



# On-grid Three Phase Inverter

Sun trio Plus 4K/5K/6K/8K/10K



### Safe and Reliable

- Natural convection for longer life
- IP65 protection

### Flexible and Efficient

- MPPT efficiency 99.9%
- Super wide input voltage range

### Smart and Easy to Use

- RS485/Ethernet/ Wi-Fi/GPRS modules
- Remote Maintenance

### Convenient Installation

- Transformerless, smaller and lighter
- DC&AC quick connector



# Technical Data

## Suntrio Plus 4K/5K/6K/8K/10K

| Type                                  | Suntrio Plus 4K  | Suntrio Plus 5K | Suntrio Plus 6K | Suntrio Plus 8K | Suntrio Plus 10K |
|---------------------------------------|--|-----------------|-----------------|-----------------|------------------|
| <b>Input (DC)</b>                     |  |                 |                 |                 |                  |
| Max. PV Array Power [Wp]@STC          | 4840   | 6050            | 7260            | 9680            | 12000            |
| Max. DC Voltage [V]                   | 1000   |                 |                 |                 |                  |
| MPPT Voltage Range [V]                | 160-900  |                 |                 |                 |                  |
| Nominal DC Voltage [V]                | 600  |                 |                 |                 |                  |
| Start Voltage [V]                     | 180  |                 |                 |                 |                  |
| Min. DC Voltage [V]                   | 150  |                 |                 |                 |                  |
| Max. DC Input Current PV1 / PV2 [A]   | 11/11  |                 |                 |                 | 22/11            |
| Number of MPPT                        | 2  |                 |                 |                 |                  |
| Number of DC Connection Sets per MPPT | 1/1  |                 |                 |                 | 2/1              |
| DC Switch                             | Integrated   |                 |                 |                 |                  |
| <b>Output (AC)</b>                    |  |                 |                 |                 |                  |
| Rated AC Power [W] (@230V,50Hz)       | 4000   | 5000            | 6000            | 8000            | 10000            |
| Max. AC Power [VA]                    | 4000   | 5000            | 6000            | 8000            | 10000            |
| Rated AC Current [A] @230Vac          | 5.8  | 7.2             | 8.7             | 11.6            | 14.5             |
| Max. AC Current [A]                   | 6.4  | 8.1             | 9.7             | 12.9            | 15.9             |
| Nominal AC Voltage / Range            | 3L/N/PE, 220/380V, 230/400V, 240/415V; 180V-280V/312V-485V   |                 |                 |                 |                  |
| Grid frequency / Range                | 50Hz, 60Hz / 44Hz-55Hz, 54-65Hz  |                 |                 |                 |                  |
| Power factor, Adjustable [cos φ]      | 0.9 leading~0.9 lagging  |                 |                 |                 |                  |
| Total Harmonic Distortion [THDi]      | < 3% ( at nominal power )  |                 |                 |                 |                  |
| Feed-in                               | 3L+N+PE  |                 |                 |                 |                  |
| <b>Efficiency</b>                     |  |                 |                 |                 |                  |
| Max. Efficiency                       | 97.8%  | 97.8%           | 97.8%           | 98.0%           | 98.0%            |
| Euro Efficiency                       | 97.0%  | 97.2%           | 97.4%           | 97.5%           | 97.6%            |
| MPPT Accuracy                         | >99.9%   |                 |                 |                 |                  |
| <b>Protection</b>                     |  |                 |                 |                 |                  |
| Internal Over-voltage Protection      | Integrated   |                 |                 |                 |                  |
| DC Insulation Monitoring              | Integrated   |                 |                 |                 |                  |
| DCI / GFCI / Grid Monitoring          | Integrated   |                 |                 |                 |                  |
| AC Short Circuit Current Protection   | Integrated   |                 |                 |                 |                  |
| Thermal Protection                    | Integrated   |                 |                 |                 |                  |
| Anti-island protection monitoring     | AFD  |                 |                 |                 |                  |
| <b>Interface</b>                      |  |                 |                 |                 |                  |
| DC Connection                         | MC4/H4   |                 |                 |                 |                  |
| AC Connection                         | Plug-in connector  |                 |                 |                 |                  |
| LCD Display                           | 3.5 inch Graphic LCD Display, Backlight, Inverter Parameter and Data Display   |                 |                 |                 |                  |
| Display Language                      | English  |                 |                 |                 |                  |
| Datalogger & Communication            | 1*RS485 +1*RS232 ; Wi-Fi/GPRS/Ethernet ( Optional )  |                 |                 |                 |                  |
| <b>General Data</b>                   |  |                 |                 |                 |                  |
| Topology                              | Transformerless  |                 |                 |                 |                  |
| Consumption at Night [W]              | <0.6   |                 |                 |                 |                  |
| Consumption at Standby [W]            | <10  |                 |                 |                 |                  |
| Operating Temperature Range           | -25°C to +60°C ( 45°C to 60°C with derating )  |                 |                 |                 |                  |
| Cooling Method                        | Natural Convection   |                 |                 |                 |                  |
| Ambient Humidity                      | 0% to 100% Non-condensing  |                 |                 |                 |                  |
| Altitude                              | Up to 2000m (without power derating)   |                 |                 |                 |                  |
| Noise [dBA]                           | <29  |                 |                 |                 |                  |
| Ingress Protection                    | IP65   |                 |                 |                 |                  |
| Mounting                              | Rear Panel   |                 |                 |                 |                  |
| Dimensions (H*W*D) [mm]               | 530*355*190  |                 |                 | 530*355*200     |                  |
| Net Weight [kg]                       | 20.5   |                 |                 | 23.0            |                  |
| Standard Warranty [Year]              | 5 ( Standard ) / 10 / 15 / 20 / 25 ( Optional )  |                 |                 |                 |                  |
| Applicable Standard                   | IEC/EN62109-1/2, IEC61683, IEC60068-2, IEC62116, IEC61727, EN61000-6-2/3,C10/11,VDE0126-1-1/A1, VDE-AR-N 4105, CQC NB/T 32004, G83/2,EN50438,CEI-021 |                 |                 |                 |                  |

Remarks: The above parameters might be slightly modified according to different grid codes

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