

1000W High Capacity Mini Inverter Series

Interruptible unit equipment 1000W



Housing

- 14-gauge steel
- White semi-gloss powder-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 charger output fuse protection
- Low battery voltage disconnect
- Unit comes standard with electronic lockout and brownout circuits

¹When using Hi-Bay fixtures or screw in type lamps, please consult the factory.

Controls

- Standard with a **non-audible Advanced Diagnostic & self-testing** microcontroller-based system
- Optional **audible Advanced Diagnostics** available
- Optional **Non-Advanced Diagnostics** 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
- BC – California Energy Commission Title 20 (optional)

Warranty

- Battery has a 3-year full, plus 7-year pro-rata warranty
 - Unit has a three-year warranty
- Detailed warranty terms located on page 202 or online at:
www.emergi-lite.com/usa/files/EL_Warranty.pdf



Load shedding

Mini-Inverter load	Voltage (V)	80% capacity of 1000W 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
EMIU-1000-4-LD	120	800W ¹ 20% derating is standard load safety factor	100%	800	800	1
			75%	1067	1067	1
			50%	1600	1600	1
			25%	3200	1600	2
Mini-Inverter load	Voltage (V)	70% capacity of 1000W 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
EMIU-1000-4-LD	277	700W ² 30% derating is standard load safety factor	100%	700	700	1
			75%	933	933	1
			50%	1400	1400	1
			25%	2800	1400	2

EMIU-1000-4-LD fixture quantity calculation example:

- 120V Operation 80% capacity of 1000W= 800W
- 800W @ 100% brightness in emergency= 800W (ex. 40W x 20 fixtures= 800W, on min. of 1 circuit)
- 800W dimmed in emergency to 75% brightness= 1067W (ex. 40W x 26 fixtures= 1040W, on min. of 1 circuit)
- 800W dimmed in emergency to 50% brightness= 1600W (ex. 40W x 40 fixtures= 1600W, on min. of 1 circuit)
- 800W dimmed in emergency to 25% brightness= 3200W (ex. 40W x 80 fixtures= 3200W, split across 2 circuits) (1600W maximum capacity per circuit in standby mode)

Specifications

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

Replacement battery

Description	Part number
EMIU-1000	4X 860.0043-E

Electrical characteristics and dimensions

Power rating	Sine wave	Installation	Cabinet dimensions			No. of batteries	Total weight	Weight w/o battery
			Width	Height	Depth		120V & 277V	120V & 277V
1000W	Pure	Wall / floor	24"	40.75"	10.5"	4	266 lbs	114 lbs
1000W-4	Pure	Wall/ floor	24"	40.75"	14.5"	4	350 lbs	198 lbs

Power consumption and unit rating

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

How to order

Series	Capacity	Voltage	Diagnostic feature	Circuit	Options	Approval
EMIU	-1000= 1000W	Blank= 120/120VAC or 277/277VAC	-Blank= Advanced-Diagnostic, non-audible ¹ -AD= Advanced-Diagnostic, audible ¹ -NAD= No Advanced-Diagnostics ² -NEXP= Nexus®Pro IoT ¹ -NEXRF= Nexus® wireless ¹	-Blank= 1 output circuit -4= 4 output circuits -4-LD= 4 output circuits with load shedding for 0-10V fixtures	-D3= Time delay (15 minutes) -SAC= Service alarm contact ³	-Blank= Standard approvals -CEC= CEC Title 20 for California
Example: EMIU-1000-4						

¹Minimum load required: 10% of unit capacity²When using a transfer device (automatic load control relay) you must choose the NAD option³Service alarm contact (SAC) shall be provided a 24V signal, the charger board will indicate a fault by closing a contact