

micro  
**INVERTER**  
SOLUTION  
QUALIFIED TO  
**NEMA 410**  
STANDARDS



## DESCRIPTION

The IOTA IIS-50-I is a UL Listed sine wave output inverter designed to provide power to the designated emergency lighting fixture. In a power loss situation, the IOTA IIS-50-I will supply **120 or 277 VAC** power to operate up to a **50W** total connected load for not less than **90 minutes**. The IOTA IIS-50-I works in conjunction with LED, fluorescent, and incandescent lamp and fixture types and will automatically run switched, normally-on, or normally-off designated emergency fixtures. The IIS-50-I is ideal for applications requiring an emergency source in elevated ceilings, for high output luminaires, and lamp types utilizing Edison screw (ES) designs. The IIS-50-I features a replaceable long-life nickel-cadmium battery and is covered under IOTA's five-year warranty.

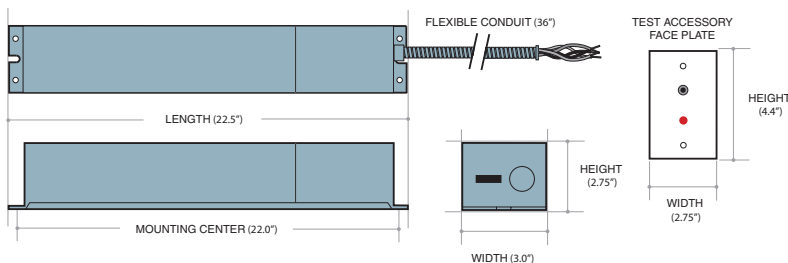
## SPECIFICATIONS

Input Voltage .....	(Dual) 120/277V, 60Hz
Input Rating (bulk) .....	60 Watts
Output Voltage .....	(Slide switch selectable) 120/277V, 60Hz
Output Power .....	50 Watts (@ .9 leading to .9 lagging PF)
Lamps Operated .....	LED (per NEMA 410), Fluorescent, Incandescent
Emergency Operation .....	90 minutes
Load Power Factor Range .....	.9 leading to .9 lagging
Operating Temp .....	0° to 50° C
Battery .....	Hi-temp rechargeable, replaceable nickel-cadmium
Weight .....	9.0 lbs.
Approval .....	UL 924 Listed for US and Canada CSA C22 No. 141 Unit Equipment for Emergency Lighting Damp Location Rated RoHS Compliant



## DIMENSIONS

22.5" x 3.0" x 2.75" (mounting center 22.0")



MODEL NO: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

### Load Capability

50 Watts

### Full Light Output for:

- LED
- Fluorescent
- Incandescent

### Features

- UL 924 Listed
- cUL Listed to CSA C22 No. 141
- Pure sine wave output
- Operates LED, incandescent, and fluorescent fixtures, fixtures with dimmable ballasts, and screw-base lamp types
- For use with switched or unswitched fixtures
- Dual voltage 120/277 VAC 60Hz input with 120/277 VAC 60Hz slide switch selectable output
- Includes test switch and charge indicator accessory kit
- Replaceable and recyclable long-life high temperature nickel-cadmium battery
- Line voltage allows for remote mounting of emergency fixtures at distances up to 250 feet
- Low Battery Voltage Disconnect (LVD)
- Rated for use in damp locations
- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements
- Galvanized steel enclosure with 3/6" conduit for wiring connections to the fixture
- RoHS Compliant
- Five-Year Warranty



# IIS-50-I

50W MICRO-INVERTER UNIT

## MODELS

- IIS-50-I

## COMPONENTS

- High-efficiency pure sine wave inverter
- Hi-temp replaceable nickel-cadmium battery
- Solid-state indicator light and single-pole test switch w/ white mounting faceplate

## CONSTRUCTION

- Galvanized steel housing
- 36" flexible conduit

## IIS-50-I SAMPLE SPECIFICATION

Emergency lighting shall be provided by micro-inverter equipment designed to operate a designated incandescent, fluorescent or LED fixture on emergency power at the full nominal lumen rating during the full 90-minute emergency discharge cycle. System output will be rated at 50 watts for 90 minutes. The system's voltage rating shall be field selectable 120 or 277 VAC input and 120 or 277 VAC selectable output via two-position slide switch.

