Lightalarms

Mini Inverter Series

Interruptible unit equipment standard with non-audible improved self-diagnostics circuitry – 250W

Construction
- 14 gauge steel
- White semi-gloss powder coat paint finish

Mounting
- Surface mount

Lamp types operated
- LED
- Incandescent
- Fluorescent
- Operates switched, normally-on or normally-off fixture types, incandescent
- Incandescent, LED, fluorescent lamps and ballast combinations, including triac dimmable ballasts (consult factory if DALI dimming)[1]
- Consult your sales representative for high bay/after market LED lamp applications

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

[1] When using high bay fixtures or screw-in type LED lamps, 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 LMIU-250

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, 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

Detailed warranty terms located at: **www.lightalarms.com**

nexus UL BC Nexus®Pro

CENTRAL & INVERTERS

Load capacity

Mini inverter	Voltage	Mini inverter @ 80% capacity (W) in emergency mode
LMIU-250	120	200

Mini inverter	Voltage	Mini inverter @ 70% capacity (W) in emergency mode
LMIU-250	277	175

Example

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

Load shedding

Mini inverter load	Voltage	Load shedding	Mini inverter @ 80% capacity (W) in emergency mode
LMIU-250-LDC	120	25%	800
LMIU-250-LDC	120	45%	363

Mini inverter load	Voltage	Load shedding	Mini inverter @ 70% capacity (W) in emergency mode
LMIU-250-LDC	277	25%	700
LMIU-250-LDC	277	45%	318

Example

Mini inverter load	Load shedding	Fixture wattage (W)	Fixture power factor	Equipment safety factor	Voltage	Fixture quantity
LMIU-250-LDC	25%	29	0.96	20%	120	14
LMIU-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%	250W model: 0.9 leading to 0.9 lagging	68°F to 86°F (20° to 30°C)

Replacement battery

Series	Part number
LMIU-250	2X 860.0024-L

Electrical characteristics and dimensions

			Cabinet dimensions				Weight	Weight w/o battery
Power rating	Sine wave	Installation	W"	H"	D"	Number of batteries	120V & 277V	120V & 277V
250W	Pure	Wall	27"	12.2"	7.3"	2	100 lbs	45 lbs

Note: For wiring diagram, please refer to instruction sheets.

Power consumption and unit rating - Non-CEC models

			Emergency power available for load			
Model number		AC specs	90 minutes	2H	3H	4H
LMIU-250	120 / 277VAC	2.75 / 1.20 Amps	250W	167W	125W	94W

Power consumption and unit rating - CEC models

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

Ordering format

Series	Capacity	Voltage in/out	Diagnostic feature	Options	Approval
LMIU	**-250**= 250W	**Blank**= 120/120VAC or 277/277VAC	**Blank=** Includes improved self-diagnostics **(non-audible)**[1] **-ID**= Improved self-diagnostics **(audible)**[1] **-NID**= No self-diagnostics[2] **-NEXP**= Nexus® Pro IoT[1] **-NEXRF**= Nexus® wireless[1]	**-D3**= Time delay (15 minutes) **-LDC25**= Load shedding to 25% brightness **-LDC45**= Load shedding to 45% brightness **-SAC**= Service alarm contact[3]	**-CEC**= CEC Title 20 for California

Example: LMIU-250

[1] Minimum load required: 10% of unit capacity
[2] When using a transfer device (automatic load control relay) you must choose the NID option
[3] Service alarm contact (SAC) shall provide a 24V signal, the charger board will indicate a fault by choosing a contact.