

# Si-375 & Si-375-PST

375 Watt Pure Sine Wave Self Testing Emergency Lighting Inverter  
with Optional Power Share Technology



Compatible with LED loads

## Specifiers reference:

Project: \_\_\_\_\_

Type: \_\_\_\_\_

Model #: \_\_\_\_\_

Comments: \_\_\_\_\_

## Product Summary

**Approvals**.....UL Listed to UL924  
NEMA 410 load tested up to 1125 W  
**BAA**.....Buy American Compliant  
**Input Voltage**.....Field Select-able 120 or 277 Vac input/Output  
**Input Current**.....4.1A (120 Vac), 1.2 A (277Vac)  
**Input Frequency**.....60 Hz  
**Power Factor**.....0.5 Leading to 0.5 Lagging  
**Output**.....120-277 Vac, 60 Hz  
**Output Current**.....3.1 A (120 Vac), 1.4A (277 Vac)  
**Output Power**.....**375 W**  
**Output voltage regulation in emergency**.....+/- 5%  
**Output**.....Dimmed, Switched, Normally On, & Normally Off  
All models have 4 switchable command zones and  
1 normally ON circuit.

## Optional Power Share Technology

Field adjustable 0-10 Vdc emergency dim feature  
Max. connected normal 0-10 Vdc load of **1125 W**

**Operating Time**.....90 Minutes @ 25°C

## Self-Testing & Self-Diagnostic

Monthly reported via visual user interface panel

**Transfer Time**.....50 mS, 1s (default), 2 s

**Recharge Time**.....24 Hours

## Battery over voltage and under voltage protection

## Sealed long-life, valve-regulated, lead calcium batteries

**Dimensions**.....20.0"H x 20.0" W x 7.1"D

**Weight**.....105 lbs.

**Operating Temperature**.....68°F to 86°F (20°C to 30° C

**Storage Temperature**.....-4° F to 158 °F (-20°C to 70°C)

**Warranty**.....2 years full on electronics,  
3 years pro-rata on batteries,  
See website for warranty details

## Options

- PST 4 Independent Adjustable (20-100%) Dimming Zones,  
0-10Vdc, Dali, & Fire Alarm Interface (Max. Normal Power Load  
1125 W when using Power Share Technology -PST)  
Audible Alarm -AA

Examples: Si-375 & Si-375-PST  
Si-375-AA

For Remote Test Monitor - Order RTS-M Separately



## Description

The Assurance Emergency Lighting Si-375 & Si-375-PST are Pure sine wave output self-test/self diagnostic inverters designed for designated emergency lighting fixtures. In the event of a power failure, the inverter will automatically supply 375 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 375 watt inverter. It has optional features such as Power Share Technology (PST) for auto dimming in emergency, audible alarm and Seismic Restraints.

When the PST option is selected, it can be used with 0-10 Vdc controlled dimmable luminaires (up to 1125W ) 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-375 inverter unit equipment designed to operate designated LED and fluorescent fixtures on emergency power ( up to 375W) 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 normally on, normally off dimmed/switched without affecting lamp operation during a power failure. The unit shall include a self-contained inverter section with an automatic, variable-rate battery charger, low voltage battery disconnect, short circuit, brownout protection and 5X crest factor for high inrush currents. The unit shall utilize a valve regulated sealed lead calcium battery with a 10 year design life expectancy. The inverter shall be self testing and self diagnostic and perform monthly self diagnostic test and report failures via user interface panel. The Si-375 shall have the option of Power Share Technology ( Si-375-PST)- which dims the load ( Max. normal connected load: 1125W) in emergency via the 0-10 vdc luminaire inputs to pre-selected values (20, 40, 60, 80 & 100%) for 3 independent zones. The inverter shall be UL Listed. It shall meet or exceed therequirements 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 (3) years Full / 7 year pro rata on batteries. Per the California Energy Commission, Regulatory Advisory dated Oct. 31, 2018, Backup Battery Charger Systems, the Si-375 is applicable and accepted for use in California. Buy American Act Compliant.

**For 2 hour FEMA emergency operation, the Si-375 can power up to 280 W (max.) of emergency loads.**

All Specifications subject to change without prior notification.

