

On-grid Three Phase Inverter

Suntrio Plus 12K/15K/17K/20K



Dual MPPT

BENEFITS

Flexible and Efficient

- Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%
- Dual MPPT which are compatible to all kinds of solar roofs
- Max. efficiency of 98.5%, European efficiency of 98.2%
- Super wide input voltage range(180V-1000V), supporting various solar panels and string designs

Convenient Installation

- Aluminum case design, smaller and lighter
- Integrate DC combiner box, reduce system cost
- Separate area for maintenance, easy and quick for repair

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 with the function of reactive power control & ZVRT, responds to power grid dispatching, energy management of grid
- Integrate string current monitoring, monitor string working status

Safe and Reliable

- IP65 protection for indoor and outdoor installation
- Optional DC&AC surge protection, guarantee system safety
- Optional Anti-PID module, protect panels from PID damage
- Aluminum case design to enhance heat dissipation and resist rust corrosion, prolong life time

Technical Data

Suntrio Plus 12K/15K/17K/20K

Type	Suntrio Plus 12K	Suntrio Plus 15K	Suntrio Plus 17K	Suntrio Plus 20K
Input (DC)				
Max. DC Power [W]	14520	18150	20570	24200
Max. DC Voltage [V]			1000	
MPPT Voltage Range [V]			180-900	
Nominal DC Voltage [V]			600	
Start Voltage [V]			200	
Min. DC Voltage [V]			180	
Max. DC Input Current PV1 / PV2 [A]	22/11	22/22	22/22	22/22
Number of MPPT			2	
Number of DC Connection Sets per MPPT	2/1	2/2	2/2	2/2
DC Switch			Integrated	
Output (AC)				
Rated AC Power [W](@230V,50Hz)	12000	15000	17000	20000
Max. AC Power [VA]	13200	16500	18700	22000
Rated AC Current [A]	18.2	22.7	25.8	30.3
Max. AC Current [A]	20.0	25.0	28.3	33.0
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	98.3%	98.4%	98.5%	98.5%
Euro Efficiency (@ 600Vdc)	98.0%	98.1%	98.2%	98.2%
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	
LVRT			Integrated	
Thermal Protection			Integrated	
AC Surge Protection		III (Integrated) , II (Optional)		
String Current Monitoring			Integrated	
Anti-PID Module			Optional	
DC Surge Protection			II (Optional)	
DC Fuse			Optional	
Anti-island protection monitoring			AFD	
Interface				
DC Connection			MC4/H4	
AC Connection			Terminal Block	
LCD & LED Display			3.5 inch Graphic LCD Display, Backlight	
Display Language			English	
Communication port			2*RS485+1*RS232	
Communication			Wi-Fi/GPRS/Ethernet (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			Intelligent fan	
Ambient Humidity			0% to 100% Non-condensing	
Altitude			3000m (> 2000m power derating)	
Noise [dBA]			<35	
Ingress Protection			IP65 (Indoor & Outdoor Installation)	
Mounting			Rear Panel	
Dimensions (H*W*D) [mm]			640*450*232	
Weight [kg]		29		33
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,G59-3,NBR 16149,NBR 16150,TF 3.2.1			