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				