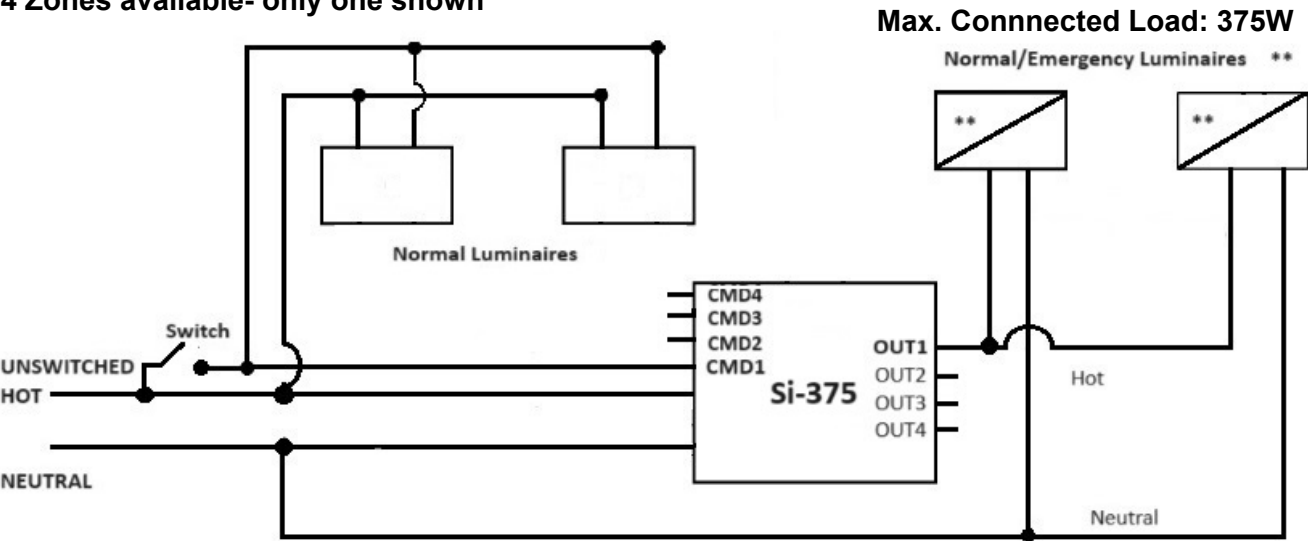
Assurance Emergency Lighting, a division of Assurance Engineering LLC

Assurance Engineering LLC · 357 Cumberland Street · Memphis, TN 38112 · 1-877-774-4775 · [www.assurancelighting.com](http://www.assurancelighting.com)

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**DIAGRAM 1**

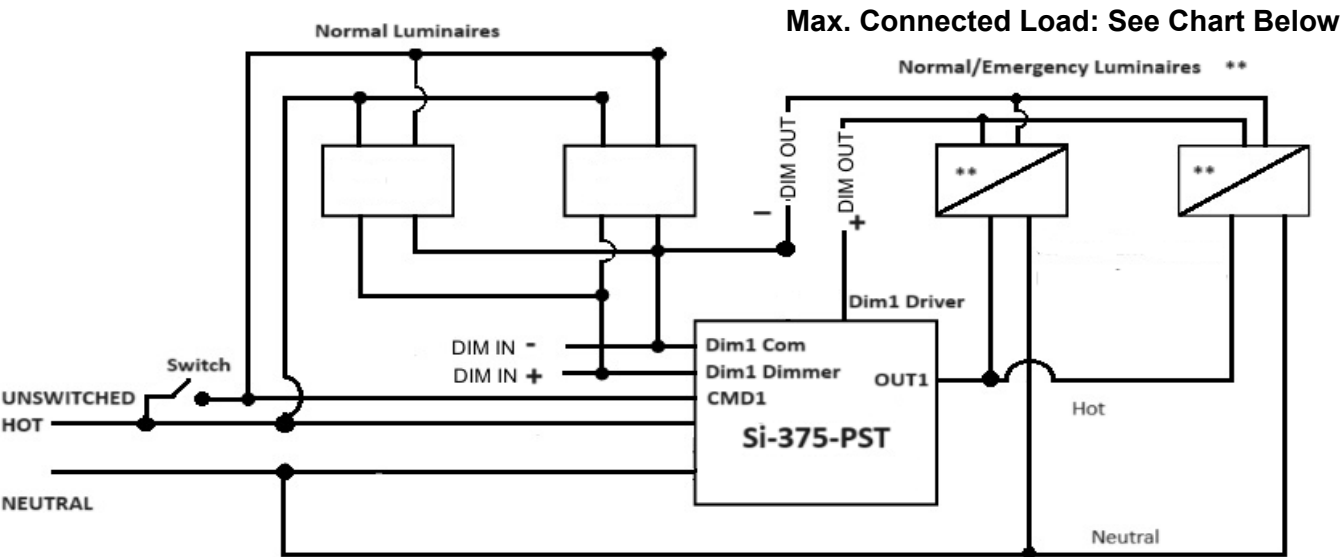
Typical Wiring Diagram for Switched applications  
 4 Zones available- only one shown



Note: Multiple zone wiring can be duplicated - Only One zone is shown.

**DIAGRAM 2**

Typical Wiring Diagram for 0-10 Vdc and Power Share Technology  
 4 Zones are available - only one shown.



Note: Multiple zone wiring can be duplicated - Only One zone is shown.  
 Additional CMDs, DIM, and OUTs not shown.

**TABLE 1**

Output of all ( 4 ) dimming circuits	2.0 V		4.0 V		6.0 V		8.0 V		10.0 V	
Model	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
Si-375-PST	1125W max.	375W Total EM	935W	375W Total EM	625W	375W Total EM	465W	375W Total EM	375W	375W Total EM