20 yr sealed lead (	calcium 🗆	Wet nickel cad	dmium 🗆
8) Options (refer to available op	otions for each type sy	stem)		
🗆 12HR- 12 hr fast recharge	2		– normally OFF out	put
MBYP- internal bypass sy	vitch	□ MOD-	external modem	
EMBP- external bypass s	witch	🗆 FAX- f	ax modem	
🗆 RMP- remote metering p	anel	🗆 BPR- b	oypass relays How	many
□ RSAP- remote summary	alarm panel	□ SEIS- s	seismic mounting	
DCS- dry summary alarm	o contacts	□ ZONE	M- zone monitoring	)
□ INVON- inverter on dry co	ontacts	D VTD-1	Fime delay, 15 minu	tes
🗆 RS232- diagnostic interfa	ace			

# Accessories & general information

We provide everything you need for complete emergency lighting solutions, including wire guards, mounting plates, remote test switches and more. To specify alternate lamps, lamp data includes part numbers and catalog suffixes. National Electrical Code and Life Safety Code requirements related to emergency lighting are also provided for your reference.

01 EPC Series Emergency transfer switch for generator and mini inverters. Supplies power to switched lighting fixtures. 01

See page 162 for more information

# **Table of contents** Accessories & general information



14-3/4

13-3/4

13-1/2"

# Wire guards

#### Catalog number WG1-E Application

- JS Series (small cabinet)
- Premier™ Battery Unit
- Premier<sup>™</sup> Exit Sign (wall mount)
- Prestige<sup>™</sup> DX Series
- Preceptor™ Die-Cast Series
- Prestige™ Thin Die-Cast Series

# Application X10 (end or ceiling mounted) AC and AC/DC or self-powered exit with no mounted heads

 Preceptor<sup>™</sup> Series LED (AC and AC/DC or self-powered) (end or ceiling mounted)

Catalog number WG5-E

• Prestige<sup>™</sup> DX Series LED and Thin Die-Cast Series (end or ceiling mount)



• Premier<sup>™</sup> Exit Sign (end or ceiling mount)

#### Catalog number WG2-E Application

- JS Series (large cabinet)
- All A cabinets
- Premier<sup>™</sup> Combo Series (wall mount)



# Catalog number WG6-E Application

 X10 mini systems (wall mounted) with front mounted EF9 head(s) (wall mounted)



#### Catalog number WG7-E

#### Catalog number WG3-E Application

All B and C cabinets



#### Catalog number WG4-E Application

• All D cabinets





• Single remote EF10



# 8-1/4" 8-1/4" 9" 10-1/4"

# Catalog number

WG9-E

Application

• Double or triple remote EF10, lighting heads



### Catalog number WG13-E Application

• PRO-2N Series

(wall mount)

Preceptor<sup>™</sup> Series
 Self-Powered



#### Catalog number WG10-E Application

# JS Series with

front mounted heads



### Catalog number WG11-E Application

# GS Series

- Fully recessed
   Preceptor™
   Series
- Prestige™ Thin Die Cast Exit Sign (wall mounted)



# Catalog number WG12-E Application

- X10 Series LED (AC and AC/DC or Self-Powered) (wall mount)
- Preceptor<sup>™</sup> Series LED (AC and AC/DC or Self-Powered) (wall mount)
- Prestige<sup>™</sup> DX Series LED AC and AC/DC or Self-Powered (wall mount)



# Catalog number WG14-E Application Exit signs

- (ceiling mount) • Prestige™ Floor Proximity Series (6" & 8");
- Preceptor™
   Die-Cast Series;

• X10 LED Series,

• Premier™ Exit

Series:



11-7/8" 9-5/8" 13-3/4"

# Catalog number WG15-E

# Application Exit signs (ceiling mount)

- Prestige<sup>™</sup> Floor
- Proximity Series (6" & 8");
- Preceptor<sup>™</sup>
   Die-Cast Series;
- Prestige<sup>™</sup> Thin Die-Cast Series;
- X10 LED Series,
- Premier<sup>™</sup> Exit Series;



# Accessories

#### Catalog number VRS or VRS-4X Application

- ME Series with top mounted heads
- PS Series all mountings
- X10 LED, (wall mounted) AC and AC/DC or self-powered exit with no mounted heads
- ECL Series LED (wall mounted) AC and AC/DC or self-powered
- Preceptor<sup>™</sup> Series LED, (wall mounted) AC and AC/DC

#### Catalog number VRS-BB or VRSBB-4X Application

- JS Series (small cabinet) top or front mounted heads
- 22 • ECC & ECM Series 7-3/4" -(small cabinet) 13-7/8 14-7/8" 1/4"

#### **Remote test switch**

Make testing your ceiling mounted equipment easier with the remote test switch. Compatible with 120 or 277 VAC circuits, the remote test switch will interrupt the line voltage to your equipment by means of a momentary push button switch. AC on/Charge status indicator lamp assures that power is going to

# your emergency lighting.

How to order Metal faceplate, chrome RTS Plastic Faceplate plastic, off white RTS-1



10"

ø1/4" (4 PLCS)

Part# A

B1

B2

**Dimensions (inches)** 

14-1/4" 11-3/4" 12-5/8

в

7" 7-1/2"



Constructed of 16 gauge. steel, the B1 and B2 mounting bracket will accommodate our unit equipment in our 'A' and 'B' cabinets respectively.

How to order Mounting bracket (off white)

**B1** 2-1/4" 1 Mounting bracket (off white) 1-15/16" **B2** 



NEMA-4X

NEMA-4X

#### MP3 mounting platform

Constructed of 18 gauge. steel, the MP3 mounting platform will accommodate all our unit equipment in our 'B' cabinet.

#### **How To Order**



#### MP6, MP12, MP24 mounting platform

Constructed of 18 gauge. steel, the MP6, MP12, and MP24 mounting platform will accommodate our unit equipment in our 'C', 'D', and 'E' cabinets respectively.

#### How to order

Mounting platform (off white) Mounting platform (off white) Mounting platform (off white) Optional colors available, contact your sales representative

# MP6-EG **MP12** MP24



			Dime	ensions	(inches)
Part #	A		В	В	D
MP6		17"	7.75"	12.25"	16"
MP12		27.5"	7.75"	12.25"	16"
MP24		27.5"	11.63"	12.25"	16"

# 190

#### 230.1238-Е & 230.1239-Е Off-White - 230.1238-E Black - 230.1239-E · Single, double or triple round Thermoplastic construction · Off-white or black finish only Mount direct to 4" octagonal box Dimensions: 5" diameter - slotted mounting holes 3 to 3-9/16" mounting center Standard: EF18, EF18D; and EF9, EF9D 450.0397-E 450.0398-E 450.0129-E 450.0129-E, 450.0397-E & 450.0398-E No square hole No square hole No square hole 450.1155-E - 1/2" 450.1153-E - 1/2" · Single, double or triple rectangular 450.0194-E-1/2" Square hole Square hole Square hole • Single, triple or 4-gang steel construction · Chrome plated finish only 0 · Mount direct to standard outlet box **Dimensions:** Single - 2-3/4" X 4-1/2" (for 1 fixture) 3-gang - 6-7/16" X 4-1/2" (for 2 fixtures) 4-gang - 8-3/8" X 4-1/2" (for 3 fixtures) Standard: EF28, EF28D; EF18T and EF28T Off-white single Black single Off-white double Black double 330.7583-Е & 330.7584-Е 330.7583-E 330.7577-E 330.7584-E 330.7578-E • Single or double round • Die-cast aluminum construction Gasketed weatherproof · Off-white or black powder paint finish only Mount direct to 4"octagonal box Dimensions: 4-1/8" diameter 3-9/16" mounting center Gasket - 245.0100-E Standard: EF11 and EF11D 12804-E & 12805-E 12804-E 12805-E

