

Three Phase Grid-Connection Inverter STH17-25KTG



High Yield & Efficiency

- SiC power components to increase power generation.
- 150% PV array oversizing, 110% AC output overloading, 16 A input current per string to compatible with mainstream PV modules.
- Integrated anti-PID (Potential Induced Degradation) functions, significantly reduce the negative effect of PID.
- Low start-up voltage and wide MPPT voltage for more power generation time.

Safe & Reliable

- Type II AC & DC Surge Protection.
- Adaptable film bus capacitors to improve reliability of system.
- IP66 protection rating, C5 anti-corrosion rating, high environmental adaptability system integration.
- Supports AFCI Protection, preventing sparking or arcing that may potentially cause electrical hazard.
- Built-in RS485, supports WiFi and 4G, firmware updates by USB ports or remotely.
- LED indicators for different status, LCD display for realtime data reading.

Aesthetic & Compact

- Screw free cover design, integrated molding box without welding, good aesthetic & product stability and consistency.
- Light weight and compact size.
- Aluminum die-casting shell with reinforcing bars, 3 layer effective waterproof design, for harsh environment resistance.

Smart Management

- Supporting intelligent automatic I-V curve scanning for fault diagnosis, precisely positoning the abnormal string.
- Free online real-time monitoring of system power generation and energy management for end user, installer and retailer..

MODEL	STH17KTG	STH20KTG	STH22KTG	STH25KTG
Max. Input Power	25.5 kW	30 kW	33 kW	37.5 kW
Max. DC Voltage	1100 V			
Start-up Voltage	180 V			
Nominal Voltage	600 V			
MPPT Voltage Range	160-1000 V			
No. of MPP Trackers	2			
No. of PV Strings per MPP Tracker	2			
Max. Input Current per MPP Tracker	32 A			
Max. Input short Current per MPP Tracker	40 A			
Output Data (AC)				
Nominal Output Power	17 kW	20 kW	22 kW	25 kW
Max. AC Apparent Power	18.7 kVA	22 kVA	24.2 kVA	27.5 kVA
Nominal AC Voltage	230/400 V, 3L/N/PE or 3L/PE			
AC Grid Frequency	50/60 Hz			
Frequency Range	(45-55)/(55-65) Hz			
Max. Output Current (PF=0.9)	28.4 A	33.4 A	36.8 A	41.8 A
Power Factor	>0.99			
Adjustable Power Factor	0.8 leading...0.8 lagging			
THDi	<3% (Rated Power)			
Efficiency				
Max. Efficiency	98.5%			
European Efficiency	98.0%			
MPPT Efficiency	99.9%			
Protection				
Anti-flow Protection	Yes			
DC Reverse Polarity Protection	Yes			
DC Switch	Yes			
DC Surge Protection	Type II			
Insulation Resistance Monitoring	Yes			
Residual-current Monitoring Unit (GFCI)	Yes			
AC Short-circuit Protection	Yes			
AC Surge Protection	Type II			
Grid Monitoring	Yes			
Anti-islanding Protection	Yes			
Anti-PID Function	Yes			
AFCI Protection	Optional			
General Data				
Dimensions (W×H×D)	520 × 420 × 242 mm			
Weight	27 kg			
Operating Temperature Range	-25°C~+60°C (>45°C derating)			
Relative Humidity	0~100%			
Altitude	4000 m(>2000 m derating)			
Self-consumption at Night	<1 W			
Topology	Transformerless			
Cooling	Intelligent Air Cooling			
Protection Degree	IP66			
Guarantee Period	5 Years / 10 Years (Optional)			
Display	LED & LCD			
Communication	Yes: RS485/USB, Optional: 4G/WiFi			
Standards Compliance				
Grid Connection	NB/T 32004, G98/G99, VDE 0126, VDE 4105, VDE 0124, EN 50549-1/2, CEI0-21/CEI0-16, AS 4777.2, IEC 61727, IEC 62116, PEA, MEA			
Safety Standards	IEC 62109-1/2			
Others	EN 61000-6-1/2/3/4, IEC 61683, IEC 60068(1,2,14,30)			