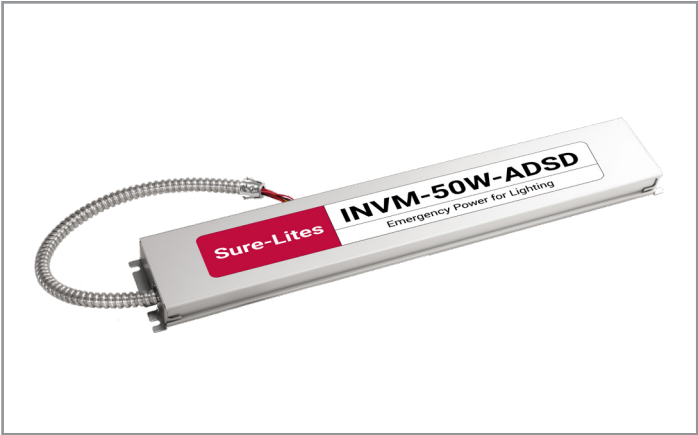


Project		Catalog #		Type	
Prepared by		Notes		Date	



Sure-Lites

INVM-50W-ADSD

Emergency Power for Lighting
50VA Output Micro Inverter
0-10V Auto Dimming to Max 320W* Load

Typical Applications

Office • Education • Healthcare • Hospitality • Retail • Industrial • Manufacturing



Interactive Menu

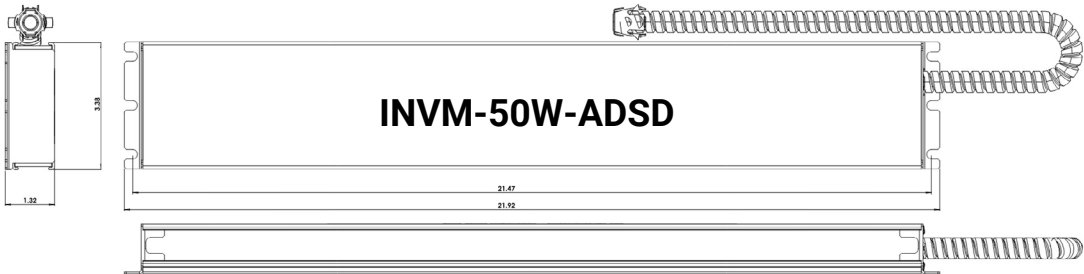
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- Product Specification page 2

Top Product Features

- Provides 90 minutes of 50VA emergency power to lighting fixtures
- 0-10V Auto dimming allows up to 320W* max dimmable load
- 50 VA max non-dimmable load
- Automatic code-compliant testing (self-testing)
- Automatic load monitoring after commissioning (new UL 924 requirement)
- Meets Title 20 CEC (California Energy Commission) efficiency standards
- Works with LED and fluorescent fixtures
- Ideal for (but not limited to) screw-base LED lamps
- Compatible with AC (line voltage) driven TLED lamps (Type B)
- Remote-mounting up to 250 feet maximum

Dimensional and Mounting Details

21.92" x 3.58" x 1.32" | Mounting center - 21.50" | Weight - 6 lbs. (2.72 kg)



* Note: A total connected load of 320W is only possible with very specific loads that have been tested at the factory. Other loads rated at this maximum power level may be possible, but they should be pre-tested at the factory or by the local electrical shop before specification or field installation.
**The bi-color illuminated test switch is a Class 2 device.

Ordering Information

SAMPLE ORDER NUMBER: **INVM-50W-ADSD**

Series	VA/W	Type/Harness	Special Features	Self-Diagnostic
Series	VA/W	Type/Harness	Special Features	Self-Diagnostic
INVM= Mini Inverter, Single Phase	50W= 50VA	Blank= Conduit out one end	AD= Automatic Dimming	SD= Self-Diagnostic

Product Specifications

Electrical/Application

- Provides minimum 90 minutes of emergency power
- Universal 120~277VAC 50/60Hz, 170 mA input
- Output voltage: 120 VAC +/- 10%, 60Hz +/- 5%
- Compatible with LED, fluorescent or incandescent light fixtures
- Ideal for (but not limited to) screw-base LED lamps
- Compatible with AC (line voltage) driven TLED lamps (Type B)
- 2~5 second transfer time
- 36-hour recharge time
- Max output power 50VA, supports up to 320W 0-10V dimmable loads
- Max output power 50VA for non-dimmable loads
- Surge withstand 4kV (ANSI C82.77-5), for industrial high-bay applications
- Provides pure sine wave power to the AC input side of the fixture for easy field installation
- Can provide emergency power to indoor and outdoor lighting (not rated for outdoor mounting locations)
- Low voltage disconnect prevents battery from deep discharge
- Temperature Rating (Ambient) 32° F to 122° F (0° C to 50° C), case Tc (max) 65° C

0-10V Auto Dimming

- 0-10V auto dimming feature allows a lighting load of up to 320W to be dimmed to 50VA maximum emergency output power.
- The auto dimming feature allows multiple fixtures to be driven in emergency mode at a combined 50 VA maximum. For example, two 100W (input) LED fixtures may be connected to one INVM-50W-ADSD and automatically dimmed for emergency operation to 25% of normal power input, providing each LED fixture with approximately 25 W of input power. See diagram below.* The emergency mode output dimming voltage is automatically controlled by the INVM-50W-ADSD electronic circuitry to maintain 50 VA output throughout the emergency event.
- The INVM-50W-ADSD passes the normal room or fixture dimming control signal (0-10 V) during normal operation (AC mains on) so normal dimming operation of the luminaire is not affected.

