

Si-950

950 Watt Pure Sine Wave Emergency Lighting Inverter



Compatible with LED loads
Options include:
Power Share Technology - PST
Self Diagnostic / Self Testing - SDT
Output Circuit Breakers- CB



Specifiers reference:

Project: _____

Type: _____

Model #: _____

Comments: _____

Product Summary

Approvals.....UL Listed to UL924
Input Voltage.....120 / 277 Vac, 60Hz (Dual input)
Input Frequency..... 60 Hz
Input Current 8.5 A @120 Vac
 3.7 A @ 277 Vac
Power Factor0.88 Leading to 0.88 Lagging
Output 120 or 277 Vac, 60 Hz
Output Power 950 W
Output voltage regulation in emergency +/- 5%
Output..... Switched, Normally On, & Normally Of
Operating Time90 Minutes @ 25°C
Transfer Time < 1 Sec
Recharge Time 96 Hours (meets UL requirements)
Battery over voltage and under voltage protection
Sealed long-life, valve-regulated, lead calcium batteries
Dimensions 22.4"L x 25.1" W x 9.2"D
Weight 222 lbs.
Operating Temperature 68° F to 86° F (20°C to 30° C)
Storage Temperature- Cabinet -4° F to 158° F (-20°C to 60°C)
Storage Temperature- Batteries 32° F to 104° F (0°C to 40°C)
Thermal Output (BTUs) 484 BTUs in Emergency
 18 BTUs in normal charging
Remote Mounting Distance

Warranty3 years full on electronics,
 4 years pro-rata on batteries,
 See website for warranty details

Options:

- PST Power Share Technology - 4 Independent Adjustable (25-50-75--100%) Dimming Zones with 0-10 Vdc luminaires. See chart on page 2 for details.

- SDT Self Diagnostic and Testing- Monthly and annual testing

CB2, CB6: Output circuit breakers: 0, 2 and 6

For 2 hour FEMA emergency operation, the Si-950 can be connected to up to 700W (max.) of normal and emergency loads.

Description

The Assurance Emergency Lighting Si-950 & Si-950-PST are Pure sine wave output with optional self-test/self diagnostic inverter designed for designated emergency lighting fixtures. In the event of a power failure, the inverter will automatically supply 950 watts of emergency power to LED, fluorescent and incandescent luminaires for ninety (90) minutes. It will operate with multiple switched, non-switched and emergency only luminaires. It can operate as a standalone 950 watt inverter. It has optional features such as Power Share Technology (PST) for selectable dimming in emergency with 4 zones. When the PST option is selected, it can be used 0-10 Vdc controlled dimmable luminaires (up to 3420W) and the 0-10 Vdc dimming voltage is adjusted to the AC drivers for rated emergency output.

Specifications

Emergency lighting shall be provided by the Assurance Si-950 inverter unit equipment designed to operate designated LED and fluorescent fixtures on emergency power either at rated power or reduced luminaire power using the optional Power Share Technology during the 90 minute emergency discharge regardless of the wall switch position. The inverter shall allow for connected emergency fixtures to operate normally on, normally off dimmed/switched without affecting lamp operation during a power failure. The unit shall include a self-contained inverter with an automatic, variable-rate battery charger, low voltage battery disconnect, short circuit, brown out protection. The unit shall utilize a valve regulated sealed lead calcium battery with a 10 year design life expectancy. The inverter shall have optional self testing and self diagnostics (-SDT) and perform monthly self diagnostic test and report failures via visual indicator lights. The base Si-950 model is for single zone wiring. The Si-950-PST option with Power Share Technology which dims the load (Max. connected total normal load: 3120 W & 1035W per Zone) in emergency via the 0-10 vdc luminaire inputs to pre-selected values (25, 50,75 & 100%) for 4 independent zones. The inverter shall be UL Listed. It shall meet or exceed the requirements of UL924, NFPA 101 Life Safety Code, NFPA 70 National Electrical Code, OSHA, State and Local Codes. Warranty: Three (3) years full on electronics and three (4) years pro rata on batteries. Per the California Energy Commission, Regulatory Advisory dated Oct. 31, 2018, Backup Battery Charger Systems, the Si-950 is applicable and accepted for use in California.

All Specifications subject to change without notification.