- · Single or double rectangular
- Die-cast aluminum construction
- Gasketed weatherproof
- · Silver gray enamel finish only
- · Mount direct to standard outlet box

#### **Dimensions:**

4-5/8" X 2-7/8" 3-1/4" mounting center Standard: Non standard mounting plate







# Lamp Data

Emergency Lighting is required to provide illumination for a minimum of 90 minutes or an hour and a half during an emergency situation. Emergency Lighting lamps powered from a DC battery source must be powered by a battery that has the capacity to power all the lamps using that battery source for a minimum of 90 minutes. It is important to choose the correct lumen output lamp to meet the required illumination at the floor level on a path of egress. It is equally important to match the lamp and the battery voltages. If you do not have a battery that is the same voltage as the lamp and with enough wattage capacity to illuminate all the lamps, then the lamps will not provide adequate lumen output for 90 minutes to meet the required illumination at floor level along the path of egress.

First, match voltage. The voltage of the lamp must exactly match the voltage of the battery powering that lamp. If the voltage of the battery is lower than the voltage of the lamp, the lamp may not illuminate. If the voltage of the battery is higher than the voltage of the lamp, the lamp may "pop". Second, consider total wattage. The wattage of each individual lamp drawing from a battery during emergency operation, including the lamps mounted on the unit as well as all remote lamps wired to that unit, added together, CAN NOT EXCEED the total wattage capacity of that battery within 90 minutes of operation. A unit's battery wattage capacities are shown in the Unit Rating Chart of each particular unit.

Available lamp types are shown on the Lamp Selection Chart on the catalog page for each head style or fixture type. Lamp Selection Chart information refers to a single lamp. If you are using a double or triple lamp type head or fixture, the wattage draw of that head or fixture will be the total number of lamps used. For example, if you are using a double lamp fixture with a 12W lamp, that fixture will have a 24W draw (two lamps of 12W each, 12W + 12W = 24W total).

Lamp type	Part number	Lamp suffix	Voltage	Watts	Average lumen	Total candle power (CP)	Lamp #	Bulb type
	580.0097	LA	6	4	199	600	24	MR16
	580.0122	LB	6	5	415	1300	24	MR16
MR16 LED Lamps	580.0093	LG	12	4	222	440	30	MR16
	580.0104	LI	12	5	340	900	24	MR16
66	580.0106	LJ	12	6	540	1800	25	MR16
	580.0098	LL	24	4	223	900	24	MR16
	580.0100	LM	24	6	590	1939	24	MR16
·	580.0113	LW	120	4	235	110	22	MR16
	580.0095	LV	120	4	204	900	24	MR16

Emergency lighting is a vital and effective life safety tool, providing reassurance and guidance to people at critical times when they need to escape quickly and safely from a building.

# **National Electrical Code**

#### ARTICLE 700 – EMERGENCY SYSTEMS I. General

#### 700.1. Scope

The provisions of this article apply to the electrical safety of the installation, operation, and maintenance of emergency systems consisting of circuits and equipment intended to supply, distribute, and control electricity for illumination or power, or both, to required facilities when the normal electrical supply or system is interrupted. **(FPN No. 1):** For further information regarding wiring and installation of

- emergency systems in health care facilities, see Article 517. (FPN No. 2): For further information regarding performance and maintenance of emergency systems in health care facilities, see Standard for Health Care Facilities, NFPA 99-2012.
- (FPN No. 3): Emergency systems are generally installed in places of assembly where artificial illumination is required for safe exiting and for panic control in buildings subject to occupancy by large numbers of persons, such as hotels, theaters, sports arenas, health care facilities, and similar institutions. Emergency systems may also provide power for such functions as ventilation where essential to maintain life, fire detection and alarm systems, elevators, fire pumps, public safety communications systems, industrial processes where current interruption would produce serious life safety or health hazards, and similar functions.
- (FPN No. 4): For specification of locations where emergency lighting is considered essential to life safety, see Life Safety Code, NFPA 101-2012.
- (FPN No. 5): For further information regarding performance of emergency and standby power systems, see Standard for Emergency and Standby Power Systems, NFPA 110-1999.

#### 700.2. Definitions

Emergency Systems. Those systems legally required and classed as emergency by municipal, state, federal or other codes, or by any governmental agency having jurisdiction. These systems are intended to automatically supply illumination, power or both, to designated areas and equipment in the event of failure of the normal supply or in the event of accident to elements of a system intended to supply, distribute, and control power and illumination essential for safety to human life. Informational Note: Emergency systems are generally installed in places of assembly where artificial illumination is required for safe exiting and for panic control in buildings subject to occupancy by large numbers of persons, such as hotels, theatres, sports, arenas, health care facilities, and similar institutions. Emergency systems may also provide power for such functions as ventilation where essential to maintain life, fire detection and alarm systems, elevators, fire pumps, public safety communications systems, industrial processes where current interruption would produce serious life safety or health hazards, and similar functions. Relay automatic Load Control. A device used to set normally dimmed or normally-off switched emergency lighting equipment to full power illumination levels in the event of a loss of the normal supply by bypassing the dimming/switching controls, and to return the emergency lighting equipment to normal status when the device senses the normal supply has been restored. Informational Note: See ANSI/UL 924, Emergency Lighting and Power Equipment, for the requirements covering automatic load control relays.

#### 700.3. Tests and Maintenance

- (A) Conduct or Witness Test. The authority having jurisdiction shall conduct or witness a test of the complete system upon installation and periodically afterward.
- (B) Tested Periodically. Systems shall be tested periodically on a schedule acceptable to the authority having jurisdiction to ensure the systems are maintained in proper operating condition.

- **(C) Battery Systems Maintenance.** Where battery systems or unit equipment are involved, including batteries used for starting, control, or ignition in auxiliary engines, the authority having jurisdiction shall require periodic maintenance.
- (D) Written Record. A written record shall be kept of such tests and maintenance.
- (E) Testing Under Load. Means for testing all emergency lighting and power systems during maximum anticipated load conditions shall be provided.

Informational Note: For information on testing and maintenance of emergency power supply systems (EPSSs), see NFPA 110-2013, Standard for Emergency and Standby Power Systems.

#### 700.4. Capacity

- (A) Capacity and Rating. An emergency system shall have adequate capacity and rating for all loads to be operated simultaneously. The emergency system equipment shall be suitable for the maximum available fault current at its terminals.
- (B) Selective Load Pickup, Load Shedding, and Peak Load Shaving. The alternate power source shall be permitted to supply emergency, legally required standby, and optional standby system loads where the source has adequate capacity or where automatic selective load pickup and load shedding is provided as needed to ensure adequate power to (1) the emergency circuits; (2) the legally required standby circuits; and (3) the optional standby circuits, in that order of priority. The alternate power source shall be permitted to be used for peak load shaving, provided the above conditions are met.

Peak load shaving operation shall be permitted for satisfying the test requirement of Section 700.3(B), provided all other conditions of Section 700.3 are met. A portable or temporary alternate source shall be available whenever the emergency generator is out of service for major maintenance or repair.

