

1000W Capacity Mini Inverter Series

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



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 factory¹**

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

¹ When using hi-bay fixtures or screw-in type LED lamps, consult the factory.

Controls

- Standard with a **non-audible improved self diagnostic & self-testing** microcontroller-based system
- Optional **audible Improved Diagnostic** available
- Optional **Non-Improved Diagnostics** available
- **Non-Improved 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 for 0-10V fixtures

- During a power outage the emergency fixtures are dimmed to field selectable levels of 25%, 50% or 75% brightness output. Reducing wattage draw from the fixture will allow for more fixtures to be connected to the Mini Inverter.
- Replaceable Inverter output fuse protection (two replacement fuses included, when load shedding option is ordered only)
- Maximum 100 emergency fixtures can be daisy chained per circuit

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 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 (subject to proper installation and maintenance)

Unit has a three-year limited warranty

Detailed warranty terms located on **page 197** or online at: www.lightalarms.com



Load shedding

Mini-Inverter load	Voltage	Load shedding	Mini-Inverter @ 80% capacity (W) in emergency mode	Maximum capacity (W) per circuit in stand-by mode
LMIU-1000-4-LD	120	25%	3200	800
LMIU-1000-4-LD	120	50%	1600	800
LMIU-1000-4-LD	120	75%	1200	800
LMIU-1000-4-LD	120	100%	800	800

Mini-Inverter load	Voltage	Load shedding	Mini-Inverter @ 70% capacity (W) in emergency mode	Maximum capacity (W) per circuit in stand-by mode
LMIU-1000-4-LD	277	25%	2800	700
LMIU-1000-4-LD	277	50%	1400	700
LMIU-1000-4-LD	277	75%	1050	700
LMIU-1000-4-LD	277	100%	700	700

Example

Mini-Inverter load	Load shedding	Fixture wattage (W)	Fixture power factor	Equipment safety factor	Voltage	Fixture quantity
LMIU-1000-4-LD	25%	57	0.96	20%	120	56
LMIU-1000-4-LD	50%	57	0.96	20%	120	28
LMIU-1000-4-LD	75%	57	0.96	20%	120	21
LMIU-1000-4-LD	100%	57	0.96	20%	120	12

Replacement battery

Series	Part number
LMIU-1000	4 X 860.0043

Specifications

Transfer time	Voltage regulation on emergency	Frequency regulation on emergency	Inverter power factor range	Operating temperature
Less than 1 second	+/- 5%	60 Hz +/- 1%	0.8 leading to .08 lagging at 120V 1 leading to 1 lagging at 277V	68°F to 86°F (20° to 30°C)

Electrical characteristics and dimensions

Power rating	Sine wave	Installation	Cabinet dimensions			Number of batteries	Weight	Weight w/o battery
			W"	H"	D"		120V & 277V	120V & 277V
1000W	Pure	Floor/ Wall	24"	40.75"	10.5"	4	266 lbs	114 lbs
1000W-4	Pure	Floor/ Wall	24"	40.75"	14.5"	4	350 lbs	198 lbs

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

Power consumption and unit rating

Model number	Ac specs	Emergency power available for load				
		90 minutes	2H	3H	4H	
LMIU-1000	120 / 277VAC 12.8 / 5.3 Amps	1000W	807W	604W	489W	

Ordering format

Series	Capacity	Voltage in/out	Diagnostic feature	Options
LMIU	-1000=1000W	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 -NEX= Nexus [®] wired ¹ -NEXRF= Nexus [®] wireless ¹ -NEXP= Nexus [®] Pro IoT ¹	-D3= Time delay (15 minutes) -SAC= Service alarm contact ³ -4= 4 output circuits -4-LD= 4 output circuits with load shedding for 0-10V fixtures

Example: LMIU-1000-4

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 be provided a 24V signal, the charger board will indicate a fault by closing a contact.