

SH5/10T

Hybrid Three Phase Inverter

NEW



FULL BACKUP

- Built-in 63A bypass for whole home backup
- 10ms seamless switch
- Peak output up to 15000VA(10s) in backup mode(SH10T)



FLEXIBLE APPLICATION

- Support 100% unbalance output in backup and on grid mode
- Max. 16A DC input current per string
- 50A fast charge/ discharge current



FRIENDLY INSTALLATION

- Plug & Play installation
- Quiet operation for indoor or outdoor installation



SAFE AND DURABLE

- Support precise AFCI
- IP65/C5



Type designation	SH5T	SH10T
Input (DC)		
Max. PV input power	10000 Wp	20000 Wp
Max. PV input voltage *		1000 V
Min. PV input voltage / Startup input voltage		150 V / 180 V
Rated PV input voltage		600 V
MPPT operating voltage range **		150 V - 950 V
No. of independent MPP trackers		2
No. of PV strings per MPPT	1 / 1	2 / 1
Max. PV input current	32 A (16 A / 16 A)	48 A (32 A / 16 A)
Max. DC short-circuit current	40 A (20 A / 20 A)	60 A (40 A / 20 A)
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	15000 W / 5000 W	15000 W / 10000 W
Input and Output (AC)		
Max. AC power from grid ****		43000 VA
Rated AC output power	5000 W	9999 W
Max. AC output apparent power	5000 VA	9999 VA
Max. AC output current	7.6 A	15.2 A
Rated AC voltage	3 / N / PE , 220 V / 380 V ; 230 V / 400 V ; 240 V / 415 V	
AC voltage range		270 V - 480 V
Rated grid frequency		50 Hz / 60 Hz
Grid frequency range		45Hz - 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 (on grid mode)		
Max. output power for backup load ****		43000 W
Max. output current for backup load		3 * 63 A
Backup data (off-grid mode)		
Rated voltage	3 / N / PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V (± 2 %)	
Rated frequency		50 Hz / 60 Hz (± 0.2 %)
THDV(@Linear load)		< 2 %
Backup switch time		< 10 ms
Rated output power	5000 W / 5000 VA	10000 W / 10000 VA
Peak output power *****	10000 W / 10000 VA , 10 s	15000 W / 15000 VA , 10 s
Efficiency		
Max. efficiency / European efficiency	97.9 % / 97.2 %	98.0 % / 97.5 %
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 zero		Yes
Battery input reverse polarity protection		Yes
General data		
Topology (solar / battery)		Transformerless / Transformerless
Degree of protection		IP65
Protective class		Protective class I
Overvoltage category		III[AC]; II[PV]; [BATTERY]
Active anti-islanding method		Frequency shift
Dimensions (W * H * D)		620 mm * 480 mm * 195 mm
Weight		32 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
Max. operating altitude		2000
Noise(Typical)		35 dB (A)
Display		LED
Communication		RS485, WLAN, Ethernet, CAN
DI / DO		DI * 4 / DO * 2 / DRM0
DC connection type		Plug and play connector (PV, Max.6 mm ² / battery, Max.10 mm ²)
AC connection type		Plug and play connector (Max.16 mm ²)
Compliance		IEC / EN 62109, IEC 61000-6, EN 62477-1, IEC 61727, IEC62116, IEC62920, EN55011, CISPR 11, VDE-AR-N-4105, EN50549-1, AS/NZS 4777.2:2020, TOR Type A, R25, NC RFG, PSE 2018, NTS V2.1 Type A, UNE217001, UNE 217002, RD, CEI 0-21
Country of manufacture		China

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection ** Please refer to the user manual for the full load MPPT voltage range *** Depending on the connected battery **** Please refer to the user manual and modify the settings based on actual load power ***** Can be reached only if PV and battery power is sufficient