

SPV - 5.0 Series

Grid Tie Isolated Solar Inverter

5000 Watts

Total Power: 5000 Watts
Input Voltage: 475-550 Vdc
MPPT Voltage: 200-475 Vdc
Output: Single Phase AC

Special Features

- Grid Tie certified
- High efficiency
- Dual independent DC PV inputs
- Dual independent MPPT tracking circuits
- Convection cooled (no unreliable fans)
- 10 year warranty
- Small and lightweight 5 kW Inverter for ease of installation
- Light weight, only 46.9 lbs (21.3 kg)
- NEMA 3R / IP65 outdoor rating
- Optional energy monitor
- Wired & wireless communications
- Inverter easily removable from Wiring Box
- Front panel LCD display monitoring
- User programmable AC output voltage and frequency

Safety

- **ETL:** UL 1741
- **ETL:** CSA107.1-01 PV Inverters



Rev. 12.1.11_32
 SPV - 5.0 Series
 1 of 4

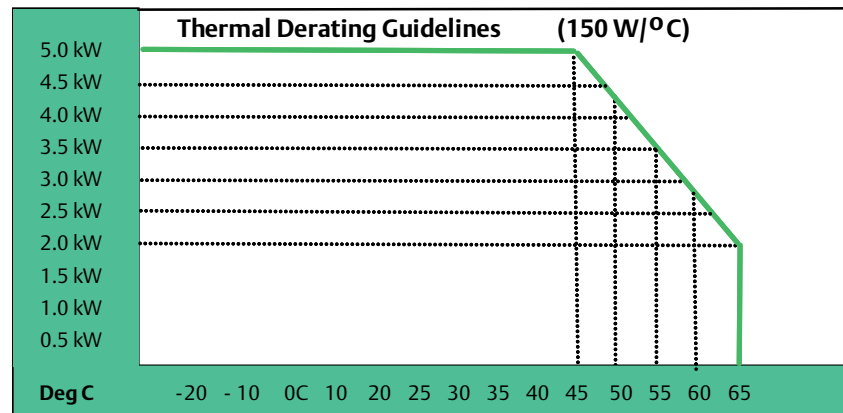


Electrical Specifications

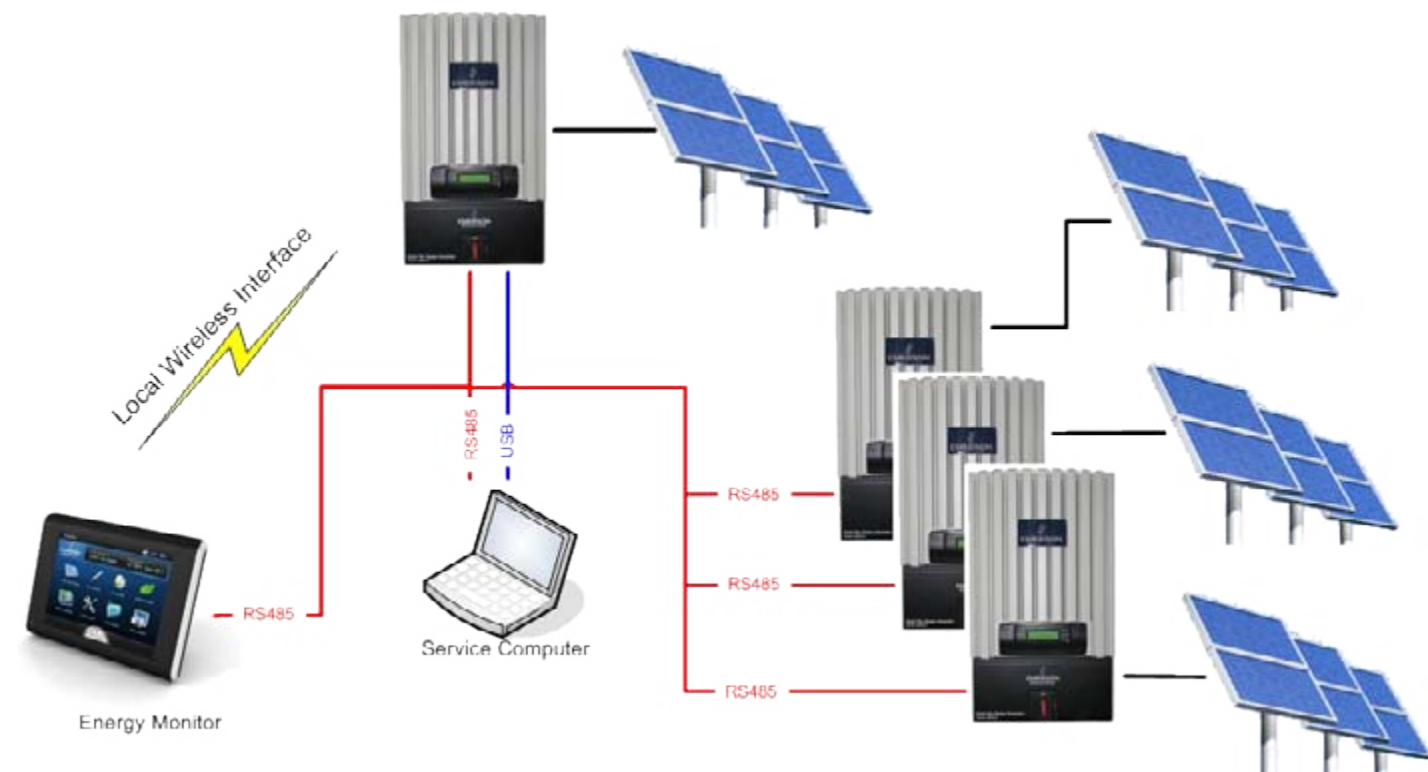
| DC Input | |
|----------------------------------|--|
| Input Power: | 5300 Watts DC maximum |
| Max. DC Input Current (Isc): | 15 Amps DC x 2 each (Independent Dual Inputs) |
| DC Input Range: | 200 Vdc - 550 Vdc (250Vdc to turn on) |
| MPPT Circuits: | Independent Dual MPPT inputs |
| MPPT Range: | 200 Vdc - 475 Vdc. MPPT Efficiency > 99.5% |
| AC Output | |
| Maximum Output Power: | 5000 Watts AC |
| Maximum Output Current: | 22 Amps AC @ 208 Vac |
| AC Output Voltage Range: | 184 - 228 V @ 208 Vac; 216 - 264 V @ 240 Vac |
| AC Output Frequency: | 50 - 60 Hz |
| AC Grid Connection: | Single phase or 240 Vac Split Phase |
| Power factor: | 0.99 minimum |
| Total Harmonic Distortion (THD): | < 2% at rated power |
| Anti-Islanding Protection: | Standard AC Internal Disconnect Switch per IEEE 1547 |
| CEC Efficiency: | 95.0% at 240 Vac |
| Euro ETA Efficiency: | 94.5% at 240 Vac |
| Night Time Power Consumption: | < 1 Watt |

