INTRODUCING THE NEW MINI INVERTERS BY EMERGI-LITE

RELIABILITY THROUGH TECHNOLOGY
MINI INVERTERS: EFFICIENT & RELIABLE POWER IN AN EMERGENCY

WITH TODAY’S HIGHLY EFFICIENT LED TECHNOLOGY, MINI INVERTERS ARE A RELIABLE, ECONOMICAL, HIGH-PERFORMANCE CHOICE FOR EMERGENCY POWER.

Mini Inverters offer many advantages. Provides a broad range of capacity for system flexibility. The Mini Inverter provides 125W to 720W of emergency power for 90 minutes to exit signs and emergency lighting equipment. Each Mini Inverter can power many remote fixtures for a streamlined system with a small footprint. Ideal for locations with limited space to house power systems, Mini Inverters can be installed unobtrusively in a small area and added as needed to provide emergency power on each floor of larger buildings.

Allows existing fixtures to be used as emergency lighting. To preserve the aesthetics of high-visibility areas, the Mini Inverter can run existing normally-on light fixtures in a power failure, as an alternative to separate dedicated emergency lighting.

Powers LED fixtures and most light sources at 100%. When power fails, the Mini Inverter supplies 100% power/lumen output with less than 1 second of transfer, and is ideal for use with LED fixtures and most light sources except HID. Fixtures can be on, off, switched or dimmed triac dimmable ballast.
Compatibility with Nexus® real-time monitoring system provides even higher levels of system reliability. With the Mini Inverter, all the advantages of Nexus® real-time monitoring system are now available for inverter-powered systems. Nexus® manages the status of the total load on the Mini Inverter from a central control unit. Through wireless communication and building automation, Nexus runs diagnostics, performs required monthly and annual functional tests according to Life Safety Code, generates maintenance logs, and runs compliance reports. A Nexus® system can contribute to LEED certification and support green building initiatives.

Reliability is built into the Mini Inverter. The UL924 listed the Mini Inverter uses a long-life, maintenance-free Lead-Acid battery. Fully-featured self-diagnostics test the batteries and lamps connected to the Mini Inverter so you can rest assured that your emergency lighting system will be on when the main power fails.
Choosing the Right Backup Power System

Back-up power can be provided in many ways. However, even though certain methods are suitable for critical applications, they may not be suitable for Emergency Lighting. This is because an Emergency Lighting system has unique load characteristics. Since Emergency Lighting is a critical life safety installation, it must be designed with its specific load characteristics in mind. Mini Inverter systems are specifically designed to provide emergency power for Emergency Lighting systems in a power failure.
MINI INVERTER FEATURES & BENEFITS

FEATURES

Self-Diagnostics/Self-Testing
The diagnostic/charger is a fully self-contained, fully automatic microcontroller-based system. Any fault condition causes a status LED indicator to blink, identifying the nature of the fault. Every 30 days, the sequence generator will generate a command to force a transfer in emergency mode for a variable test period based on code requirements (30 seconds each month, and 90 minutes after 12 months).

System Design
Inverter and charger modules utilize highly reliable solid state electronics. The modules feature input and output protection, and they measure and limit their own current.

Capacity
Capacity is available starting at 125W up to 720W, 120V and 277V.

True Sine Waveform (250W and up)
Using a solid-state, pulse width modulation (PWM) inverter, Mini Inverter systems produce pure sinusoidal output waveform with less than 5% Total Harmonic Distortion (THD) for linear loads.

Nexus Monitoring System
The Mini Inverter is compatible with Nexus®, a real-time monitoring system that manages the status of the total load on the Mini Inverter from a central control unit. Nexus® runs diagnostics, performs required monthly and annual functional tests as per Life Safety Code, generates maintenance logs and runs compliance reports.

BENEFITS

Code Compliance
Reduces testing/service time for a minimal maintenance cost, while ensuring that local safety codes are met, and provides system reliability in a power failure condition.

High Performance
The Mini Inverter is a rugged, easy-to-maintain system with exceptional performance for emergency lighting use. It offers exceptional overload performance without the need to over-specify the rating.

