

1000W High Capacity Mini Inverter Series

Interruptible unit equipment 1000W



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 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 self diagnostic & self-testing** microcontroller- based system
- Optional **audible Advanced Diagnostics** available
- Optional **Non-Advanced Diagnostics** available
- **Non-Advanced 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%, 40% or 45% 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

- 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

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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
EMIU-1000-4-LD	120	25%	3200	800
EMIU-1000-4-LD	120	50%	1600	800
EMIU-1000-4-LD	120	75%	1200	800
EMIU-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
EMIU-1000-4-LD	277	25%	2800	700
EMIU-1000-4-LD	277	50%	1400	700
EMIU-1000-4-LD	277	75%	1050	700
EMIU-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
EMIU-1000-4-LD	25%	57	0.96	20%	120	56
EMIU-1000-4-LD	50%	57	0.96	20%	120	28
EMIU-1000-4-LD	75%	57	0.96	20%	120	21
EMIU-1000-4-LD	100%	57	0.96	20%	120	12

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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° to 86°F (20° to 30°C)

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Replacement battery

Description	Part number
EMIU-1000	4X 860.0043-E

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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

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Power consumption and unit rating

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

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How to order

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

Example: EMIU-1000-4

¹Minimum load required: 10% of unit capacity

²Service alarm contact (SAC) shall be provided a 24V signal, the charger board will indicate a fault by closing a contact.

³When using a transfer device (automatic load control relay) you must choose the NAD option

⁴Available on EMIU-1000-4 or EMIU-100-4-LD