Assurance Emergency Lighting, a division of Assurance Engineering LLC

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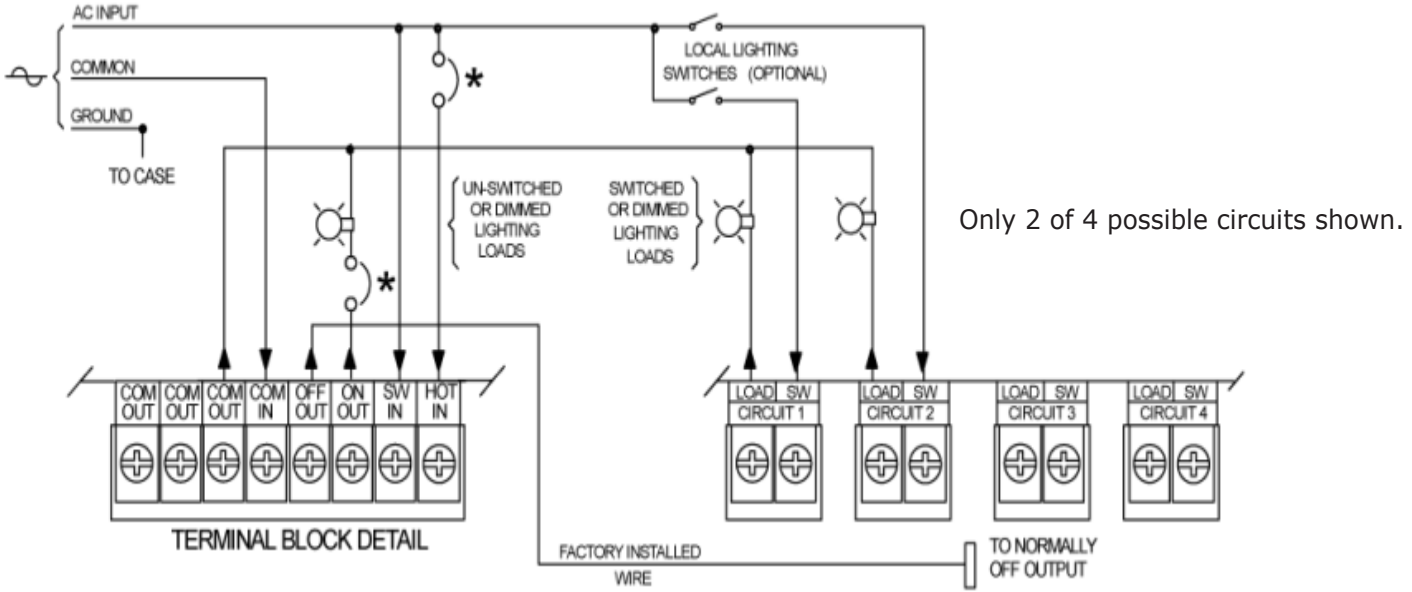
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Order Code	Output Circuit Breakers	Self Diagnostic	Power Share Technology
Si-950	NA	NA	NA
Si-950-CB2	2	NA	NA
Si-950-CB6	6	NA	NA
Si-950-SDT	NA	SDT	NA
Si-950-CB2-SDT	2	SDT	NA
Si-950-CB6-SDT	6	SDT	NA
Si-950-PST	NA	NA	PST
Si-950-CB2-PST	2	NA	PST
Si-950-CB6-PST	6	NA	PST
Si-950-SDT-PST	NA	SDT	PST
Si-950-CB2-SDT-PST	2	SDT	PST
Si-950-CB6-SDT-PST	6	SDT	PST

Table 2: Maximum Connected Load when using optional Power Share Technology - PST

Output of all (4) dimming circuits	2.5 V		5.0 V		7.5 V		10.0 V	
	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
Si-950 with - PST option	3420W and 1035W per zone max.	950 W Total EM	1710W and 1035W per zone max.	950 W Total EM	1140W and 1035W per zone max.	950 W Total EM	950W	950 W Total EM

Typical Wiring for Switched or Dimmed (0-10 Vdc) Loads



DIMMING OPTION PROGRAMMING TABLE

NOTE: POSITION-1 AND POSITION-2 ARE PROVIDED FOR EACH OF THE (4) CIRCUITS.

POSITION-1	POSITION-2	VOUT 1
OPEN (OFF)	OPEN (OFF)	10.0V
OPEN (OFF)	CLOSED (ON)	7.50V
CLOSED (ON)	OPEN (OFF)	5.00V
CLOSED (ON)	CLOSED (ON)	2.50V

NOTE: Dimming switches S1-1 and S1-2 are designed for independent settings to allow different emergency dimming control voltages for each circuit
 CAUTION: Dimming switches must be programmed such that total loads do not exceed unit rating in emergency mode.

NOTE: ONLY (1) OF (4) POSSIBLE CIRCUITS SHOWN

