1150 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

Power Share Technolog


## 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 10.2 A @120 Vac
4.4 A @ 277 Vac
Power Factor
0.88 Leading to 0.88 Lagging
Output ..... 120 or 277 Vac, 60 Hz
Output Power ..... 1150 W
Output voltage regulation in emergency ..... +/-5\%
Output

$\qquad$
Switched, Normally On, \& Normally Of
Operating Time . 90 Minutes @ 25ㄷ
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 ..... $22.4^{\prime \prime} \mathrm{L}$ x $25.1^{\prime \prime} \mathrm{W}$ x 9.2"D
Weight ..... 254 lbs.
Operating Temperature ..... $68^{\circ} \mathrm{F}$ to $86^{\circ} \mathrm{F}\left(20^{\circ} \mathrm{C}\right.$ to $\left.30^{\circ} \mathrm{C}\right)$
Storage Temperature- Cabinet $-4^{\circ} \mathrm{F}$ to $158^{\circ} \mathrm{F}\left(-20^{\circ} \mathrm{C}\right.$ to $\left.60^{\circ} \mathrm{C}\right)$
Storage Temperature- Batteries $32^{\circ} \mathrm{F}$ to $104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.40^{\circ} \mathrm{C}\right)$
Thermal Output ( BTUs) 535 BTUs in Emergency
22 BTUs in normal charging
Remote Mounting Distance ............... Up to1000 ft
Warranty . . 3 years full on electronics,4 years pro-rata on batteries,
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

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## Description

The Assurance Emergency Lighting $\mathrm{Si}-1150$ \& $\mathrm{Si}-1150-\mathrm{PST}$ are Pure sine wave output with optiona self-test/self diagnostic inverter designed for designated emergency lighting fixtures. In the event of a power failure, the inverter will automatically supply 1150 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 1150 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 $0-10 \mathrm{Vdc}$ controlled dimmable luminaires (up to 4140W) and the $0-10 \mathrm{Vdc}$ dimming voltage is adjusted to the AC drivers for rated emergency output.

## Specifications

Emergency lighting shall be provided by the Assurance Si -1150 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 $\mathrm{Si}-1150$ model is for single zone wiring. The Si-1150-PST option with Power Share Technology which dims the load (Max. connected total normal load: 4140 W \& 1035 W per Zone) in emergency via the $0-10$ vdc luminaire inputs to preselected 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 $\mathrm{Si}-1150$ is applicable and accepted for use in California.

| Order Code | Output Circuit <br> Breakers | Self <br> Diagnostic | Power Share <br> Technology |
| :--- | :---: | :---: | :---: |
| Si-1150 | NA | NA | NA |
| Si-1150-CB2 | 2 | NA | NA |
| Si-1150-CB6 | 6 | NA | NA |
| Si-1150-SDT | NA | SDT | NA |
| Si-1150-CB2-SDT | 2 | SDT | NA |
| Si-1150-CB6-SDT | 6 | SDT | NA |
| Si-1150-PST | NA | NA | PST |
| Si-1150-CB2-PST | 2 | NA | PST |
| Si-1150-CB6-PST | 6 | NA | PST |
| Si-1150-SDT-PST | NA | SDT | PST |
| Si-1150-CB2-SDT-PST | 2 | SDT | PST |
| Si-1150-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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Normal Mode | Emergency <br> Mode | Normal <br> Mode | Emergency <br> Mode | Normal <br> Mode | Emergency <br> Mode | Normal Mode | Emergency <br> Mode |
| Si-1150 with - PST option | 4140 W and <br> 1035 W per <br> zone max. | 1150 W <br> Total EM | 2070 W and <br> 1035 W per <br> zone max. | 1150 W <br> Total EM | 1380 W and <br> 1035 W per <br> zone max. | 1150 W <br> Total EM | 1150 W and <br> 1035W per <br> zone max. | 1150 W <br> Total EM |

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


## * Optional OCBs

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) | 10.0 V |
| OPEN (OFF) | CLOSED (ON) | 7.50 V |
| CLOSED (ON) | OPEN (OFF) | 5.00 V |
| CLOSED (ON) | CLOSED (ON) | 2.50 V |

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 OLY (1) OF (4) POSSSBLE CRCCUTS SHown




[^0]:    For 2 hour FEMA emergency operation, the Si-1150 can be connected to up to 860 W (max.) of normal and emergency loads.