#### 700.5. Transfer Equipment

- (A) General. Transfer equipment, including automatic transfer switches, shall be automatic and identified for emergency use and approved by the authority having jurisdiction. Transfer equipment shall be designed and installed to prevent the inadvertent interconnection of normal and emergency sources of supply in any operation of the transfer equipment. Transfer equipment and electric power production systems installed to permit operation in parallel with the normal source shall meet the requirements of article 705.
- (B) Bypass Isolation Switches. Means shall be permitted to bypass and isolate the transfer equipment. Where bypass isolation switches are used, inadvertent parallel operation shall be avoided.
- **(C) Automatic transfer switches** shall be electrically operated and mechanically held. Automatic transfer switches, rated 1000 VAC and below, shall be listed for emergency system use.
- (D) Use. Transfer equipment shall supply only emergency loads.

#### 700-6. Signals.

Audible and visual signal devices shall be provided, where practicable, for the following purposes described in 700.6(A) through (D).

- (A) Derangement. To indicate derangement of the emergency source. (B) Carrying Load. To indicate that the battery is carrying load.
- (b) Carrying Load. To indicate that the battery is carryi
   (C) Not Functioning. To indicate that the battery charger is not functioning.
- (D) Ground Fault. To indicate a ground fault in solidly grounded wye emergency systems of more than 150 volts to ground and circuit protective devices rated 1000 amperes or more. The sensor for the ground-fault signal devices shall be located at, or ahead of, the main system disconnecting means for the emergency source, and the maximum setting of the signal devices shall be for a ground-fault current of 1200 amperes. Instructions on the course of action to be taken in event of indicated ground fault shall be located at or near the sensor location.

Informational Note: For signals for generator sets, see NFPA 110-2013, Standard for Emergency and Standby Power Systems

#### 700.7. Signs

- (A) Emergency Sources. A sign shall be placed at the service entrance equipment indicating type and location of on-site emergency power sources.
   Exception: A sign shall not be required for individual unit equipment as specified in Section 700-12(F).
- (B) Grounding. Where removal of a grounding or bonding connection in the normal power source equipement interrupts the grounding electrode conductor connection to the alternate power source(s) grounded conductor, a warning sign shall be installed at the normal power source equipment stating: WARNING

SHOCK HAZARD EXISTS IF GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS EQUIPMENT IS REMOVED WHILE ALTERNATE SOURCE(S) IS ENERGIZED. The warning sign(s) or label(s) shall comply with 110.21(B).

#### 700.8 Emergency Sources

A listed SPD shall be installed in or on all emergency systems switchboards and panelboards.

#### **II. Circuit Wiring**

#### 700-10. Wiring, Emergency System.

- (A) Identification. All boxes and enclosures (including transfer switches, generators, and power panels) for emergency circuits shall be permanently marked so they will be readily identified as a component of an emergency circuit or system.
- (B) Wiring. Wiring of two or more emergency circuits supplied from the same source shall be permitted in the same raceway, cable, box, or cabinet. Wiring from an emergency source distribution overcurrent protection to emergency loads shall be kept entirely independent of all other wiring and equipment, unless otherwise permitted in 700.10(B) (1) through (5):
  - (1) Wiring from the normal power source located in transfer equipment enclosures.
  - (2) Wiring supplied from two sources in exit or emergency luminaires
  - (3) Wiring from two sources in a listed load control relay supplying exit or emergency luminaires, or in a common junction box, attached to exit or emergency luminaires
     (4) Wiring within a common junction box attached to
  - unit equipment, containing only the branch circuit supplying the unit equipment and the emergency circuit supplied by the unit equipment.
  - (5) Wiring from an emergency source to supply emergency and other loads in accordance with 700.10(B)(5)a, b, c, and d as follows:
  - a. Separate vertical switchgear sections or separate vertical switchboard sections, with or without a common bus, or individual disconnects mounted in separate enclosures shall be used to separate emergency loads from all other loads.
- b. The common bus of separate sections of the switchgear, separate sections of the switchboard, or the individual enclosures shall be permitted to be supplied by single or multiple feeders without overcurrent protection at the source.
   Exception to (5)b: Overcurrent protection shall be permitted

at the source or for the equipment, provided the overcurrent protection complies with the requirements of 700.28.

- c. Legally required and optional standby circuits shall not originate from the same vertical switchboard section, panel board enclosure, or individual disconnect enclosure as emergency circuits.
- d. It shall be permissible to utilize single or multiple feeders to supply distribution equipment between an emergency source and the point where the combination of emergency, legally required, or optional loads are separated.

- (C) Wiring Design and Location. Emergency wiring circuits shall be designed and located to minimize the hazards that might cause failure due to flooding, fire, icing, vandalism, and other adverse conditions.
- (D) Fire Protection. Emergency systems shall meet the following additional requirements (D)(1) through (D)
   (3) in assembly occupancies for not less than 1000 persons or in buildings above 23 m (75 ft) in height.

Informational Note: For the definition of Occupancy Classification, see Section 6.1 of NFPA 101-2009, Life Safety Code

(1) Feeder-circuit wiring shall meet one of the following conditions:

- (1) Be installed in spaces or areas that are fully protected by an approved automatic fire suppression system.
- (2) Be listed electrical circuit protective system with a minimum 2-hour fire rating. Informational note: UL guide information for electrical circuit protective systems (FHIT) contains information on proper installation requirements to maintain the fire rating
- (3) Be protected by a listed thermal barrier system for electrical system components with a minimum 2-hour fire rating.
- (4) Be protected by a listed fire-rated assembly that has a minimum fire rating of 2 hours and contains only emergency wiring circuits
- (5) Be encased in a minimum of 50 mm (2 in) of concrete
- (2) Feeder-Circuit Equipment. Equipment for feeder circuits (including transfer switches, transformers, panel boards) shall be either located in spaces fully protected by approved automatic fire suppression systems (including sprinklers and carbon dioxide systems) or in spaces with a 2-hour fire resistance rating.
- (3) Generator Control Wiring. Control conductors installed between the transfer equipment and the emergency generator shall be kept entirely independent of all other wiring and shall meet the conditions of 700.10(D)(1)

#### III. Sources of Power

**700.12. General Requirements.** Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both will be available within the time required for the application but not to exceed 10 seconds. The supply system for emergency purposes, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12(A) through (D) below. Unit equipment in accordance with Section 700.12(E) shall satisfy the applicable requirements of this article.

In selecting an emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building. Equipment shall be designed and located to minimize the hazards that might cause complete failure due to flooding, fires, icing, and vandalism. Equipment for sources of power as described in Sections 700.12(A) through (E) where located within assembly occupancies for greater than 1000 persons or in buildings above 23 m (75 ft) in height with any of the following occupancy classes: assembly, educational, residential, detention and correctional, business, and mercantile, shall be installed either in spaces fully protected by approved automatic fire suppression systems (sprinklers, carbon dioxide systems, and so forth), or in spaces with a 1-hour fire rating.

Informational note No. 1: For definition of Occupancy Classification, see Section 6.1of NFPA 101-2012, Life Safety Code.

# **National Electrical Code**

Informational note No. 2: For further information, see ANSI/ IEEE 493-2007, Recommended Practice for the Design of Reliable Industrial and Commercial Power Systems.

#### (A) Storage Battery.

Storage batteries used as source of power for emergency systems shall be of suitable rating and capacity to supply and maintain the total load for a period of 1-1/2 hours minimum, without the voltage applied to the load falling below 87-1/2 percent of normal.

Batteries, whether of the acid or alkali type, shall be designed and constructed to meet the requirements of emergency service and shall be compatible with the charger for that particular installation.

For a sealed battery, the container shall not be required to be transparent. However, for the lead acid battery that requires water additions, transparent or translucent containers shall be furnished. Automotive-type batteries shall not be used.

An automatic battery charging means shall be provided.

