

## Specifications:

### Input Data (DC)

|  |           |
|--|-----------|
| Recommended PV Module Power (STC)Range | 180W-310W |
| MPPT Voltage Range                     | 22V-45V   |
| MPPT Voltage Range @ Full Power        | 26V-45V   |
| Operation Voltage Range                | 16V-52V   |
| Maximum Input Voltage                  | 55V       |
| Startup Voltage                        | 22V       |
| Maximum Input Current                  | 10.5A     |
| Maximum DC Short Circuit Current       | 15A       |

### Output Data (AC)

|                                 |                     |
|---------------------------------|---------------------|
| Maximum Output Power            | 250W                |
| Nominal Output Voltage          | 230V                |
| Nominal Output Current          | 1.08A               |
| Default Output Voltage Range    | 184V-253V*          |
| Extended Output Voltage Range   | 149V-278V           |
| Nominal Output Frequency        | 50Hz                |
| Default Output Frequency Range  | 48Hz-51Hz*          |
| Extended Output Frequency Range | 45.1Hz -54.9Hz      |
| Power Factor                    | >0.99               |
| Total Harmonic Distortion       | <3%                 |
| Maximum Current per Branch      | 25A                 |
| Maximum Units per Branch        | 14 for 20 Breaker** |

### Efficiency

|                          |                             |
|--------------------------|-----------------------------|
| Max. Inverter Efficiency | 95.5% (With HF Transformer) |
| Night Power Consumption  | 120mW                       |

### Mechanical Data

|                                     |  |
|-------------------------------------|--|
| Operating Ambient Temperature Range | -40 °F to +149 °F (-40 °C to +65 °C )                                  |
| Storage Temperature Range           | -40 °F to +185 °F (-40 °C to +85 °C )                                  |
| Dimensions (W x H x D)              | 160mm X 150mm X 29mm (6.3" X 5.9" X 1.1")                              |
| Weight                              | 3.3lbs/1.5kg   |
| AC CABLE                            | 4mm <sup>2</sup>   |
| Enclosure Rating                    | IP65   |
| Cooling                             | Natural Convection   |
| Wet Locations Classification        | For Wet Locations  |
| Pollution Degree Classification     | PD3  |
| Relative Humidity Ratings           | 0-95%  |
| Maximum Altitude Rating             | All data at this technical Specifications has been tested under <2000m |
| Overvoltage Category                | OVC II for PV input circuit, OVC III for mains circuit                 |

### Features & Compliance

|                            |   |
|----------------------------|---|
| Communication              | Power line  |
| Design Lifetime            | 25yrs   |
| Monitoring                 | Life monitoring via EMA software  |
| Safety and EMC Compliance  | EN 62109-1; EN 62109-2;EN61000-6-1;<br>EN61000-6-2; EN61000-6-3; EN61000-6-4; |
| Grid Connection Compliance | EN50438   |