

# On-grid Three Phase Inverter

## Suntrio Plus 25K/33K/40K/50K



### BENEFITS

#### Flexible and Efficient

- Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%
- Three MPPT which are compatible to all kinds of solar roofs
- Max. efficiency of 98.%, European efficiency of 98.8%
- Super wide input voltage range(180V-1000V), supporting various solar panels and string design

#### 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 adjusting & 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



**ANTARES**  
TECHNOLOGY

# Technical Data

## Suntrio Plus 25K/33K/40K/50K

Type	Suntrio Plus 25K	Suntrio Plus 33K	Suntrio Plus 40K	Suntrio Plus 50K
<b>Input (DC)</b>				
Max. DC Power [W]	30300	36300	48400	60500
Max. DC Voltage [V]			1000	
MPPT Voltage Range [V]		180-900		280-900
Nominal DC Voltage [V]			600	
Start Voltage[V]		200		300
Min. DC Voltage[V]		180		250
Max. DC Input Current PV1 / PV2 [A]		22/22/22		40/30/30
Number of MPPT			3	
Number of DC Connection Sets per MPPT		2/2/2		4/3/3
DC Switch			Integrated	
<b>Output (AC)</b>				
Rated AC Power [W](@230V,50Hz)	25000	30000	40000	50000
Max. AC Apparent Power [VA]	27500	33000	44000	55000
Rated AC Current [A]	37.9	45.5	61.0	76.0
Max. AC Current [A]	42.0	50.0	65.0	80.0
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		
<b>Efficiency</b>				
Max. Efficiency	98.6%	98.8%	98.8%	98.8%
Euro Efficiency (@ 600Vdc)	98.4%	98.5%	98.5%	98.5%
MPPT Accuracy		>99.5%		
<b>Protection</b>				
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		
<b>Interface</b>				
DC Connection		MC4/H4		
AC Connection		Terminal Block		
LCD & LED Display		3.5 inch Graphic LCD Display		
Display Language		English		
Communication port		2*RS485、1*RS232		
Communication		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		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]	700*530*260		800*550*280	
Weight [kg]	48		68	
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		