#### (B) Generator Set.

- (1) Prime Mover-Driven. For a generator set driven by a prime mover acceptable to the authority having jurisdiction and sized in accordance with Section 700-4. Means shall be provided for automatically starting the prime mover on failure of the normal service and for automatic transfer and operation of all required electrical circuits. A time-delay feature permitting a 15-minute setting shall be provided to avoid retransfer in case of short-time reestablishment of the normal source.
- (2) Internal Combustion Engines as Prime Movers. Where internal combustion engines are used as the prime mover an on-site fuel supply shall be provided with an on-premise fuel supply sufficient for not less than 2 hours full-demand operation of the system. Where power is needed for the operation of the fuel transfer pumps to deliver fuel to a generator set dry tank, this pump shall be connected to the emergency power system.
- (3) Dual Supplies. Prime movers shall not be solely dependent upon a public utility gas system for their fuel supply or municipal water supply for their cooling systems. Means shall be provided for automatically transferring from one fuel supply to another where dual fuel supplies are used. Exception: Where acceptable to the authority having jurisdiction, the use of other than on-site fuels shall be permitted where there is a low

probability of a simultaneous failure of both the off-site fuel delivery system and power from the outside electrical utility company. (4) Where a storage battery is used for control or signal power, or

- (c) Where a storage battery is used for control of signal power, of as the means of starting the prime mover, it shall be suitable for the purpose and shall be equipped with an automatic charging means independent of the generator set. Where the battery charger is required for the operation of the generator set, it shall be connected to the emergency system. Where power is required for the operation of dampers used to ventilate the generator set, the dampers shall be connected to the emergency system.
- (5) Auxiliary Power Supply. Generator sets that require more than 10 seconds to develop power shall be permitted is an auxiliary power supply energizes the emergency system until the generator can pick up the load.
- (6) Outdoor Generator Sets. Where an outdoor housed generator set is equipped with a readily accessible disconnecting means in accordance with 445.18, and the disconnecting means is located within sight of the building or structure supplied, an additional disconnecting means shall not be required where ungrounded conductors serve or pass through the building or structure. Where the generator supply conductors terminate at a disconnecting means in or on a building or structure, the disconnecting means shall meet the requirements of 225.36.

Exception: For installations under single management where conditions of maintenance and supervision ensure that only qualified persons will monitor and service the installation and where documented safe switching procedures are established and maintained for disconnection, the generator set disconnecting means shall not be required to be located within sight of the building of structure served.

(C) Uninterruptible Power Supplies. Uninterruptible power supplies used to provide power for emergency systems shall comply with the applicable provisions of Sections 700-12(A) and (B).

(D) Separate Service. Where acceptable to the authority having jurisdiction as suitable for use as an emergency source of power, an additional service shall be permitted. This service shall be in accordance with the applicable provisions of Article 230 and following additional requirements.

- (1) Separate overhead service conductors, service drops, underground service conductors, or service laterals shall be installed
- (2) The service conductors for the separate service shall be installed sufficiently remote electrically and physically from any other service conductors to minimize the possibilit of simultaneous interruption of supply
- (E) Fuel Cell System. Fuel Cell Systems used as a source of power for emergency systems shall be of suitable rating and capacity to supply and maintain the total load for not less than 2 hours of full demand operation.

Installation of a fuel cell system shall meet the requirements of Parts II through VIII of Article 692. Where a single fuel cell system serves as the normal supply for the building or group of buildings concerned, it shall not serve as the sole source of power for the emergency standby system.

#### (F) Unit Equipment.

- (1) Components of Unit Equipment. Individual unit equipment for emergency illumination shall consist of the following:
   (1) A rechargeable battery
  - (2) A battery charging means
  - (3) Provisions for one or more lamps mounted on the equipment, or shall be permitted to have terminals for remote lamps, or both and
  - (4) A relaying device arranged to energize the lamps automatically upon failure of the supply to the unit equipment.

(2) Installation of Unit Equipment. Unit equipment shall be installed in accordance with 700.12(F)(2)(1) through (6).

- (1) The batteries shall be of suitable rating and capacity to supply and maintain at not less than 87-1/2 percent of the nominal battery voltage for the total lamp load associated with the unit for a period of at least 1-1/2 hours, or the unit equipment shall supply and maintain not less than 60 percent of the initial emergency illumination for a period of at least 1-1/2 hours. Storage batteries, whether of the acid or alkali type, shall be designed and constructed to meet the requirements of emergency service.
- (2) Unit equipment shall be permanently fixed in place (i.e., not portable) and shall have all wiring to each unit installed in accordance with the requirements of any of the wiring methods in Chapter 3. Flexible cord and plug connection shall be permitted, provided that the cord does not exceed 900 mm (3 ft) in length.
- (3) The branch circuit feeding the unit equipment shall be the same branch circuit as that serving the normal lighting in the area and connected ahead of any local switches.

Exception : In a separate and uninterrupted area supplied by a minimum of three normal lighting circuits, a separate branch circuit for unit equipment shall be permitted if it originates from the same panelboard as that of the normal lighting circuits and is provided with a lock-on feature.

- (4) The branch circuit that feeds unit equipment shall be clearly identified at the distribution panel.
- (5) Emergency luminaire's (illumination fixtures) that obtain power from a unit equipment and are not part of the unit equipment shall be wired to the unit equipment as required by Section 700-10 and by one of the wiring methods of Chapter 3.
- (6) Remote heads providing lighting for the exterior of an exit door shall be permitted to be supplied by the unit equipment serving the area immediately inside the exit door

#### IV. Emergency System Circuits for Lighting and Power

#### 700.15.

**Loads on Emergency Branch Circuits.** No appliances and no lamps, other than those specified as required for emergency use, shall be supplied by emergency lighting circuits.

#### 700.16.

**Emergency illumination.** Emergency iillumination shall include all required means of egress lighting, illuminated exit signs, and all other lights specified as necessary to provide required illumination.

Emergency lighting systems shall be designed and installed so that the failure of any individual lighting element, such as the burning out of a light bulb, cannot leave in total darkness any space that requires emergency illumination.

Where high-intensity discharge lighting such as high- and low-pressure sodium mercury vapor, and metal halide is used as the sole source of normal illumination, the emergency lighting system shall be required to operate until normal illumination has been restored. Where an emergency system is installed, emergency illumination shall be provided in the area of the disconnecting means required by 225.31 and 230.70, as applicable, where the disconnecting means are installed indoors.

Exception: Where alterative means that ensure the emergency lighting illumination level is maintained shall be permitted.

- 700.17. Branch Circuits for Emergency Lighting. Branch circuits that supply emergency lighting shall be installed to provide service from a source complying with Section 700-12 when the normal supply for lighting is interrupted. Such installations shall provide either one of the following:
- (1) An emergency lighting supply, independent of the normal lighting supply, with provisions for automatically transferring the emergency lights upon the event of failure of the normal lighting branch circuit
- (2) Two or more branch circuits supplied from separate and complete systems with independent power sources. One of the two power sources and systems shall be part of the emergency system and the other shall be permitted to be part of the normal power source and system. Each system shall provide sufficient power for emergency lighting purposes.

Unless both systems are used for regular lighting purposes and are both kept lighted, means shall be provided for automatically energizing either system upon failure of the other. Either or both systems shall be permitted to be a part of the general lighting of the protected occupancy if circuits supplying lights for emergency illumination arc installed in accordance with other sections of this article.

**700.18. Circuits for Emergency Power.** For branch circuits that supply equipment classed as emergency, there shall be an emergency supply source to which the load will be transferred automatically upon the failure of the normal supply.

