

Three Phase Grid-tied Inverter **STH100-136KTG**



High Yield

- 9-12 MPPT to achieve maximum power output for complex application scenarios;
- SiC power components to increase power generation.
- 150% PV array oversizing, 110% AC output overloading, 16A input current per string to compatible with bifacial and large PV modules;
- Low start-up voltage and wide MPPT voltage for more power generation time.
- Integrated anti-PID(Potential Induced Degradation) functions, Significantly reduce the negative effect of PID;

Safe & Reliable

- Type II AC & DC Surge Protection;
- Adapt 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 an electrical fire;
- Aluminum die casting shell with reinforcing bars, 3 layer effective waterproof design, to resist harsh environment;

User-friendly

- Independent AC terminal box design, save 30% installation time;
- Firmware update remotely or by USB interface;
- Online monitoring by slenergy Sonnex Tech app. via RS485/USB/Bluetooth
- Quick & Easy-to-install with basic tools, LED indicators for different status.

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	STH100KTG	STH110KTG	STH136KTG
Max. Input Power	150kw	165kw	204kw
Max. DC Voltage		1100 V	
Start-up Voltage		180 V	
Nominal Voltage		600 V	
MPPT Voltage Range		200~1000 V	
No. of MPP Trackers	9	9	12
No. of PV Strings per MPP Tracker		2	
Max. Input Current per MPP Tracker		32A	
Max. Input short Current per MPP Tracker		40 A	
Output Data (AC)			
Nominal Output Power	100kw	110kw	136kw
Max. AC Apparent Power	110kVA	121kVA	149.6kVA
Nominal AC Voltage	220/380V, 3L/N/PE or 3L/PE	230/400 V, 3L/N/PE or 3L/PE	312/540V,m 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)	166.7A	175A	160A
Power Factor		>0.99(Rated)	
Adjustable Power Factor Range		0.8leading...0.8lagging	
Max. Total Harmonic Distortion		<3% (Rated Power)	
Efficiency			
Max. Efficiency		98.5%	
European Efficiency		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		Yes	
AFCI Protection		Optional	
General Data			
Dimensions (W×H×D)		1040 x 700 x 350 mm	
Weight		88 kg	
Operating Temperature Range		-25°C~+60°C(>45°Cderating)	
Relative Humidity		0~100%	
Altitude		4000 m (>2000 m derating)	
Self-consumption at Night		<4W	
Topology		Transformerless	
Cooling		Intelligent Air Cooling	
Protection Rating		IP66	
Guarantee Period		5 Years / 10 Years (Optional)	
Display		LED	
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, CEIO-21/CEIO-16, AS 4777.2, IEC 61727, IEC 62116, PEA, MEA		
Safety Standards	EN/IEC 62109-1/2		
Others	EN/IEC 61000-6-1/2/3/4, IEC 61683, IEC 60068(1,2,14,30)		