Environmental Specifications

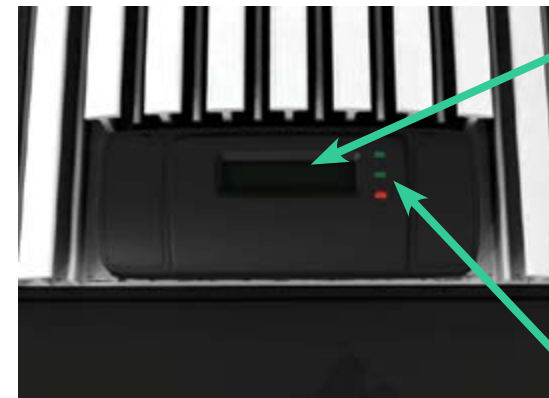
| | |
|--------------------------|--------------------------|
| Full Power Rating: | To 45 °C |
| Operational temperature: | -25 °C to +65 °C |
| Derate: | Above +45 °C |
| Storage temperature: | -40 °C to +85 °C |
| Operating altitude: | 10,000 feet |
| Enclosure: | IP65 outdoor use rated |
| EMI: | CISPR 22 Class "B" |
| Convection Cooled: | No fans |
| Shock and Vibration: | Meets Industry Standards |
| RoHS: | Meets RoHS 6/6 Lead Free |



Communication Specification



PV Solar Inverter - Functionality LCD Display & LED Status Indicators



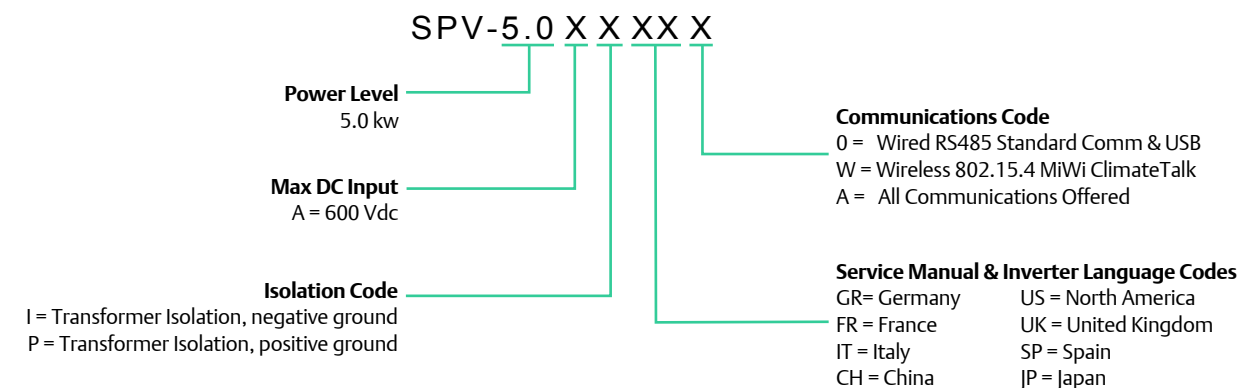
| |
|--|
| LCD Display; Backlit two line 16 Character Liquid Crystal Display |
| LCD Display shows the main operational parameters |
| Inverter ON/OFF |
| Real Time Data for Inverter Photovoltaic DC Input Voltage, Current & Power (Watts) |
| Real Time Data for Inverter AC Output Voltage, Current, Line Frequency & Power (Watts) |
| Present Year, Month, Day, Hour and Minutes |
| Tap display to change display to next monitoring function to maximize clarity |
| Provides Instantaneous Energy (in kWh) Daily and Lifetime Electricity Production |
| Fault Messages and Installer Customizable Screens |
| Bi-Color LED Status Indicating the Operating Status |