Versatile Applications
Mini Inverter systems can be used in almost every type of building, and are ideal for architecturally sensitive applications or when maintenance costs and testing of individual unit equipment becomes significant. The smaller unit size of the Mini Inverter allows more flexibility and minimizes testing. The Mini Inverter can be installed at a distance, offering the opportunity to hide the unit from view and maintain the architectural design by powering normally-on luminaires.

Maximum Light Output
The Mini Inverter will deliver 100% power/lumen output of the fixture up to the specified run time. It is compatible with all fluorescent ballast, LED drivers or incandescent light sources.

Reliability Through Technology
Nexus® allows for maintenance time and cost savings, and ensures that the emergency lighting fixtures will perform when needed. Nexus® can contribute to LEED certification and support sustainability objectives.
Mini Inverter Series
Interruptible Unit Equipment

Highlights
The Mini Inverter is a UL Listed stand-alone pure sine wave (250W and up) output inverter designed to provide power to designated emergency lighting fixtures. In a power loss situation, it will supply power from the onboard battery supply.

The Mini Inverter works in conjunction with incandescent, LED, and fluorescent fixture types and will automatically run switched, normally-on, or normally-off designated emergency fixtures.

The Mini Inverter is ideal for applications requiring an emergency source for lighting arrangements that utilize multiple lamp and fixture types and is available in surface mount and comes with a 3 year warranty and 7 year pro-rata battery warranty.

Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Features
- Lamps operated: Incandescent, LED, fluorescent lamps and ballast combinations, including triac dimmable ballasts (consult factory if DALI dimming)
- Components: High-efficiency pure sine inverter (250W and up), temperature-compensated charger, 12V oversized Valve Regulated Lead-Acid (VRLA) battery
- Construction: 14-gauge (400W & 720W) or 18-Gauge (125W & 250W) steel housing
- Emergency lighting supplied from one convenient source
- Input/Output voltage 120V 60 Hz or 277V 60 Hz
- Replaceable output fuse protection
- Line voltage allows for remote mounting of emergency fixtures at distances up to 1000 feet
- Low Voltage Battery Disconnect
- Unit comes standard with electronic lockout and brownout circuits
- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements UL924 Listed
- Cabinet in factory white semi-gloss powder-coat paint finish
- May accept load to its full capacity when load feature power factor of 0.9 for 250W model and 0.8 for 125, 400 and 720W model
- Standard auto-diagnostic, non-audible, Nexus® system interface optional with an improved minimum load lost detection of 10%
- Standard lighting control override for 0-10V dimming systems

Replacement Battery

| EMU-125 | 860.0024-E |
| EMU-250 | 2X 860.0024-E |
| EMU-400 | 2X 860.0043-E |
| EMU-720 | 2X 860.0096-E |

Suggested Specification
Emergency lighting shall be provided by inverter unit equipment designed to operate designated incandescent, fluorescent and LED fixtures on emergency power at their full nominal lumen rating during the full 90 minutes emergency discharge cycle. System output will be rated at _____ watts for 90 minutes and provide fused output connections to the load. The system’s voltage rating shall be _____ VAC input/output. The inverter unit shall allow for connected emergency fixture(s) to be normally-on, normally-off, switched or triac dimmable ballasts without affecting lamp operation during a power failure. Upon utility power loss, the inverter unit shall deliver 100% of its rated output to the emergency fixtures regardless of the local switch or dimmer position, and will provide power to emergency fixtures at distances of up to 1000 feet. The housing shall be manufactured using 14-gauge (400W & 720W) or 18-Gauge (125W & 250W) steel with a white baked-on powder coat paint finish. The unit’s electronics shall include a self-contained inverter section with a fully automatic, thermal-compensating variable-rate battery charger, AC lockout feature, low voltage battery disconnect, DC overload, short circuit and brownout protection as standard. The unit shall utilize a sealed Lead-Acid battery with a 10-year design life. The inverter system shall be UL 924 Listed and labeled. The unit shall be covered under a 3-year warranty on the electronics and battery and a 7-year pro-rata warranty on the battery.

