

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 Apparent 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	3/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 Phase / Connection Phase	3			
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	4000m (> 3000m 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,IEC61717,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			