

SH15/20/25T

Hybrid Three Phase Inverter



FLEXIBLE APPLICATION

- 100~700V wide battery voltage range
- Supports parallel connection with master-slave control
- Provides 100% power to unbalance loads in backup and grid-tied mode



ENERGY INDEPENDENCE

- Seamless transition to backup mode for protection against power outages
- 50A fast charging / discharging for higher consumption
- Support each-phase export power control



SMART MANAGEMENT

- High self-consumption with optimised built-in EMS
- Free online monitoring to enhance energy management
- Remote firmware update and customisable settings



EASY INSTALLATION

- Whole home backup available
- Unique push-in connectors for time-saving installation
- Extra quiet for residential installation



Type designation	SH15T	SH20T	SH25T
Input (DC)			
Recommended max. PV input power	30000 W	40000 W	50000 W
Max. PV input voltage		1000 V	
Min. PV input voltage / Startup input voltage		150 V / 180 V	
Rated PV input voltage		600 V	
MPP voltage range		150 V - 950 V	
No. of independent MPP inputs		3	
No. of PV strings per MPPT	2 / 1 / 1		2 / 2 / 1
Max. PV input current	64A(32A / 16A / 16 A)		80A (32A/32A/16A)
Max. DC short-circuit current	80A(40A / 20A /20A)		100A (40A/40A/20A)
Max. current for input connector		30 A	
Battery Data			
Battery type		Li-ion battery	
Battery voltage		100 V - 700 V	
Max charge / discharge current		50 A * / 50 A *	
Max charge / discharge power	30000 W / 15000 W	30000 W / 20000 W	30000 W / 25000 W
Input / Output (AC)			
Max. AC input power	15000 W	20000 W	25000 W
Max. AC power from grid		43000 W / 43000 VA(25°C)	
Rated AC output power	15000 W	20000 W	25000 W
Max. AC output apparent power	15000 VA	20000 VA	25000 VA
Rated AC output apparent power	15000 VA	20000 VA	25000 VA
Rated AC output current	21.8 A	29 A	36.3 A
Max. AC output current	22.8 A	30.4 A	37.9 A
Rated AC voltage		3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V	
AC voltage range		270 V - 480 V	
Rated grid frequency		50 Hz / 60 Hz	
Grid frequency range		45 Hz - 55 Hz / 55 Hz - 65 Hz	
Harmonic (THD)		< 3% (of rated power)	
Power factor at Rated power / Adjustable power factor		> 0.99 / 0.8 leading to 0.8 lagging	
Feed-in phases/connection phases		3 / 3-N-PE	
Backup Data			
Rated voltage		3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V	
Frequency range		50Hz / 60Hz	
Total harmonic factor output voltage(Linear load)		2%	
Back-up switching time		< 10 ms	
Rated output power	15000 W / 15000 VA	20000 W / 20000 VA	25000 W / 25000 VA
Peak output power **	25500 W/ 25500 VA,10s	32000 W/ 32000 VA,10s	36500 W/ 36500 VA,10s
Rated output power for backup load during on grid mode		43000 W / 43000 VA (25°C)	
Efficiency			
Max. efficiency / European efficiency	98.1 % / 97.7 %		98.2 % / 97.8 %
Protection & Function			
Grid monitoring		Yes	
DC reverse polarity protection		Yes	
AC short-circuit protection		Yes	
Leakage current protection		Yes	
DC switch (solar)		Yes	
Surge Protection		DC Type II / AC Type II	
PID recovery function		Yes	
On-grid parallel		Master-slave mode	
Battery input reverse polarity protection		Yes	
General Data			
Topology (solar / battery)		Transformerless / Transformerless	
Degree of protection		IP65	
Dimensions (W * H * D)		620 mm * 480 mm * 245 mm	
Weight	38 kg		40 kg
Mounting method		Wall-mounting bracket	
Operating ambient temperature range		-25 °C - 60 °C	
Allowable relative humidity range(Non-condensing)		0% - 100%	
Cooling method	Natural convection		Fan cooling
Max. operating altitude		2000m	
Noise(Typical)	35 dB (A)		50 dB (A)
Display		LED	
Communication		RS485, WLAN, Ethernet, CAN, 4 × DI, 2 × DO	
DC connection type		MC4 (PV) / Plug and play connector (battery)	
AC connection type		Plug and play connector	
Compliance	IEC / EN 62109, IEC / EN 61000-6, EN 62477-1, IEC 61727, IEC62920, EN55011, CISPR 11, VDE-AR-N-4105, AS/NZS 4777.2:2020, EN50549-1, NRS 097-2-1, TOR Type A+R25, CEI 0-21,PEA,MEA		
Country of manufacture	China		

* Depending on the connected battery

** Can be reached only if PV and battery power is sufficient.

