

## DESCRIPTION

The Sure-Lites INV series is a UL Listed stand-alone modified sine wave output inverter designed to provide power to designated emergency lighting fixtures. In a power loss situation, the unit will supply 55, 110 or 220 Watts of power from the onboard battery supply. It works in conjunction with incandescent, LED, and fluorescent lamps and fixture types and will automatically run switched, normally-on, or normally-off designated emergency fixtures. The INV series is ideal for applications requiring an emergency source for lighting arrangements that utilize multiple lamp and fixture types. Installation options include surface mount, recessed or T-grid. The series has a self-diagnostics option and comes with a three-year product warranty and seven-year pro-rated battery warranty.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## SPECIFICATION FEATURES

### Electrical

- input frequencies 60 Hz  $\pm$ 2%
- input protection: AC line fuses
- Output voltages 120 or 277 VAC
- Efficiency rating 98%
- Sinusoidal waveform output
- Output frequencies 60 Hz in emergency mode
- Less than 3% THD
- Transfer time < 1 second
- Load power factor range for 55W: 0.44 lead to 0.44 lag
- Load power factor range for 110W/220W: 0.88 lead to 0.88 lag
- Minimum loading: 0% of rated capacity
- Output protection: line and inverter fuses
- "Soft start" design reduces in-rush current

- installable up to 1000 feet from controlled fixtures
- 100% of lumen output from fixtures in emergency mode
- Low voltage disconnect prevents deep battery discharge
- Test switch

### Housing Construction

- Durable 18-gauge steel housing design with white semi-gloss powder-coat paint finish
- Recessed, surface or T-grid mounting
- Replaceable output fuse protection
- Variable-rate, temperature-compensated charger

### Code Compliance

- UL 924 Listed
- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements
- T-grid models are plenum rated

### Application

- LED, Fluorescent and Incandescent Lighting

### Warranty

- 3 year product warranty
- 7 year pro-rated battery warranty



## INV EMERGENCY INVERTER SERIES

LED  
FLUORESCENT  
INCANDESCENT  
**ON-LINE POWER INVERTER  
SYSTEMS**



## SPECIFICATIONS

Series	Wattage	Battery	Mounting	Self-Diagnostics	CEC
INV= inverter	55= 55 watts 110=110 watts	PB= lead acid	S= surface R= recessed TG= T grid	= no self-diagnostics SD= Self-Diagnostics	= non-CEC compliant CA= CEC compliant

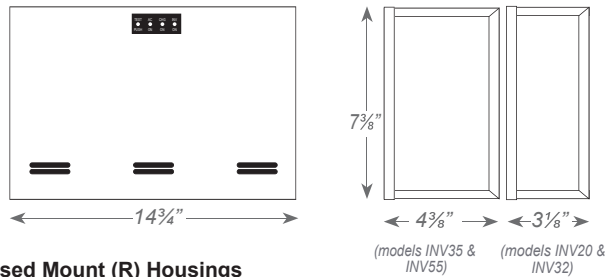
Series	Wattage	Battery	Mounting	Self-Diagnostics	CEC
INV= inverter	220= 220 watts	PB= lead acid	S= surface	= no self-diagnostics SD= Self-Diagnostics	= non-CEC compliant CA= CEC compliant

### General Specifications

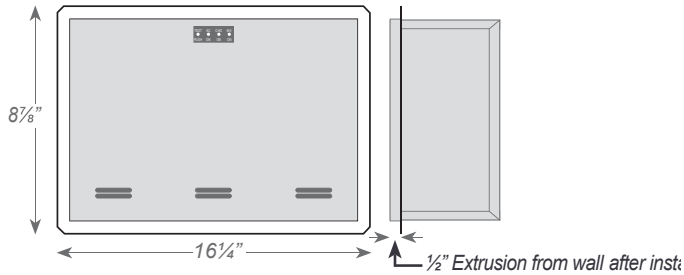
Series	Input/ Output volts	90 minute capacity		System Weight		Full Load Efficiency	# of Batteries	Battery Voltage	Battery Current	AC Input Current		Thermal output BTU's	
		Watts	VA	lbs	Kg					120 VAC	277 VAC	On-line	Emergency
INV55	120/277	55	125	30	14	98%	2	24 VDC	3.4 A	1.2	0.52	9	90
INV110	120/277	110	125	42	17	98%	2	24 VDC	5.7 A	1.2	0.52	9	95
INV220	120/277	220	250	60	27	98%	4	48 VDC	5.6 A	2.4	1.1	18	167

