

## Mini Inverter Series

### Interruptible unit equipment 250W



#### Housing

- 14-gauge steel
- White semi-gloss powered-coat paint finish

#### Mounting

- Surface mount

#### 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

- 250W
- 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 self diagnostic/charger is fully self-contained, fully automatic microcontroller-based system
- Optional audible auto diagnostic available
- Standard lighting control override for 0-10V dimming systems

#### Load shedding for 0-10V fixtures

- During a power outage the emergency fixture is dimmed to 25% or 45% factory set brightness output. Reducing wattage draw from the fixture will allow for more fixture to be connected to the Mini Inverter.
- Maximum 20 Emergency fixtures can be daisy chained per EMIU-250
- In stand-by mode, the maximum normally-on load that can be connected to EMIU-250-LD is 960 watts (see load shedding table on the next page)

#### Nexus® Option

- Units equipped with Nexus® self-testing monitoring system circuitry shall self-test, 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](http://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.



**Load capacity**

Mini-Inverter	Voltage	Mini-Inverter @ 80% capacity (W) in emergency mode
EMIU-250	120	200
Mini-Inverter	Voltage	Mini-Inverter @ 70% capacity (W) in emergency mode
EMIU-250	277	175

Example

Mini-Inverter load	Fixture wattage (W)	Fixture power factor	Equipment safety factor	Voltage	Fixture quantity
EMIU-250	29	0.96	20%	120	6

**Load shedding**

Mini-Inverter load	Voltage	Load shedding	Mini-Inverter @ 80% capacity (W) in emergency mode
EMIU-250-LDC	120	25%	800
EMIU-250-LDC	120	45%	363
Mini-Inverter load	Voltage	Load shedding	Mini-Inverter @ 70% capacity (W) in emergency mode
EMIU-250-LDC	277	25%	700
EMIU-250-LDC	277	45%	318

Example

Mini-Inverter load	Load shedding	Fixture wattage (W)	Fixture power factor	Equipment safety factor	Voltage	Fixture quantity
EMIU-250-LDC	25%	29	0.96	20%	120	14
EMIU-250-LDC	45%	29	0.96	20%	120	6

**Specifications**

Transfer time	Voltage regulation on emergency	Frequency regulation on emergency	Load power factor range	Operating temperature
Less than 1 second	+/- 5%	60 Hz +/- 1%	.9 leading to .9 lagging	68° to 86°F (20° to 30°C)

**Replacement battery**

Description	Suffix
EMIU-250	2X 860.0024-E

**Electrical characteristics and dimensions**

Power rating	Sine wave	Installation	Cabinet dimensions			No. of batteries	Total weight	Weight w/o battery
			Width	Height	Depth		120V & 277V	120V & 277V
250W	Pure	Wall	27"	12.2"	7.3"	2	100 lbs	45 lbs

Note: For wiring diagram, please refer to the specification sheets

**Power consumption and unit rating - non-CEC models**

Model number	AC specs	Emergency power available for load			
		90 Min	2H	3H	4H
EMIU-250	2.75 / 1.20 Amps	250W	167W	125W	94W

**Power consumption and unit rating - CEC models**

Model number	AC specs	AC power stand by	Emergency power available for load				
			90 Min	2H	3H	4H	
EMIU-250	120/277VAC	2.28 / 0.99 Amps	2.26W	250W	167W	125W	94W

**How to order**

Series	Capacity	Voltage	Diagnostic feature	Options	Approval
EMIU	-250= 250W	Blank= 120/120VAC or 277/277VAC	-Blank= Advanced Diagnostic, non-audible <sup>1</sup> -AD= Advanced Diagnostic, audible <sup>1</sup> -NAD= No Advanced Diagnostics <sup>2</sup> -NEX= Nexus® wired <sup>1</sup> -NEXP= Nexus®Pro IoT <sup>1</sup> -NEXRF= Nexus® wireless <sup>1</sup>	-D3= Time delay (15 minutes) -LDC25= Load shedding to 25% brightness -LDC45= Load shedding to 45% brightness -SAC= Service alarm contact <sup>3</sup>	-CEC= CEC Title 20 for California

Example: EMIU-250

<sup>1</sup>Minimum load required: 10% of unit capacity

<sup>2</sup>When using a transfer device (automatic load control relay) you must choose the NAD option

<sup>3</sup>Service alarm contact (SAC) shall provide a 24V signal, the charger board will indicate a fault by choosing a contact.