

Mini Inverter Series

Interruptible unit equipment 400W



Housing

- 14-gauge steel
- White semi-gloss powder-coat paint finish

Mounting

- Surface mount

Lamp types operated

- LED
- Incandescent
- Fluorescent
- Operating switched, normally-on or normally-off fixture types
- Incandescent, LED, fluorescent lamps and ballast combinations, including triac dimmable ballasts (consult factory if DALI dimming)¹

Load capacity

- 400W
- 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

Controls

- Standard with a non-audible self diagnostic/charger is fully self-contained, fully automatic microcontroller-based system
- Optional audible auto diagnostic available
- Standard lighting control override for 0-10V dimming systems

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

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
- BC – California Energy Commission Title 20

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 (excluding lamps and fuses)
- Detailed warranty terms located on page 202 or online at:
www.emergi-lite.com/usa/files/EL_Warranty.pdf

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



Load shedding

Mini-Inverter load	Voltage	Load shedding	Mini-Inverter @ 80% capacity (W) in standby mode	Maximum capacity (W) per circuit in standby mode	Minimum number of circuits to load Inverter to full capacity
EMIU-400-4-LD	120	25%	1280	800	2
EMIU-400-4-LD	120	50%	640	640	1
EMIU-400-4-LD	120	75%	427	427	1
EMIU-400-4-LD	120	100%	320	320	1
Mini-Inverter load	Voltage	Load shedding	Mini-Inverter @ 70% capacity (W) in standby mode	Maximum capacity (W) per circuit in standby mode	Minimum number of circuits to load Inverter to full capacity
EMIU-400-4-LD	277	25%	1120	700	2
EMIU-400-4-LD	277	50%	560	560	1
EMIU-400-4-LD	277	75%	373	373	1
EMIU-400-4-LD	277	100%	280	280	1

Example

Mini-Inverter load	Load shedding	Fixture wattage (W)	Fixture power factor	Equipment safety factor	Voltage	Fixture quantity
EMIU-400-4-LD	25%	57	0.96	20%	120	22
EMIU-400-4-LD	50%	57	0.96	20%	120	11
EMIU-400-4-LD	75%	57	0.96	20%	120	7
EMIU-400-4-LD	100%	57	0.96	20%	120	5

Specifications

Transfer time	Voltage regulation on emergency	Frequency regulation on emergency	Inverter power factor range		Operating temperature
			120V	277V	
Less than 1 second	+/- 5%	60 Hz +/- 1%	400W model .8 leading to .8 lagging	400W model .9 leading to .9 lagging	68° to 86°F (20° to 30°C)

Replacement battery

Description	Suffix
EMIU-400	2X 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
400W	Pure	Wall	24"	20"	10.5"	2	150 lbs	65 lbs

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

Power consumption and unit rating - non-CEC models

Model number	AC specs	Emergency power available for load			
		90 Min	2H	3H	4H
EMIU-400	120/277VAC 4.60 / 2.00 Amps	400W	300W	200W	150W

Power consumption and unit rating - CEC models

Model number	AC specs	Power consumed in standby mode	Emergency power available for load			
			90 Min	2H	3H	4H
EMIU-400	120/277VAC 3.73 / 1.62 Amps	3.21W	400W	300W	200W	150W

How to order

Series	Capacity	Voltage	Diagnostic feature	Options	Approval
EMIU	-400= 400W	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	-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	-CEC= CEC Title 20 for California

Example: EMIU-400

¹Minimum load required: 10% of unit capacity

²When using a transfer device (automatic load control relay) you must choose the NAD option

³Service alarm contact (SAC) shall provide a 24V signal, the charger board will indicate a fault by choosing a contact.