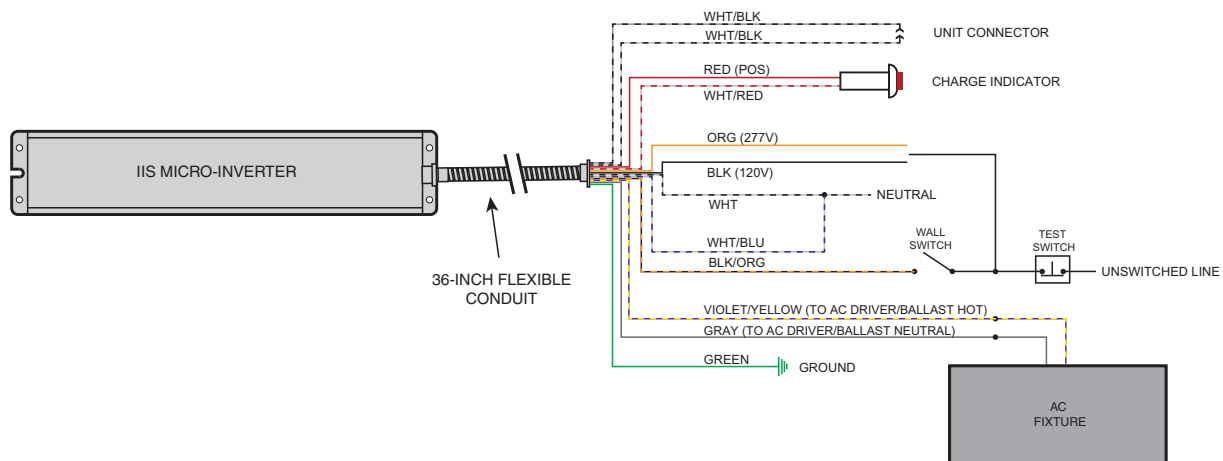
The micro-inverter unit shall allow for the connected emergency fixture to be normally on, normally off, switched or dimmed without affecting lamp operation during a power failure. Upon utility power loss, the micro-inverter unit shall deliver 100% of its full rated output regardless of the local switch or dimmer position, and will provide power to the emergency fixture at distances of up to 250 feet.

The housing shall be designed for installation onto or adjacent to the fixture and manufactured using a galvanized steel enclosure.

The unit's electronics shall include inverter circuitry with a fully automatic battery charging circuit, low battery voltage disconnect, short circuit and brownout protection as standard. The unit shall utilize a rechargeable and replaceable high-temperature nickel-cadmium battery with a 10-year design life. The inverter system shall be UL 924 Listed and labeled for use in the United States and Canada. The unit shall be covered under a full 5-year warranty on the electronics and battery. It shall meet or exceed the requirements of UL 924, NFPA 101 Life Safety Code, NFPA 70 National Electrical Code, NEMA 410, OSHA and State and Local codes.

The micro-inverter unit shall be IOTA model IIS-50-I.

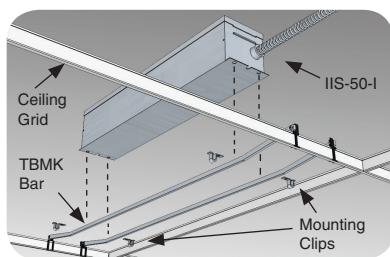
## TYPICAL WIRING



## ACCESSORIES (ordered as separate item)

### ○ TBMK T-Grid Mounting Kit

Use the TBMK mounting kit to remote mount the IIS unit within a grid ceiling. The IIS unit is secured to the bars of the TBMK via mounting clips. The bars then mount to the T-bars of the ceiling grid. The flexible conduit of the IIS unit connects to the fixture.



### ○ SK - Strap Kit

The SK strap kit provides (2) straps that run through the mounting tabs of the unit for securing to a beam or column near the fixture. Overall strap length is 18". Multiple strap kits can be used in conjunction with each other for larger diameter requirements.

