

Mini Inverter Series

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



Construction

- 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
- 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)

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

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 on LMIU-250 models 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.
- Maximum 20 Emergency fixtures can be daisy chained per LMIU-250
- In standby mode, the maximum normally-on load that can be connected to LMIU-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

Detailed warranty terms located on **page 182** or online at: www.lightalarms.com



Replacement battery

Series	Part number
LMIU-125	860.0024-L
LMIU-250	2X 860.0024-L
LMIU-400	2X 860.0043-L
LMIU-720	2X 860.0096-L

Specifications

Transfer time	Voltage regulation on emergency	Frequency regulation on emergency	Load power factor range	Operating temperature
Less than 1 second	+/- 3%	60 Hz +/- 1%	250W model: 0.9 leading to 0.9 lagging	68°F to 86°F (20° to 30°C)
-	-	-	125, 400 & 720W models: 0.8 leading to 0.8 lagging	-

Electrical characteristics and dimensions

Power rating	Sine wave	Installation	Cabinet dimensions			Number of battery	Weight	Weight w/o battery
			W"	H"	D"		120V & 277V	120V & 277V
125W	Modified	T-Bar	24"	6.5"	8"	1	43 lbs	20 lbs
125W	Modified	Wall	23"	12.2"	7.3"	1	41 lbs	18.5 lbs
250W	Pure	Wall	27"	12.2"	7.3"	2	76 lbs	30 lbs
400W	Pure	Wall	24"	20"	10.5"	2	128 lbs	50 lbs
720W	Pure	Wall	24"	20"	14.5"	2	185 lbs	72 lbs

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

Power consumption and unit rating - Non-CEC models

Model number	Ac specs	Emergency power available for load			
		90 minutes	2H	3H	4H
LMIU-720	120 / 277VAC 6.90 / 4.00 Amps	720W	480W	360W	270W

Power consumption and unit rating - CEC models

			Emergency power available for load				
Model number		Ac specs	AC power stand by	90 minutes	2H	3H	4H
LMIU-125	120 / 277VAC	1.15 / 0.50 Amps	1.44W	125W	83W	62W	47W
LMIU-250	120 / 277VAC	2.28 / 0.99 Amps	2.26W	250W	167W	125W	94W
LMIU-400	120 / 277VAC	3.73 / 1.62 Amps	3.21W	400W	300W	200W	150W

Ordering format

Series	Capacity	Voltage in/out	Diagnostic feature	Options	Approval
LMIU	-125= 125W -250= 250W -400= 400W -720= 720W	Blank= 120/120VAC or 277/277VAC	Blank= Includes improved self-diagnostics (non-audible) ¹ -ID= Improved self-diagnostics (audible) ¹ -NID= No self-test/Self-diagnostic -NEX= Nexus® wired -NEXRF= Nexus® wireless	-D3= Time delay (15 minutes) -LD25= Load shedding to 25% brightness ² -LD45= Load shedding to 45% brightness ² -SAC= Service alarm contact ³ -T= Recessed T-Bar mounting (125W unit only)	-CEC= CEC Title 20 for California ⁴
Example: LMIU-720					

¹ Minimum load required: 10% of unit capacity

² Available on 250W models only

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

⁴ Available with 125, 250 and 400W capacities only