INV 55 DIMENSIONS

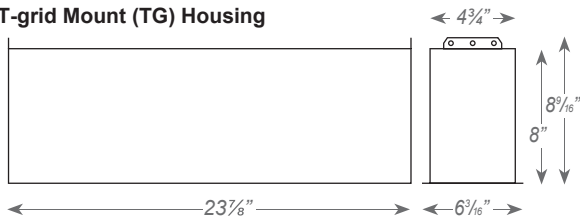
Surface Mount (S) Housings



Recessed Mount (R) Housings

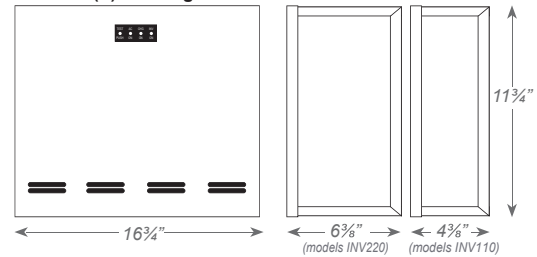


Ceiling T-grid Mount (TG) Housing

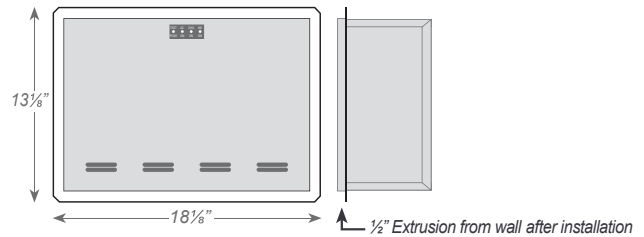


INV 110, INV 220 DIMENSIONS

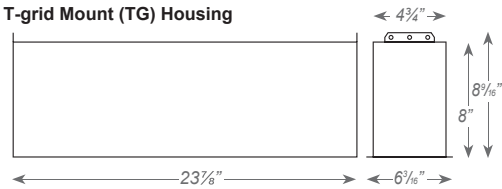
Surface Mount (S) Housings



Recessed Mount (R) Housings



Ceiling T-grid Mount (TG) Housing



SELF-DIAGNOSTICS

**Description**

Sure-Lites INV series offers the self-testing and self-diagnostic (SDT) options. This feature helps insure NFPA and OSHA code compliance and validates system operational performance.

**Self-diagnostic functions**

The self-diagnostic function is factory preset and performs the following:

- Monitoring of battery, battery charger and connected loads.
- Self-testing and a 30-second battery discharge once every 30 days after normal utility power has been supplied for a minimum of 96 hours.
- Self-testing and a 30-minute battery discharge once every 180 days after normal utility power has been supplied for a minimum of 96 hours.

- Self-testing and a 90-minute battery discharge once every 365 days after normal utility power has been supplied for a minimum of 96 hours.

**Service Indication**

**Led Indicator / Status**

- GREEN Steady** = Normal Service
- RED/GREEN Blinking** = High Charge Enabled
- GREEN Blinking** = Test mode Enabled
- One Blink RED / Pause** = Battery Charger Fault
- Two Blinks RED / Pause** = Battery Fault
- Four Blinks RED / Pause** = Lamp / Load Fault

**Manual Testing Action / Reaction & LED Indication**

- Push test switch once (within 2 seconds) 30** = second test one blink GREEN / pause
- Push test switch twice (within 2 seconds) = 30 minute test two blinks GREEN / pause**
- Push test switch thrice (within 2 seconds) = 90 minute test three blinks GREEN / pause**
- Push test switch and hold for 3 seconds** = Canceled test
- Push test switch and hold for 6 seconds** = System reset