Note:

The LCD Display for Different Modes of Operation
The front panel display shows different message screens during different modes of operation.

| Parameter | OK | Fault |
|-------------------------|-------|-------|
| DC Input OK | Green | Red |
| AC Output OK | Green | Red |
| Internal Temperature OK | Green | Amber |

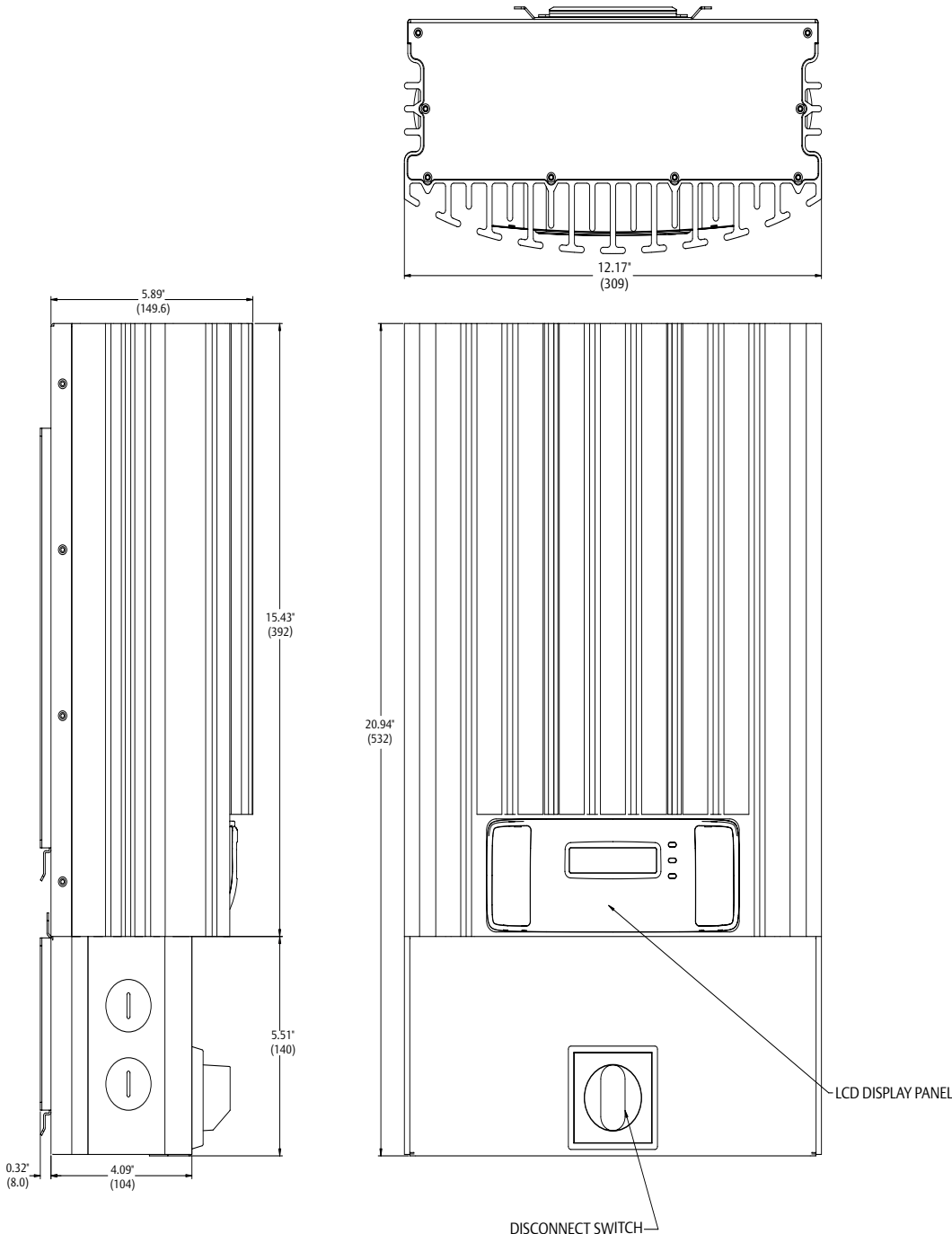
Ordering Information



Example:

Model Number: **SPV-5.0AIUS0**
= 5 kW Grid Inverter, 600 Vdc, Isolated, Negative Ground, North America, Wired Communication with No Modification

Mechanical Outline Drawing



Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is $\pm .02$ "
3. Warranty: 10 years
4. Weight: 46.9 lbs. / 21.3 kg

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