

On-grid Three Phase Inverter

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



BENEFITS

Flexible and Efficient

- Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%
- Asymmetric dual MPPT which are compatible to all kinds of solar roofs
- Max. efficiency of 98.0%, European efficiency of 97.6%
- Super wide input voltage range(150V-1000V), supporting various solar panels and string designs
- With reduced derating under high temperature, the generating capacity is improved

Convenient Installation

- Transformerless, smaller and lighter
- AC output quick connector design, for faster installation
- Specialized mounting design, easy to install

Smart and Easy to Use

- One-button safety setting, easy configuration of all parameters
- Built-in independent RTC chip, supporting data storage of 25 years
- Integrated LCD graphical display, showing daily/monthly/yearly generation
- Integrated RS232 / Wi-Fi interfaces, for improved communication
- Free monitoring anytime anywhere
- Local and remote intelligent maintenance by PC, IOS and Android devices
- Responds to power grid dispatching, energy management of micro-grids
- Integrated with the function of reactive adjusting

Safe and Reliable

- IP65 protection for indoor and outdoor installation
- Aluminum case design to enhance heat dissipation and prevent rust corrosion, prolong life time
- Built-in high voltage DC switch for safer maintenance and application
- Built-in convective fans to lower the temperature of core components, prolong life time
- Natural convection for longer life

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 |
|---------------------------------------|--|-----------------|-----------------|-----------------|------------------|
| Input (DC) | | | | | |
| Max. DC Power [W] | 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 | | | | |
| Output (AC) | | | | | |
| Rated AC Power [W] (@230V,50Hz) | 4000 | 5000 | 6000 | 8000 | 10000 |
| Max. AC Power [VA] | 4400 | 5500 | 6600 | 8800 | 10000 |
| Rated AC Current [A] | 5.8 | 7.2 | 8.7 | 11.6 | 14.5 |
| Max. AC Current [A] | 7.0 | 8.8 | 10.5 | 14.1 | 16.1 |
| 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] | 0.8 leading~0.8 lagging | | | | |
| Total Harmonic Distortion [THDi] | < 3% (at nominal power) | | | | |
| Feed-in | 3L+N+PE | | | | |
| Efficiency | | | | | |
| Max. Efficiency | 97.8% | 97.8% | 97.8% | 98.0% | 98.0% |
| Euro Efficiency (at 600Vdc) | 97.0% | 97.2% | 97.4% | 97.5% | 97.6% |
| MPPT Accuracy | >99.5% | | | | |
| Protection | | | | | |
| Internal Over-voltage Protection | Integrated | | | | |
| DC Insulation Monitoring | Integrated | | | | |
| DCI Monitoring | Integrated | | | | |
| GFCI Monitoring | Integrated | | | | |
| Grid Monitoring | Integrated | | | | |
| AC Short Circuit Current Protection | Integrated | | | | |
| Thermal Protection | Integrated | | | | |
| Anti-island protection monitoring | AFD | | | | |
| Interface | | | | | |
| 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 (Optional) | | | | |
| General Data | | | | | |
| 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 (Indoor & Outdoor Installation) | | | | |
| 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) | | | | |
| Certificates | IEC62109-1/2, IEC61000-6-2/3, IEC61683, IEC60068-2, IEC62116, IEC61727, PEA/MEA, NRS 097-2-1, UTE-C-15-712-1, VDE0126-1-1/A1, VDE-AR-N 4105, AS4777.2, AS4777.3, C-TICK, CQC NB/T 32004, G83-2, NBR 16149, NBR 16150, TF 3.2.1, C10/11 | | | | |