Lightalarms

New product

Mini Inverter Series

Interruptible unit equipment standard with non-audible Improved Diagnostics self-testing circuitry – 720W

Housing
- 16 gauge steel (standard) and 14 gauge steel (4 output circuits)
- 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
- 720W
- 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 charger 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 Improved Diagnostics** & self-testing microcontroller-based system
- Optional **audible Improved Diagnostics** available
- Optional **non-Improved Diagnostics** for applications with emergency power controls
- Standard lighting control override for 0-10V dimming systems

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 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

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**

All Lightalarms® inverter products receive 100% quality inspection before shipment to ensure proper and satisfactory operation.

Nexus®Pro nexus

CENTRAL & INVERTERS

Load shedding

Mini inverter load	Voltage (V)	80% capacity of 720W[1]	If emergency load shedding illumination is set to:	Maximum standby mode load capacity (W)	Maximum capacity per circuit cannot exceed (W) standby mode	Minimum number of circuits to load Inverter to full capacity
LMIU-720-4-LD	120	576W	100%	576	576	1
		[1]20% derating is standard load safety factor	75%	768	768	1
			50%	1152	800	2
			25%	2304	800	3

Mini inverter load	Voltage (V)	70% capacity of 720W[2]	If emergency load shedding illumination is set to:	Maximum standby mode load capacity (W)	Maximum capacity per circuit cannot exceed (W) standby mode	Minimum number of circuits to load Inverter to full capacity
LMIU-720-4-LD	277	504W	100%	504	504	1
		[2]30% derating is standard load safety factor	75%	672	672	1
			50%	1008	700	2
			25%	2016	700	3

LMIU-720-4-LD fixture quantity calculation example:

- 120V operation 80% capacity of 720W= 576W
- 576W at 100% brightness in emergency= 576W (ex. 48W x 12 fixtures= 576W, on min. of 1 circuit)
- 576W dimmed in emergency to 75% brightness= 768W (ex. 48W x 16 fixtures= 768W, on min. of 1 circuit)
- 576W dimmed in emergency to 50% brightness= 1152W (ex. 48W x 24 fixtures= 1152W, split across 2 circuits)
- 576W dimmed in emergency to 25% brightness= 2304W (ex. 48W x 48 fixtures= 2304W, split across 3 circuits) (800W maximum capacity per circuit in standby mode)

Specifications

Transfer time	Voltage regulation in emergency	Frequency regulation in emergency	Inverter power factor range 120V	Inverter power factor range 277V	Operating temperature
Less than 1 second	+/ -5%	60 Hz +/- 1%	720W model .8 leading to .8 lagging	720W model .9 leading to .9 lagging	68°F to 86°F (20° to 30°C)

Replacement battery

Description	Suffix
LMIU-720	2X 860.0096-L

Electrical characteristics and dimensions

Power rating	Sine wave	Installation	Cabinet dimensions W"	Cabinet dimensions H"	Cabinet dimensions D"	Number of batteries	Weight 120V & 277V	Weight w/o battery 120V & 277V
LMIU-720	Pure	Wall	25.6"	20"	7.5"	2	180 lbs	65 lbs
LMIU-720-4	Pure	Wall	24"	20"	14.5"	2	230 lbs	116 lbs

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

Power consumption and unit rating

Model number	AC specs	Emergency power available for load 90 minutes	2H	3H	4H
LMIU-720	120 / 277VAC 9.60 / 4.00 Amps	720W	480W	360W	270W

Ordering format

Series	Capacity	Voltage in/out	Diagnostic feature	Circuit	Options
LMIU	**-720**= 720W	**Blank**= 120/120VAC or 277/277VAC	**Blank=** Includes improved self-diagnostics **(non-audible)**[1] **-ID**= Improved self-diagnostics **(audible)**[1] **-NID**= No improved self-diagnostics[2] **-NEXRF**= Nexus® wireless[1] **-NEXP**= Nexus® Pro IoT[1]	**Blank**= 1 output circuit **-4**= 4 output circuits **-4-LD**= 4 output circuits with load shedding for 0-10V models	**-D3**= Time delay (15 minutes) **-SAC**= Service alarm contact[3]

Example: LMIU-720

[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.