

Three Phase Grid-Connection Inverter STH3-15KTG



High Yield & Efficiency

- Max. Efficiency of inverter is up to 98.6%.
- SiC power components to increase power generation.
- 150% PV array oversizing, 110% AC output overloading, 16A input current per string, compatible with mainstream PV modules.
- 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.
- Supporting 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 reliable harsh environment resistance.
- Fanless design, natural heat dissipation, low noise.

Smart Management

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

MODEL	STH3KTG	STH4KTG	STH5KTG	STH6KTG	STH7KTG	STH8KTG	STH9KTG	STH10KTG	STH11KTG	STH12KTG	STH13KTG	STH15KTG	
Max. Input Power	4.5 kW	6 kW	7.5 kW	9 kW	10.5 kW	12 kW	13.5 kW	15 kW	16.5 kW	18 kW	19.5 kW	22.5 kW	
Max. DC Voltage	1100 V												
Start-up Voltage	180 V												
Nominal Voltage	600 V												
MPPT Voltage Range	140-1000 V												
No. of MPP Trackers	2												
No. of PV Strings per MPP Tracker	1 / 1						1 / 2						
Max. Input Current per MPP Tracker	16A / 16A						16A / 32A						
Max. Input short Current per MPP Tracker	20 / 20 A						20 / 40 A						
Output Data (AC)													
Nominal Output Power	3 kW	4 kW	5 kW	6 kW	7 kW	8 kW	9 kW	10 kW	11 kW	12 kW	13 kW	15 kW	
Max. AC Apparent Power	3.3 kVA	4.4 kVA	5.5 kVA	6.6 kVA	7.7 kVA	8.8 kVA	9.9 kVA	11 kVA	12.1 kVA	13.2 kVA	14.3 kVA	16.5 kVA	
Nominal AC Voltage	230/400 V, 3L/N/PE												
AC Grid Frequency	50/60 Hz												
Frequency Range	(45-55)/(55-65) Hz												
Max. Output Current (PF=0.9)	4.8 A	6.4 A	8.0 A	9.6 A	11.2 A	12.8 A	14.3 A	15.9 A	17.5 A	19.1 A	20.7 A	23.9 A	
Power Factor	>0.99												
Adjustable Power Factor	0.8leading...0.8lagging												
THDi	<3% (Rated Power)												
Efficiency													
Max. Efficiency	98.4%						98.5%				98.6%		
European Efficiency	97.5%						98.0%				98.1%		
MPPT Efficiency	99.9%												
Protection													
Anti-flow Protection	Optional												
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												
String Fault Monitoring	/						Optional						
AFCI Protection	Optional												
General Data													
Dimensions (W×H×D)	440×370×140 mm						440×370×186 mm				440×370×186 mm		
Weight	13 kg						16 kg				17 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	Natural convection											Intelligent Air Coding	
Classificação de proteção	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)												