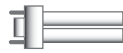
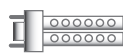


MODEL NO: _____
 TYPE: _____
 PROJECT: _____
 COMMENTS: _____

INITIAL LUMEN OUTPUT
 1100 Lumens

LAMPS OPERATED*

-  (1) 13W-57W 4-PIN Compact
-  Select LED Retrofit Tubes

*Refer to Lumen Reference Chart and LED Retrofit Reference Chart for list of compatible lamps.

DESCRIPTION

The **ISD-420-EM-A** from IOTA Engineering is a UL Listed self-diagnostic fluorescent emergency ballast that allows the same fixture to be used for both normal and emergency operation. In the event of a power failure, the **ISD-420-EM-A** switches to the emergency mode and operates **one** of the existing lamps for **90 minutes**. The **ISD-420-EM-A** will self-test for thirty seconds monthly and for ninety minutes annually and will diagnose potential problems within the light fixture. If problems are encountered, the unit will specify failure of the battery, charge, lamp, or inverter by means of a flashing red indicator. The dual color LED indicator is lit red when charging and lit green when ready. The unit contains a battery, charger, and inverter circuit in a single can. The **ISD-420-EM-A** can be used with 13W to 57W 4-pin compact fluorescent lamps, providing an initial output of up to **1100 lumens** for one or two lamps, and features lamp selector leads for optimizing the light output for designated lamp types. **The ISD-420-EM-A utilizes AC output to ensure compatibility with new lamp technologies.** The **ISD-420-EM-A** is suitable for use in damp locations.

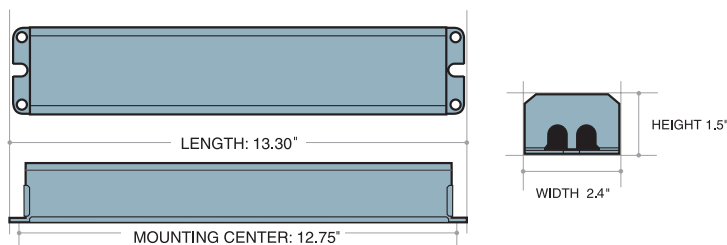
SPECIFICATIONS

| | |
|----------------------------|---|
| Input Voltage | 110-277V, 50/60Hz |
| Input Wattage | 5 Watts (max.) |
| Lamps Operated | 13W-57W 4-pin Rapid Start Compact Lamps including Twin, Triple, Quad Tube, 2D & Straight |
| Power Factor | ≥ 0.9 |
| Emergency Operation | (1) 13W-57W 90 minutes |
| Initial Illumination | 1100 lumens |
| Operating Temp | 0° to 55° C |
| THD | < 20% |
| Battery | 24 Hour Recharge 7-10 Year Life Expectancy |
| Weight | 5.6 lbs. |
| Approval | UL and CUL Listed |



DIMENSIONS

13.3" x 2.4" x 1.5" (mounting center 12.75")



PRODUCT ADVANTAGES

- **Automatically conducts required monthly and annual testing**
- **Internal self-diagnostic circuitry tests lamp frequency, battery charge and discharge current**
- **AC output for compatibility with Low-Mercury Content Amalgam lamps**
- **Time Delay feature for compatibility with End-of-Lamp-Life circuitry**
- **Open Circuit Isolation protects unit when load is absent**
- **Universal Voltage 110-277V, 50/60Hz**

FEATURES

- Will cold start and operate all specified lamps
- Long life high temperature recyclable Ni-Cad battery
- Galvanized steel case
- Includes one-piece test switch and dual color charge indicator (LPTS)
- For use with switched or unswitched fixtures
- **5-Year Warranty.** See Warranty Page for details.
- Lamp selector leads optimize light output for desired lamp type
- Rated for use in damp locations and plenum fixtures
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- RoHS Compliant



FLUORESCENT

SELF-DIAGNOSTICS

ISD-420-EM-A

SELF-DIAGNOSTIC FLUORESCENT EMERGENCY BALLAST

OPTIONS

TEST KIT CONFIGURATION

- LPTS

VOLTAGE RATINGS

- UNIVERSAL VOLTAGE 110-277V, 50/60HZ

INITIAL LUMEN RATINGS

| LAMP | 1 LAMP |
|----------------------|--------|
| 13W PL CF 4-PIN | 740 |
| 18W PL CF QUAD 4-PIN | 780 |
| 26W PL CF QUAD 4-PIN | 1000 |
| 32W PL CF QUAD 4-PIN | 1060 |
| 42W PL CF QUAD 4-PIN | 1060 |
| 57W PL CF QUAD 4-PIN | 1190 |

LED Retrofit Tube Options

This IOTA Emergency Ballast is UL Listed for emergency operation of select LED retrofit tube applications. For a complete list of acceptable LED retrofit tube options, refer to the **IOTA LED Retrofit Tube Reference Chart** at www.iotaengineering.com/IOTA-LED-Retrofit.pdf

DIAGNOSTIC CODES

| LED IS RED WHEN CHARGING, GREEN WHEN READY | | FAILURE CODES OCCUR ONCE EVERY 15 SECONDS WITH 1 SECOND DELAY BETWEEN CODES IN INSTANCES OF MULTIPLE FAILURE |
|--|-----------|--|
| CHARGE FAILURE | 1 FLASH | |
| BATTERY FAILURE | 2 FLASHES | |
| LAMP FAILURE* | 3 FLASHES | |
| INVERTER FAILURE* | 4 FLASHES | |

*IF FAILURE, REPLACE LAMP AND RESET UNIT BY DEPRESSING THE TEST SWITCH FOR 3 SECONDS, THEN RETEST.

REMOTE MOUNTING

When battery packs are remote mounted, consult Customer Service for the maximum allowable distance between the battery pack and lamp(s).

ISD-420-EM-A SAMPLE SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with an **IOTA ISD-420-EM-A** self-diagnostic fluorescent emergency battery pack. The **ISD-420-EM-A** shall be designed to automatically test the emergency lighting capability for no less than 30 seconds monthly and 90 minutes annually, and shall monitor lamp frequency, battery charge and battery discharge current. A light-emitting LED shall be provided to indicate test results and charge status. The **ISD-420-EM-A** shall consist of a high temperature, maintenance-free nickel cadmium battery, charger board and an electronic circuit enclosed in a 13.3" x 2.4" x 1.5" vandal-resistant galvanized steel case for installation on top of the fixture and shall provide 1/2" flexible conduit for wiring to the fixture and test switch. A combination one piece test switch and long-life LED charge indicator light for monitoring charger, inverter, battery, and fault conditions shall be included. The fluorescent EM pack shall operate one 13w-57w 4-pin rapid start compact fluorescent lamp and **will operate the lamp with AC output**. The **ISD-420-EM-A** shall provide reduced illumination for a minimum of 90 minutes in the emergency mode with a total initial output of 1100 lumens and will feature lamp selector leads for optimizing light output for the designated lamp type. The **ISD-420-EM-A** shall have 5 watts maximum of input power and a battery capacity of 24 watt hours. The **ISD-420-EM-A** is U.L. Listed and meets or exceeds all NEC and Life Safety Code Emergency Lighting Requirements, and rated for use in damp locations. The **ISD-420-EM-A** is warranted for a full five (5) years from the date of purchase.