Electronic Battery Disconnect

- Electronic Battery Disconnect simplifies shipping, storage, installation, and commissioning of the emergency lighting luminaire.
- It allows for the luminaire to be installed and made ready for use without needing to re-open the luminaire when AC power is available, also avoiding unnecessary drain on the battery.
- Once activated, the product can also be manually disabled, allowing the product or the luminaire to be safely stored for extended periods of time.
- In the situation where the user manually deactivates the emergency operation for shipping or storing product via the test switch, the Electronic Battery Disconnect feature reactivates power when the driver senses that AC current is applied.
- This feature saves time, labor and the potential to overlook the converter connector step.
- This reduces the possibility of inadvertently discharging the battery prior to installation, whether in transit or storage.

Self-Diagnostic / Self-Testing

- Labor saving feature that automatically conducts NFPA required testing of the emergency lighting for a minimum of 30 seconds every 28 days and 90 minutes once a year.

Commissioning

- The INVM-50W-ADSD requires initial calibration as part of the full product installation in order to accurately monitor the load for changes (new UL 924 requirement). See installation instructions for details.

Installation

- Compatible with switched or unswitched fixtures
- Can be installed on or near the fixture
- Remote mounting up to 250 feet

Construction

- Steel housing
- 3/8" Conduit, 24" (610mm) Long; 3/8" Fitting

Battery

- Maintenance free lithium-ion

Warranty

- 5-year limited warranty

Charging Indicator Light / Test Switch

- Two-Wire, Bi-Color Illuminated Test Switch**
- IP65 rated for ingress protection to dust and water jets
- UL 2043 plenum rated test switch cable assembly

Code Compliance

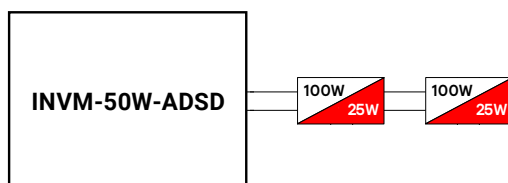
- UL 924 damp location for factory or field installation
- CSA 22.2, No.141 compliant
- NEC, NFPA, OSHA compliant
- CEC Title 20 compliant
- National Building Code of Canada (NBC), National Fire Code of Canada (NFPC)

Specification

- Emergency lighting shall be provided by using a standard fixture or group of fixtures powered with Sure-Lites INVM-50W-ADSD inverter.
- The INVM-50W-ADSD consists of a maintenance-free Li-ion battery, and electronic battery charging and output generation circuitry contained in one 15.0" H x 3.58" W x 1.32" D metal case
- Electronic circuitry shall be self-testing in design and automatically test emergency lighting for a minimum of 30 seconds every 28 days and 90 minutes once a year.
- The INVM-50W-ADSD unit shall be capable of powering any combination of dimmable fluorescent and/or LED lighting fixtures rated at a total of 320 W input power at 0 to 50°C for a minimum of 90 minutes by the use of 0 to 10 V dimming control, utilized to reduce the input of said luminaires to a total of 50 VA input power during emergency operation, regardless of local switch or dimmer position.
- The INVM-50W-ADSD shall allow the connected fixture(s) to be on, off, switched or dimmed without affecting emergency operation.
- The INVM-50W-ADSD unit shall exceed emergency standards set forth by the current NEC. • This device complies with Part 15 of the FCC Rules and meets California Energy Commission Title 20 efficiency requirements.
- It shall be UL Listed for the US and Canada, suitable for damp locations, and warranted for five years from date of manufacture.

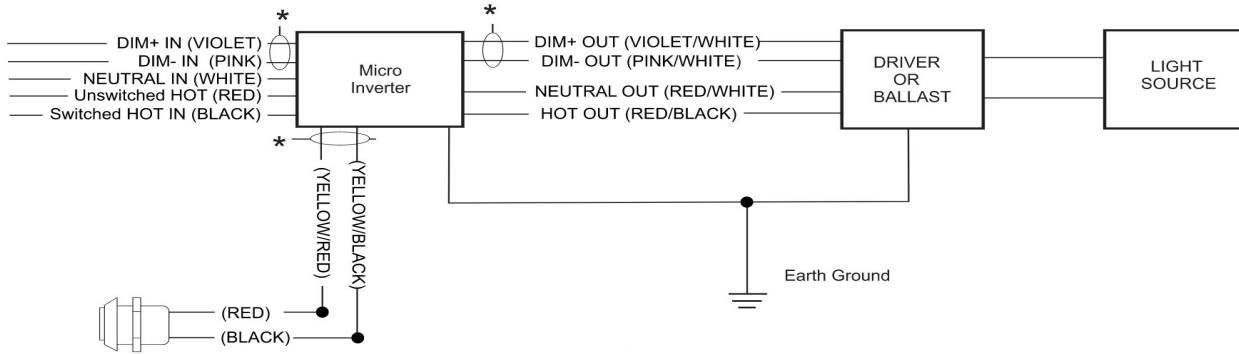
FCC Compliance

- This device complies with Part 15 of the FCC Rules



*Two (2) 100 W fixtures at 25% dim level in emergency mode

Schematic



*Apply AC power to enter charging mode.
 * Remove AC power to enter emergency mode.
 For incandescent or non-dimming loads no greater than 50VA (INVM-50W-ADSD).
 Cap off all unused dimming (DIM) leads separately.

***These connections have been evaluated to comply with requirements
 for UL1310 Class 2 Power Units**

Accessories (sold separately)

This inverter can be used with Cooper Lighting accessory INVM-BKT inverter mounting bracket, to facilitate installation with suspended high-bay luminaires.



Lithium Battery Shipping Regulations

To comply with IATA provisions for air transporting lithium batteries, and for a step by step guidance through the shipping process, please visit <https://www.iata.org/en/publications/store/lithium-battery-shipping-regulations/>.