V. Control—Emergency Lighting Circuits

- 700.19. Multiwire Branch Circuits. The branch circuit serving emergency lighting and power circuits shall not be part of a multiwire branch circuit.
- **700.20. Switch Requirements.** The switch or switches installed in emergency lighting circuits shall be arranged so that only authorized persons will have control of emergency lighting.

Exception No. 1: Where two or more single-throw switches are connected in parallel to control a single circuit, at least one of these switches shall be accessible only to authorized persons.

Exception No. 2: Additional switches that act only to put emergency lights into operation but not disconnect them shall be permissible. Switches connected in series or 3- and 4-way switches shall not be used.

**700.21. Switch Location.** All manual switches for controlling emergency circuits shall be in locations convenient to authorized persons responsible for their actuation. In facilities covered by Articles 518 and 520, a switch for controlling emergency lighting systems shall be located in the lobby or at a place conveniently accessible thereto. In no case shall a control switch for emergency lighting be placed in a motion-picture projection booth or on a stage or platform. Exception: Where multiple switches are provided, one such switch shall be permitted in such locations where arranged so that it can energize the circuit only, but cannot deenergize the circuit.

**700.22. Exterior Lights.** Those lights on the exterior of a building that are not required for illumination when there is sufficient daylight shall be permitted to be controlled by an automatic light-actuated device.

**700.23 Dimmer Systems.** A dimmer or relay system containing more than one dimmer or relay and listed for use in emergency systems shall be permitted to be used as a control device for energizing emergency lighting circuits. Upon failure of normal power, the dimmer or relay system shall be permitted to selectively energize only those branch circuits required to provide minimum emergency illumination. All branch circuits supplied by the dimmer or relay system cabinet shall comply with the wiring methods of Article 700.

**700.24 Automatic Load Control Relay.** Where emergency illumination is provided by one or more directly controlled luminaires that respond to an external control input to bypass normal control upon loss of normal power, such luminaires and external bypass controls shall be individually listed for use in emergency systems.

**700.25 Automatic Load Control Relay.** If an emergency lighting load is automatically energized upon loss of the normal supply, a listed automatic load control relay shall be permitted to energize the load. The load control relay shall not be used as transfer equipment.

#### **VI. Overcurrent Protection**

**700-26.** Accessibility. The branch-circuit overcurrent devices in emergency circuits shall be accessible to authorized persons only.

**700-27. Ground-Fault Protection of Equipment.** The alternate source for emergency systems shall not be required to have ground-fault protection of equipment with automatic disconnecting means. Ground-fault indication of the emergency source shall be provided in accordance with 700.6(D) if ground-fault protection of equipment with automatic disconnecting means is not provided. Exception: Selective coordination shall not be required between two overcurrent devices located in series if no loads are connected in parallel with the downstream device.

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# Life Safety Code

#### 7.8 Illumination of Means of Egress. 7.8.1 General.

7.8.1.1\* Illumination of means of egress shall be provided in accordance with Section 7.8 for every building and structure where required in Chapters 11 through 43. For the purposes of this requirement, exit access shall include only designated stairs, aisles, corridors, ramps, escalators, and passageways leading to an exit. For the purposes of this requirement, exit discharge shall include only designated stairs, aisles, corridors, ramps, escalators, walkways, and exit passageways leading to a public way.

**7.8.1.2** Illumination of means of egress shall be continuous during the time that the conditions of occupancy require that the means of egress be available for use, unless otherwise provided in 7.8.1.2.2.

**7.8.1.2.1** Artificial lighting shall be employed at such locations and for such periods of time as are necessary to maintain the illumination to the minimum criteria values herein specified.

**7.8.1.2.2** Unless prohibited by Chapters 11 through 43, automatic lighting control devices shall be permitted to temporarily turn off the illumination within the means of egress, provided that each lighting control device complies with all of the following: (1) In new installations, the lighting control device is listed.

- (2) The lighting control device is equipped to automatically energize the controlled lights upon loss of normal power and is evaluated for this purpose.
- (3) Illumination timers are provided and are set
- for a minimum 15-minute duration.
- (4) The lighting control device is activated by any occupant movement in the area served by the lighting units.
- (5) In new installations, the lighting control device is activated by activation of the building fire alarm system, if provided.
- (6) The lighting control device does not turn off any lights relied upon for activation of photoluminescent exit signs or path markers.
- (7) The lighting control device does not turn off any battery equipped emergency luminaires, unit equipment, or exit signs.

**7.8.1.2.3\*** Energy-saving sensors, switches, timers, or controllers shall be approved and shall not compromise the continuity of illumination of the means of egress required by 7.8.1.2.

7.8.1.3\* The floors and other walking surfaces within an exit and within the portions of the exit access and exit discharge designated in 7.8.1.1 shall be illuminated as follows:
(1) During conditions of stair use, the minimum

- illumination for new stairs shall be at least 10 ft-candle (108 lux), measured at the walking surfaces.
- (2) The minimum illumination for floors and other walking surfaces, other than new stairs during conditions of stair use, shall be to values of at least 1 ft-candle (10.8 lux), measured at the floor.
- (3) In assembly occupancies, the illumination of the walking surfaces of exit access shall be at least 0.2 ft-candle (2.2 lux) during periods of performances or projections involving directed light.
- (4)\*The minimum illumination requirements shall not apply where operations or processes require low lighting levels.

**7.8.1.4\* Required illumination** shall be arranged so that the failure of any single lighting unit does not result in an illumination level of less than 0.2 ft-candle (2.2 lux) in any designated area.

**7.8.1.5 The equipment** or units installed to meet the requirements of Section 7.10 also shall be permitted to serve the function of illumination of means of egress, provided that all requirements of Section 7.8 for such illumination are met.

#### 7.8.2 Sources of Illumination.

**7.8.2.1\*** Illumination of means of egress shall be from a source considered reliable by the authority having jurisdiction.

**7.8.2.2** Battery-operated electric lights and other types of portable lamps or lanterns shall not be used for primary illumination of means of egress. Battery-operated electric lights shall be permitted to be used as an emergency source to the extent permitted under Section 7.9.

#### 7.9 Emergency Lighting.

#### 7.9.1 General.

7.9.1.1\* Emergency lighting facilities for means of egress shall be provided in accordance with Section 7.9 for the following:
(1) Buildings or structures where required in Chapters 11 through 43
(2) Underground and limited access structures as addressed in Section 11.7

- (3) High-rise buildings as required by other sections of this Code
- (4) Doors equipped with delayed-egress locks
- (5) Stair shafts and vestibules of smokeproof enclosures,
  - for which the following also apply:
    (a) The stair shaft and vestibule shall be permitted to include a standby generator that is installed for the smokeproof enclosure mechanical ventilation equipment.
- (b) The standby generator shall be permitted to be used for the stair shaft and vestibule emergency lighting power supply.

(6) New access-controlled egress doors in accordance with 7.2.1.6.2.

**7.9.1.2** For the purposes of 7.9.1.1, exit access shall include only designated stairs, aisles, corridors, ramps, escalators, and passageways leading to an exit. For the purposes of 7.9.1.1, exit discharge shall include only designated stairs, ramps, aisles, walkways, and escalators leading to a public way.

**7.9.1.3** Where maintenance of illumination depends on changing from one energy source to another, a delay of not more than 10 seconds shall be permitted.

#### 7.9.2 Performance of System.

**7.9.2.1** Emergency illumination shall be provided for a minimum of 1-1/2 hours in the event of failure of normal lighting.

