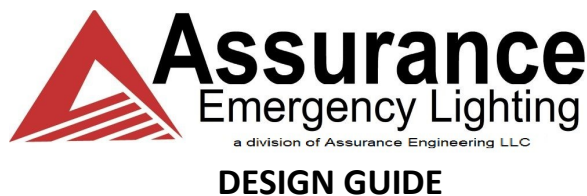


# Si Series Micro Inverters

## with Power Share Technology



Assurance Emergency Lighting's Power Share Technology for inverters allow the inverter to be wired with AC luminaires of much greater power than the inverter size when using 0-10 Vdc AC luminaire drivers. This can be single or multiple luminaires in a single zone. The micro inverter charges from a constant power hot and allows the emergency luminaires to operate as normal luminaires in normal power mode – on – off and dimmed. When power is lost, the micro inverter with Power Share Technology will provide inverter AC power to the (luminaire's) AC driver input leads as well as providing an auto adjusted 0-10 Vdc to the dimming driver leads. This process will allow maximum emergency lighting power from the micro inverter into higher power connected loads.

### **There are numerous benefits to using Power Share Technology (PST)!**

One benefit is that the cost of a smaller inverter over a larger inverter where full power in emergency is not needed. Life safety codes state footcandle average, minimums and max to min ratios must be met. Similar to LED Emergency Drivers, full power is not needed to meet these code requirements.

Also, with LED Emergency drivers, for a given space, there are multiple installations (either factory or field) with multiples of cost. Installing a single micro inverter is less costly compared to many LED EM drivers with numerous illuminated test switches.

When using the Assurance micro inverters with PST, no UL924 load control relays are needed which is another advantage and cost reduction. Note: Our micro inverters can be used with line V dimming or simple switching but maximum connected load is only rated to the inverter size.

### **Simple math and the Si- micro inverter with PST.**

- 1– Do not exceed the maximum connected load power of the micro inverter (see table).*
- 2– Divide the micro inverter wattage by the number of connected luminaires*
- 3– Multiply the luminaire efficacy and the luminaire emergency wattage for expected luminaire emergency power.*
- 4– For more emergency luminaire power, reduce the number of connected luminaires.*

#### **Example 1: Si-100-PST**

- 50W Flat Panel luminaires with 0-10 Vdc dimming
- Max. connected load for the Si-100-PST is 300W.
- Therefore;  $300/50 = 6$  connected luminaires. Round down to nearest whole count.
- $100W\ EM/6\ luminaires = 16.6W$
- Using 130 lm/W,  $130\ lm/W \times 16.6W = 2,166$  Lumens for each 6 connected luminaires in EM.
- Compare (1) Si-100-PST total unit cost and 1 installation (1/2 hr) to (6) installed 14W LED EM drivers!  
(Contact your Assurance Sales Director for access to a micro inverter Excel calculator).



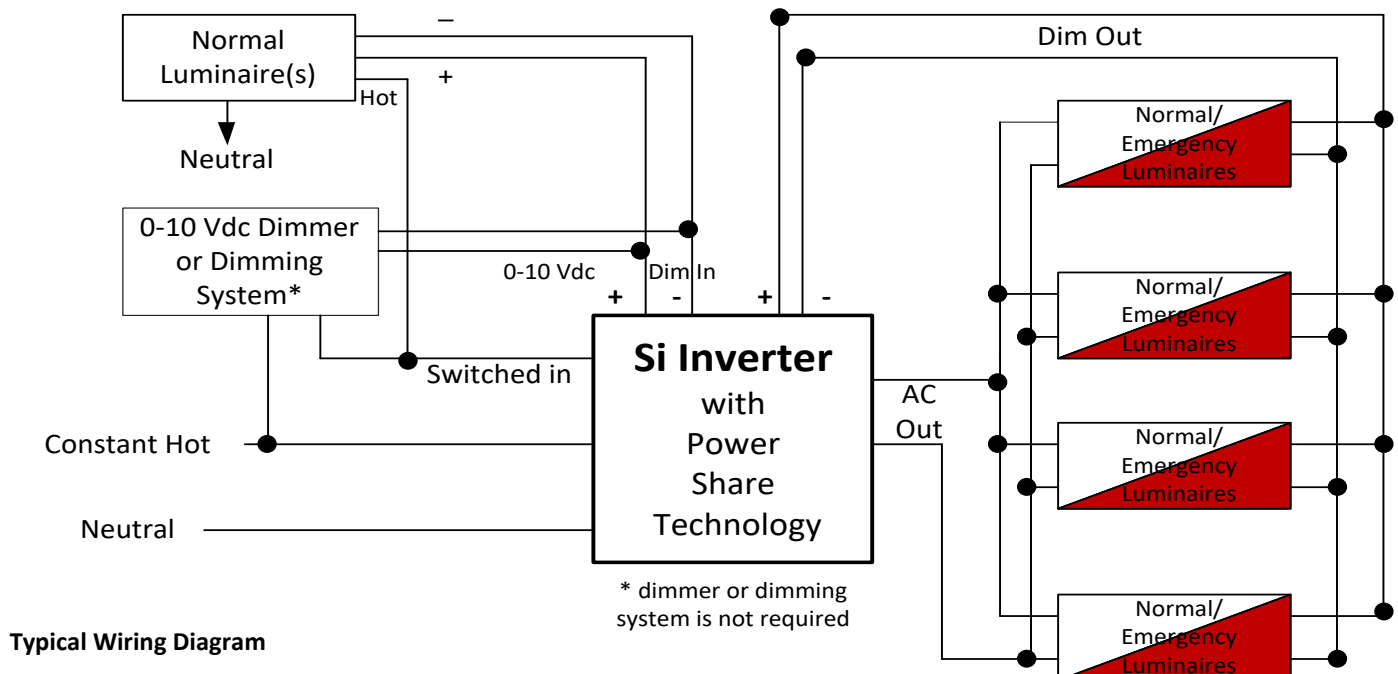
**Toll Free: 877-774-4775**

## Micro Inverters with PST Design Guide



Model	Si-200-PST	Si-100-PST	Si-50-PST	Si-35-PST *	Si-10-PST
Emergency Power	200W	100W	50W	35W	10W
Single or multiple luminaire operation	Yes	Yes	Yes	Yes	Yes
Power Share Technology When using 0-10 Vdc systems	Auto adjust to 200W Max. Normal 900W	Auto adjust to 100W Max. Normal 300W	Auto adjust to 50W Max. Normal 150W	Auto adjust to 35W Max. Normal 175W	Auto adjust to 10W Max. Normal 50W
Universal Input Voltage	120-277 Vac	120-277 Vac	120-277 Vac	120-277 Vac	120-277 Vac
Output Voltage Auto Setting equal to input	120-277 Vac, 50/60 Hz	120-277 Vac, 50/60 Hz	120-277 Vac, 50/60 Hz	120-277 Vac, 50/60 Hz	120-277 Vac, 50/60Hz
Weight	9.0 lbs	8 lbs	5.5 lbs	5.0 lbs	2.9 lbs
Warranty	5 Years Full	5 Years Full	5 Years Full	5 Years Full	5 Years Full
Dimensions	19" L x 4.5" W x 1.63" H	19.5"L x 3.3" W x 2.5" H	20.7"L x 2.75" W x 2" H	20.7"L x 2.25" W x 2" H	15.4"L x 2.2" W x 1.3" H

\* Si-35-PST available Q3/2025 , check for stock Si-36 and Si-27



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