Specifications

| Transfer Time | less than 1 second |
| Voltage Regulation on Emergency | +/- 3% |
| Frequency Regulation on Emergency | 60 Hz +/- 1% |
| Load Power Factor Range | • 250W model: 0.9 leading to 0.9 lagging |
| | • 125, 400 & 720W models: 0.8 leading to 0.8 lagging |
| Operating Temperature | 68° to 86°F (20° to 30°C) |

Warranty
All Emergi-Lite® inverter products receive 100% quality inspection before shipment to insure proper and satisfactory operation. When operated under normal conditions, Emergi-Lite® inverter products will provide years of dependable service. The unit is covered by a complete 3-year warranty against defects in material or workmanship, and a 7-year pro-rata battery warranty. The inverter unit shall be Emergi-Lite® model: ___________________.
Interruptible Unit Equipment 125W, 250W, 400W or 720W Standard with Non-Audible Advanced Diagnostics Circuitry & Lighting Control Override

Electrical Characteristics & Dimensions

<table>
<thead>
<tr>
<th>POWER RATING</th>
<th>SINE WAVE</th>
<th>INSTALLATION</th>
<th>CABINET DIMENSIONS</th>
<th>NO. OF BATTERY</th>
<th>TOTAL WEIGHT</th>
<th>WEIGHT W/O BATTERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>125W</td>
<td>Modified</td>
<td>T-Bar</td>
<td>24” 6.5” 8”</td>
<td>1</td>
<td>50 lbs</td>
<td>22 lbs</td>
</tr>
<tr>
<td>125W</td>
<td>Modified</td>
<td>Wall</td>
<td>16.5” 12.2” 7.3”</td>
<td>1</td>
<td>50 lbs</td>
<td>22 lbs</td>
</tr>
<tr>
<td>250W</td>
<td>Pure</td>
<td>Wall</td>
<td>27” 12.2” 7.3”</td>
<td>2</td>
<td>100 lbs</td>
<td>45 lbs</td>
</tr>
<tr>
<td>400W</td>
<td>Pure</td>
<td>Wall</td>
<td>24” 10.5” 20”</td>
<td>2</td>
<td>150 lbs</td>
<td>65 lbs</td>
</tr>
<tr>
<td>720W</td>
<td>Pure</td>
<td>Wall</td>
<td>24” 14.5” 20”</td>
<td>2</td>
<td>220 lbs</td>
<td>95 lbs</td>
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</table>

Power Consumption And Unit Rating

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>AC SPECS</th>
<th>EMERGENCY POWER AVAILABLE FOR LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMUI-125</td>
<td>120/277VAC 1.15 / 0.70 Amps</td>
<td>125W 83W 62W 47W</td>
</tr>
<tr>
<td>EMUI-250</td>
<td>120/277VAC 2.75 / 1.20 Amps</td>
<td>250W 167W 125W 94W</td>
</tr>
<tr>
<td>EMUI-400</td>
<td>120/277VAC 4.60 / 2.00 Amps</td>
<td>400W 300W 200W 150W</td>
</tr>
<tr>
<td>EMUI-720</td>
<td>120/277VAC 9.60 / 4.00 Amps</td>
<td>720W 480W 360W 270W</td>
</tr>
</tbody>
</table>

How to Order

<table>
<thead>
<tr>
<th>SERIES</th>
<th>CAPACITY</th>
<th>VOLTAGE</th>
<th>DIAGNOSTIC FEATURE</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMIU</td>
<td>-125= 125W -250= 250W -400= 400W -720= 720W</td>
<td>BLANK= 120/120VAC or 277/277VAC</td>
<td>-Blank= Advanced-Diagnostic, non-audible* -AD= Advanced-Diagnostic, audible* -NEX= Nexus® wired -NEXRF= Nexus® wireless</td>
<td>-D1= Time Delay (5 minutes) -D2= Time Delay (10 minutes) -D3= Time Delay (15 minutes) -SAC= Service Alarm Contact* -T= Recessed T-Bar mounting (125W unit only)</td>
</tr>
</tbody>
</table>

Example: EMIU-720

* Minimum load required: 10% of unit capacity

* Service alarm contact (SAC) shall provide a 24V signal, the charger board will indicate a fault by choosing a contact. Not available with 720W capacity