- 7.9.2.1.1 Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 ftcandle (10.8 lux) and, at any point, not less than 0.1 ft-candle (1.1 lux), measured along the path of egress at floor level.
- 7.9.2.1.2 Illumination levels shall be permitted to decline to not less than an average of 0.6 ft-candle (6.5 lux) and, at any point, not less than 0.06 ft-candle (0.65 lux) at the end of 1-1/2 hours.
- **7.9.2.1.3** The maximum-to-minimum illumination shall not exceed a ratio of 40 to 1.

**7.9.2.2** New emergency power systems for emergency lighting shall be at least Type 10, Class 1.5, Level 1, in accordance with NFPA110, Standard for Emergency and Standby Power Systems.

7.9.2.3\* The emergency lighting system shall be arranged to provide the required illumination automatically in the event of any interruption of normal lighting due to any of the following:
(1) Failure of a public utility or other outside electrical power supply
(2) Opening of a circuit breaker or fuse

(3) Manual act(s), including accidental opening of a switch controlling normal lighting facilities 7.9.2.4 Emergency generators providing power to emergency lighting systems shall be installed, tested, and maintained in accordance with NFPA 110, Standard for Emergency and Standby Power Systems. Stored electrical energy systems, where required in this Code, other than battery systems for emergency luminaires in accordance with 7.9.2.5, shall be installed and tested in accordance with NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems.

**7.9.2.5 Unit equipment and battery systems** for emergency luminaires shall be listed to ANSI/UL 924, Standard for Emergency Lighting and Power Equipment.

**7.9.2.6\* Existing battery-operated emergency lights** shall use only reliable types of rechargeable batteries provided with suitable facilities for maintaining them in properly charged condition. Batteries used in such lights or units shall be approved for their intended use and shall comply with NFPA 70, National Electrical Code.

**7.9.2.7 The emergency lighting system** shall be either continuously in operation or shall be capable of repeated automatic operation without manual intervention.

#### 7.9.3 Periodic Testing of Emergency Lighting Equipment.

**7.9.3.1 Required emergency lighting** systems shall be tested in accordance with one of the three options offered by 7.9.3.1.1, 7.9.3.1.2, or 7.9.3.1.3.

#### 7.9.3.1.1 Testing of required emergency lighting systems

shall be permitted to be conducted as follows:

- (1) Functional testing shall be conducted monthly, with a minimum of 3 weeks and a maximum of 5 weeks between tests, for not less than 30 seconds, except as otherwise permitted by 7.9.3.1.1(2).
- (2)\* The test interval shall be permitted to be extended beyond 30 days with the approval of the authority having jurisdiction.
- (3) Functional testing shall be conducted annually for a minimum of 90 minutes if the emergency lighting system is battery powered.
- (4) The emergency lighting equipment shall be fully operational for the duration of the tests required by 7.9.3.1.1(1) and (3).
- (5) Written records of visual inspections and tests shall be kept by the owner for inspection by the authority having jurisdiction.

#### 7.9.3.1.2 Testing of required emergency lighting systems

- shall be permitted to be conducted as follows:
- (1) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall be provided.
- (2) Not less than once every 30 days, self-testing/selfdiagnostic battery-operated emergency lighting equipment shall automatically perform a test with a duration of a minimum of 30 seconds and a diagnostic routine.
- (3) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall indicate failures by a status indicator.
- (4) A visual inspection shall be performed at intervals not exceeding 30 days.
- (5) Functional testing shall be conducted annually for a minimum of 90 minutes.
- (6) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall be fully operational for the duration of the 90 minutes.
- (7) Written records of visual inspections and tests shall be kept by the owner for inspection by the authority having jurisdiction.

# **7.9.3.1.3 Testing of required emergency lighting systems** shall be permitted to be conducted as follows:

- (1) Computer-based, self-testing/self-diagnostic batteryoperated emergency lighting equipment shall be provided.
- (2) Not less than once every 30 days, emergency lighting equipment shall automatically perform a test with a duration of a minimum of 30 seconds and a diagnostic routine.
- (3) The emergency lighting equipment shall automatically perform annually a test for a minimum of 90 minutes.
- (4) The emergency lighting equipment shall be fully operational for the duration of the tests required by 7.9.3.1.3(2) and (3).
- (5) The computer-based system shall be capable of providing a report of the history of tests and failures at all times.

# 7.10 Marking of Means of Egress.

#### 7.10.1 General.

**7.10.1.1 Where Required.** Means of egress shall be marked in accordance with Section 7.10 where required in Chapters 11 through 43.

#### 7.10.1.2 Exits.

**7.10.1.2.1\* Exits**, other than main exterior exit doors that obviously and clearly are identifiable as exits, shall be marked by an approved sign that is readily visible from any direction of exit access.

#### 7.10.1.2.2\*

Horizontal components of the egress path within an exit enclosure shall be marked by approved exit or directional exit signs where the continuation of the egress path is not obvious.

7.10.1.3 Exit Door Tactile Signage. Tactile signage shall be provided to meet all of the following criteria, unless otherwise provided in 7.10.1.4:(1) Tactile signage shall be located at each

- exit door requiring an exit sign.
- (2) Tactile signage shall read as follows: EXIT.
- (3) Tactile signage shall comply with ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities.

**7.10.1.4 Existing Exemption.** The requirements of 7.10.1.3 shall not apply to existing buildings, provided that the occupancy classification does not change.

#### 7.10.1.5 Exit Access.

**7.10.1.5.1** Access to exits shall be marked by approved, readily visible signs in all cases where the exit or way to reach the exit is not readily apparent to the occupants.

**7.10.1.5.2\*** New sign placement shall be such that no point in an exit access corridor is in excess of the rated viewing distance or 100 ft (30 m), whichever is less, from the nearest sign.

**7.10.1.6\* Floor Proximity Exit Signs.** Where floor proximity exit signs are required in Chapters 11 through 43, such signs shall comply with 7.10.3, 7.10.4, 7.10.5, and 7.10.6 for externally illuminated signs and 7.10.7 for internally illuminated signs. Such signs shall be located near the floor level in addition to those signs required for doors or corridors. The bottom of the sign shall be not less than 6 in. (150 mm), but not more than 18 in.(455 mm), above the floor. For exit doors, the nearest edge of the sign within 4 in. (100 mm) of the door frame.

7.10.1.7\* Floor Proximity Egress Path Marking. Where floor proximity egress path marking is required in Chapters 11 through 43, an approved floor proximity egress path marking system that is internally illuminated shall be installed within 18 in. (455 mm) of the floor. Floor proximity egress path marking systems shall be listed in accordance with ANSI/UL 1994, Standard for Luminous Egress Path Marking Systems. The system shall provide a visible delineation of the path of travel along the designated exit access and shall be

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essentially continuous, except as interrupted by doorways, hallways, corridors, or other such architectural features. The system shall operate continuously or at any time the building fire alarm system is activated. The activation, duration, and continuity of operation of the system shall be in accordance with 7.9.2. The system shall be maintained in accordance with the product manufacturing listing.

7.10.1.8\* Visibility. Every sign required in Section 7.10 shall be located and of such size, distinctive color, and design that it is readily visible and shall provide contrast with decorations, interior finish, or other signs. No decorations, furnishings, or equipment that impairs visibility of a sign shall be permitted. No brightly illuminated sign (for other than exit purposes), display, or object in or near the line of vision of the required exit sign that could detract attention from the exit sign shall be permitted.

