**1500W High-Capacity Mini Inverter Series** 

Interruptible unit equipment





# 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 factory<sup>1</sup>
- · Consult your sales representative for high bay/after market LED lamp applications

# Load capacity

- 1500W
- Line voltage allows for remote mounting of the emergency fixtures at distances up to 1,000 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

<sup>1</sup>When using high bay fixtures or screw in type lamps, please consult the factory.

#### Controls

- Standard with a non-audible Advanced Diagnostics & 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 (standard)

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.emergi-lite.com/usa/files/EL\_Warranty.pdf











#### Load shedding

Mini inverter load	Voltage (V)	80% capacity of 1500W <sup>1</sup>	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-1500-4-LD	120	1200W	100%	1200	1200	1
		120% derating	75%	1600	1600	1
		safety factor	50%	2400	1600	2
			25%	4800	1600	3
Mini inverter load	Voltage (V)	70% capacity of 1500W <sup>2</sup>	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-1500-4-LD	277	1050W	100%	1050	1050	1
		²30% derating	75%	1400	1400	1
		is standard load - safety factor	50%	2100	1600	2
		-	25%	4200	1600	2

# EMIU-1500-4-LD fixture quantity calculation example:

- 120V operation 80% capacity of 1500W= 1200W
- $\bullet$  1200W @ 100% brightness in emergency= 1200W (ex. 80W x 15 fixtures= 1200W, on min. of 1 circuit)
- 1200W dimmed in emergency to 75% brightness= 1600W (ex. 80W x 20 fixtures= 1600W, on min. of 1 circuit)
- 1200W dimmed in emergency to 50% brightness= 2400W (ex. 80W x 30 fixtures= 2400W, split across 2 circuits)
- 1200W dimmed in emergency to 25% brightness= 4800W (ex. 80W x 60 fixtures= 4800W, split across 3 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	+/- 3%	60 Hz +/- 1%	0.9 leading to 0.9 lagging	68° to 86°F (20° to 30°C)

# Replacement battery

Description	Part number
EMIU-1500	4X 860.0096-E

# Electrical characteristics and dimensions

			Cabinet dimensions		imensions	No. of	Total weight	Weight w/o battery
Power rating	Sine wave	Installation	Width	Height	Depth	batteries	120V & 277V	120V & 277V
1500W	Pure	Wall / floor	24"	40.75"	14.5"	4	390 lbs	148 lbs
1500W-4	Pure	Wall/ floor	24"	40.75"	14.5"	4	390 lbs	148 lbs

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

#### Power consumption and unit rating

					Emergency power available for load			
Model number		AC specs	90 Min	2H	3Н	4Н		
EMIU-1500	120/277VAC	17.6 / 6.3 Amps	1500W	1136W	789W	673W		

# How to order

Series	Capacity	Voltage	Diagnostic features	Circuits	Options
Exam	-1500= 1500W	Blank= 120/120VAC or 277/277VAC	-Blank= Advanced Diagnostics, non-audible <sup>1</sup> -AD= Advanced Diagnostics, audible <sup>1</sup> -NAD= No Advanced Diagnostics <sup>2</sup> -NEXP= Nexus® Pro IoT <sup>1</sup> -NEXRF= Nexus® wireless <sup>1</sup>	-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 contact³

<sup>&</sup>lt;sup>1</sup>Minimum load required: 10% of unit capacity

<sup>&</sup>lt;sup>2</sup>When using a transfer device (automatic load control relay) you must choose the NAD option

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