7.10.1.9 Mounting Location. The bottom of new egress markings shall be located at a vertical distance of not more than 6 ft 8 in. (2030 mm) above the top edge of the egress opening intended for designation by that marking. Egress markings shall be located at a horizontal distance of not more than the required width of the egress opening, as measured from the edge of the egress opening intended for designation by that marking to the nearest edge of the marking.

#### 7.10.2 Directional Signs.

**7.10.2.1\*** A sign complying with 7.10.3, with a directional indicator showing the direction of travel, shall be placed in every location where the direction of travel to reach the nearest exit is not apparent.

**7.10.2.2 Directional exit signs** shall be provided within horizontal components of the egress path within exit enclosures as required by **7.10.1.2.2**.

#### 7.10.3\* Sign Legend.

7.10.3.1 Signs required by 7.10.1 and 7.10.2 shall read as follows in plainly legible letters, or other appropriate wording shall be used: EXIT

7.10.3.2\* Where approved by the authority having jurisdiction, pictograms in compliance with NFPA 170, Standard for Fire Safety and Emergency Symbols, shall be permitted.

7.10.4\* Power Source. Where emergency lighting facilities are required by the applicable provisions of Chapters 11 through 43 for individual occupancies, the signs, other than approved self-luminous signs and listed photoluminescent signs in accordance with 7.10.7.2, shall be illuminated by the emergency lighting facilities. The level of illumination of the signs shall be in accordance with 7.10.6.3 or 7.10.7 for the required emergency lighting duration as specified in 7.9.2.1. However, the level of illumination shall be permitted to decline to 60 percent at the end of the emergency lighting duration.

#### 7.10.5 Illumination of Signs.

**7.10.5.1\* General.** Every sign required by 7.10.1.2, 7.10.1.5, or 7.10.8.1, other than where operations or processes require low lighting levels, shall be suitably illuminated by a reliable light source. Externally and internally illuminated signs shall be legible in both the normal and emergency lighting mode.

#### 7.10.5.2\* Continuous Illumination.

**7.10.5.2.1** Every sign required to be illuminated by 7.10.6.3, 7.10.7, and 7.10.8.1 shall be continuously illuminated as required under the provisions of Section 7.8, unless otherwise provided in 7.10.5.2.2.

7.10.5.2.2\* Illumination for signs shall be permitted to flash on and off upon activation of the fire alarm system.

#### 7.10.6 Externally Illuminated Signs. 7.10.6.1\* Size of Signs.

7.10.6.1.1 Externally illuminated signs required by 7.10.1 and 7.10.2, other than approved existing signs, unless otherwise provided in 7.10.6.1.2, shall read EXIT or shall use other appropriate wording in plainly legible letters sized as follows:
(1) For new signs, the letters shall be not less than 6 in. (150 mm) high,

- with the principal strokes of letters not less than 3/4 in. (19 mm) wide.(2) For existing signs, the required wording shall be permitted to be in plainly legible letters not less than 4 in. (100 mm) high.
- (3) The word EXIT shall be in letters of a width not less than 2 in. (51 mm), except

the letter I, and the minimum spacing between letters shall be not less than 3/8 in. (9.5 mm).

(4) Sign legend elements larger than the minimum established in 7.10.6.1.1(1) through (3) shall use letter widths, strokes, and spacing in proportion to their height.

**7.10.6.1.2** The requirements of 7.10.6.1.1 shall not apply to marking required by 7.10.1.3 and 7.10.1.7.

#### 7.10.6.2\* Size and Location of Directional Indicator.

**7.10.6.2.1 Directional indicators**, unless otherwise provided in 7.10.6.2.2, shall comply with all of the following:

- (1) The directional indicator shall be located outside of the EXIT legend, not less than 3/8 in. (9.5 mm) from any letter.
- (2) The directional indicator shall be of a chevron type, as shown in Figure 7.10.6.2.1.
- (3) The directional indicator shall be identifiable as a directional indicator at a distance of 40 ft (12 m).
- (4) A directional indicator larger than the minimum established for compliance with 7.10.6.2.1(3) shall be proportionately increased in height, width, and stroke.
- (5) The directional indicator shall be located at the end of the sign for the direction indicated.



#### 7.10.6.2.1 Chevron Type Indicator.

**7.10.6.2.2 The requirements** of 7.10.6.2.1 shall not apply to approved existing signs.

7.10.6.3\* Level of Illumination. Externally illuminated signs shall be illuminated by not less than 5 ft-candles (54 lux) at the illuminated surface and shall have a contrast ratio of not less than 0.5.

#### 7.10.7 Internally Illuminated Signs.

7.10.7.1 Listing. Internally illuminated signs shall be listed in accordance with ANSI/UL 924, Standard for Emergency Lighting and Power Equipment, unless they meet one of the following criteria:
(1) They are approved existing signs.

- (2) They are existing signs having the required wording in
- legible letters not less than 4 in. (100 mm) high.
- (3) They are signs that are in accordance with 7.10.1.3 and 7.10.1.6.

**7.10.7.2\* Photoluminescent Signs.** The face of a photoluminescent sign shall be continually illuminated while the building is occupied. The illumination levels on the face of the photoluminescent sign shall be in accordance with its listing. The charging illumination shall be a reliable light source, as determined by the authority having jurisdiction. The charging light source, shall be of a type specified in the product markings.

#### 7.10.8 Special Signs. 7.10.8.1 Sign Illumination.

**7.10.8.1.1** Where required by other provisions of this Code, special signs shall be illuminated in accordance with 7.10.5, 7.10.6.3, and 7.10.7.

**7.10.8.1.2** Where emergency lighting facilities are required by the applicable provisions of Chapters 11 through 43, the required illumination of special signs shall additionally be provided under emergency lighting conditions.

**7.10.8.2 Characters.** Special signs, where required by other provisions of this Code, shall comply with the visual character requirements of ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities.

#### 7.10.8.3\* No Exit.

**7.10.8.3.1** Any door, passage, or stairway that is neither an exit nor a way of exit access and that is located or arranged so that it is likely to be mistaken for an exit shall be identified by a sign that reads as follows:

# NO EXIT

**7.10.8.3.2** The NO EXIT sign shall have the word NO in letters 2 in. (51 mm) high, with a stroke width of 3/8 in. (9.5 mm), and the word EXIT in letters 1 in. (25 mm) high, with the word EXIT below the word NO, unless such sign is an approved existing sign.

7.10.8.4 Elevator Signs. Elevators that are a part of a means of egress (see 7.2.13.1) shall have both of the following signs with a minimum letter height of 5/8 in. (16 mm) posted in every elevator lobby:
(1) \*Signs that indicate that the elevator can be used

for egress, including any restrictions on use (2) \*Signs that indicate the operational status of elevators

7.10.8.5\* Evacuation Diagram. Where a posted floor evacuation diagram is required in Chapters 11 through 43, floor evacuation diagrams reflecting the actual floor arrangement and exit locations shall be posted and oriented in a location and manner acceptable to the authority having jurisdiction.

#### 7.10.9 Testing and Maintenance.

**7.10.9.1 Inspection.** Exit signs shall be visually inspected for operation of the illumination sources at intervals not to exceed 30 days or shall be periodically monitored in accordance with 7.9.3.1.3.

**7.10.9.2 Testing.** Exit signs connected to, or provided with, a battery-operated emergency illumination source, where required in 7.10.4, shall be tested and maintained in accordance with 7.9.3. NFPA 101° Life Safety Code® 2015 Edition

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# Limited warranty

- 1.1 EMERGI-LITE® 6, 12 and 24 volt Emergency Lighting Unit Equipment (excluding lamps and fuses) and Exit Signs are fully warranted to be free of defects in material and workmanship under normal use for a period of three years from date of installation (see Paragraph 2.1). (For MR16 LED light source, see Paragraph 3.3)
- 1.2 **EMERGI-LITE**<sup>®</sup> 6, 12 and 24 volt Emergency Lighting Unit Equipment (excluding lamps and fuses) and Exit Signs listed below are fully warranted to be free of defects in material and workmanship under normal use for a period of five years from date of installation (see Paragraph 2.1). (For MR16 LED light source, see Paragraph 3.3)

Spec Grade Architectural	Spec Grade Commercial	Spec Grade Industrial	Remote
Lux-Ray™ LED Series	Premier™ Battery Series	Survive-All™ SVX Combo Series	Lux-Ray™ LED Series
Revelation™ Series	Premier™ Combo Series	Survive-All™ SVX Exit Series	Revelation™ Series
Mini-Revelation Series	Premier™ Exit Series	Survive-All™ SVH Series	Mini-Revelation Series
Prestige™ Series Edge-Lit	Preceptor™ Die-Cast Series	Survive-All™ SVXH Series	HP High Performance Series
Prestige™ Series X40	Preceptor™ Recessed Series	Survive-All SVXHZ Series	HPRL Remote Series
Prestige™ DX Series	Preceptor™ Remote Capacity Series	HP High Performance Series	EF39 Remote Series
Prestige™ Floor Proximity Series	Premier Compact	HPH Battery Series	
RS Battery Series	Economiser Edge-Lit	HPHRL Remote Series	
TS Battery Series		EXC Battery/ Combo Series	
		EFEP Remote Series	
		EFXP Exit Series	

- 1.3 **EMERGI-LITE**<sup>®</sup> 3.6 volt Emergency Lighting Unit Equipment (excluding lamps, and fuses) are fully warranted to be free of defects in material and work-manship under normal use for a period of three year from date of installation (see Paragraph 2.1).
- 1.4 **EMERGI-LITE**<sup>®</sup> 6, 12 and 24 volt Unit Equipment Batteries are warranted as follows (Warrant below includes the full warranty on entire unit as called out in Paragraph 1.1–1.3).

Battery type	Life expectancy	Shelf life <sup>1</sup>	Full warranty	Pro rata warranty
Sealed lead-calcium	8 years	6 months	3 years	3 years
High temperature lead-calcium	8 years	6 months	5 years	3 years
Sealed nickel-cadmium	10 years	1 year	5 years	5 years
Nickel-metal hydride	10 years	1 year	5 years	5 years

<sup>1</sup>Maximum storage life. Must be recharged if not placed in service or battery warranty void.

- 2.1 The full warranty period begins on the date of installation or 90 days from date of shipment, whichever date is earlier.
- 2.2 Should a defect appear in the equipment or batteries listed in Paragraphs 1.1–1.4 above within the specified full warranty period, EMERGI-LITE<sup>®</sup> will repair or replace equipment without charge (see Paragraph 3.3). Such repair or replacement shall be the purchaser's exclusive remedy.
- 2.3 The Pro Rata Warranty Period for batteries begins on the date the full warranty period ends.
- 2.4 A battery determined to be defective during the Pro Rata Warranty Period shall be repaired or replaced at a cost equal to the net price in effect at the time, reduced by the percentage obtained in multiplying 10% by the number of full years remaining in the total warranty peri-od. Such repair or replacement at this adjusted price shall be the purchaser's exclusive remedy.
- 3.1 All warranties are subject to proper installation and maintenance in accordance with the instructions supplied.
- 3.2 Any material deemed defective must be returned, freight prepaid, to the factory for evaluation (see Paragraph 5.1–5.3). Any changes in circuitry or components by other than authorized EMERGI-LITE<sup>®</sup> personnel or its service companies will void the warranty.

- 3.3 All warranties are limited to the repair and/or replacement or parts or equipment, which, upon examination at our plant, are determined to be defective and in our judgement are subject to repair or replacement under warranty. Replacement of lamps and fuses is not included in the warranty except for MR16 LED lamps are warranted to be free of defects in material and workmanship under normal use for a period of five (5) years when purchased and used with EMERGI-LITE® Battery Units, Combination Units or Remotes. The full warranty period begins on the date of installation or ninety (90) days from the date of shipment, whichever date is earlier.
- 3.4 If new replacement parts are shipped before defective goods are received for evaluation, the replacement parts will be invoiced at the net price in effect at that time. These charges will be credited if, upon receipt and evaluation of goods, a defect is determined. Only replace-ment parts will be shipped under these circumstances, if field replacement is possible. EMERGI-LITE\* FACTORY ONLY RESERVES THE RIGHT TO SHIP NEW UNIT EQUIPMENT FOR REPLACEMENT PURPOSES. Units returned after installation cannot be restored to 100% saleable condi-tion.
- 4.1 In no event shall EMERGI-LITE<sup>®</sup> be liable for backcharges of any kind, including, without limitation, labor charges for field repair or late penalties.

- 4.2 This warranty does not cover damages caused by improper maintenance of installation or damage due to installation in areas with other than normal temperatures and environmental conditions per application specifications. EMERGI-LITE\* assumes no responsibility for any damage to people, property, apparatus or otherwise resulting from improper installation or maintenance of its Emergency Lighting Unit Equipment.
- 4.3 This warranty does not cover damages caused by abuse, fire or Act of God.
- 4.4 In no event shall **EMERGI-LITE**<sup>®</sup> be liable for incidental or consequential damages.
- 4.5 The foregoing warranty is in lieu of all other warranties, expressed or implied, or merchantability, fitness for a particular purpose or any other thing. Except as stated in this warranty, EMERGI-LITE\* shall not be liable for any defects in, or breach of any contract relating to, the quality of performance of EMERGI-LITE\* Equipment under any theory of law including, without limitation, contract, negligence, strict liabil-ity or misrepresentation.
- 4.6 **EMERGI-LITE**<sup>®</sup> warranty coverage shall not apply to any equipment of another manufacturer used in conjunction with **EMERGI-LITE**<sup>®</sup> Equipment.
- 4.7 Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This written warranty gives you specific legal rights and you may also have other rights which vary from state to state.

- 5.1 No returned defective materials will be accepted without a Returned Goods Authorization issued in writing by an authorized EMERGI-LITE\* employee.
- 5.2 Purchaser is responsible for secure packing of returned materials to provide best possible assurance against damage in shipment.
- 5.3 Defective batteries of any kind must not be returned to EMERGI-LITE<sup>®</sup> factory without strict adherence to special instructions for handling and shipping. WARNING Never ship a refillable wet battery in any type of emergency lighting equipment. Failure to adhere to this policy will void warranty.
- 5.4 Defective goods returned to the factory must be shipped prepaid. COLLECT RETURNED SHIPMENT WILL BE REFUSED. Freight charges to return repaired equipment or ship replacement equipment to the purchaser to be paid by EMERGI-LITE<sup>®</sup>. Factory will return repaired goods via same shipping method as received.

FAILURE TO COMPLY WITH ANY OF THE STIPULATIONS SET FORTH WILL VOID THE WARRANTY. ANY EXCEPTIONS TO THE FOREGOING WARRANTY MUST BE REQUESTED AND ACCEPTED IN WRITING PRIOR TO SHIPMENT. EMERGI-LITE® EQUIPMENT NOT LISTED IN PARAGRAPHS 1.1–1.4 IS WAR-RANTED AS DESCRIBED ON ITS INDIVIDUAL DATA SHEET WITH THE STIPULATIONS AS STATED IN PARAGRAPHS 2.1–5.4.

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