

SH10-15TA



SAFE AND DURABLE

- UL 9540 A&B Certified
- Cell-level monitoring & Pack-level active fire suppression
- AFCI 3.0 (Sub-second arc fault) & Explosion-proof design
- Fully compliant with all strict EU data privacy regulations



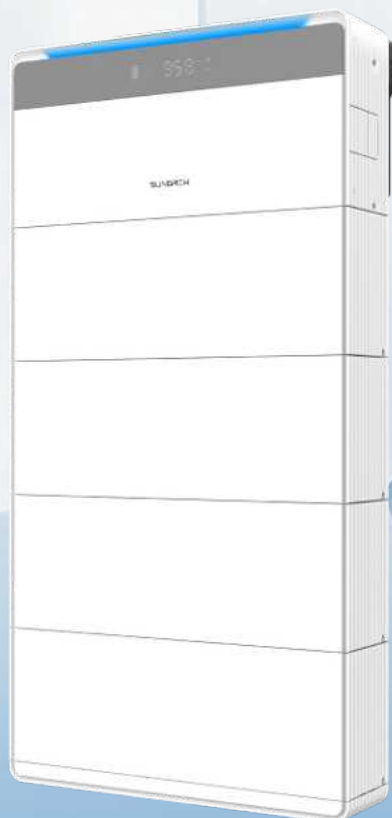
HIGHER RETURNS

- Optimized thermal design for dynamic tariffs and VPP, with stronger high-temperature performance and intelligent low-temperature heating
- 314Ah Ultra-Capacity Cells with battery optimizer, sustaining 0.66P discharge with full AC output¹⁾
- 1.6x PV to Battery Fast Charging captures midday solar (Zero curtailment)
- 150% Phase Unbalanced Output: Perfectly matches real-world 3-phase homes with heavy single-phase loads²⁾



FRIENDLY INSTALLATION

- Modular minimalist stacked installation & RJ45 quick-connect
- All-new iHomeManager Mini: no wiring, fast installation. All-new app UI: smart diagnostics and a consumer-grade user experience
- Easy Backup' with EnergyBridge
- Scalable solar-storage-charging system



¹⁾ Support 0.66P maximum discharge in VPP scheduling scenario

²⁾ 120% Phase Unbalanced Output for SH15TA

Technical data sheet	SH10TA	SH12TA	SH15TA
Input (DC)			
Max. PV input power	20000 Wp	24000 Wp	30000 Wp
Max. usable PV input power	16000 W	19200 W	24000 W
Max. PV input voltage ¹⁾		1000 V	
Min. PV input voltage / Startup input voltage		100 V / 100 V	
Rated PV input voltage		600 V	
MPPT operating voltage range ²⁾		100 V – 950 V	
No. of independent MPP trackers		3	
No. of PV strings per MPP tracker		1 / 1 / 1	
Max. PV input current		20 A / 20 A / 20 A	
Max. DC short-circuit current		25 A / 25 A / 25 A	
Max. current for input connector		30 A	
On Grid Output			
Max. AC input power	10000 W	12000 W	15000 W
Rated output power	10000 W	12000 W	15000 W
Max. output apparent power	11000 VA	13200 VA	16500 VA
Max. output current (@ 220 V / 230 V / 240 V)	15.2 A / 14.5 A / 13.9 A	18.2A / 17.4 A / 16.7 A	22.8 A / 21.8 A / 20.9 A
Rated voltage	220 V / 380 V; 230 V / 400 V; 240 V / 415 V		
Voltage range	155 V – 277 V / 268 V – 480 V		
Rated grid frequency	50 Hz / 60 Hz		
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz		
THD (at rated power)	≤ 3 %		
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		
Efficiency			
Max. efficiency	98.10%		
European efficiency	97.20%		
Output (AC backup) during on-grid mode			
Max. connectable power for backup load ³⁾	43000 W		
Max. output current for backup load	63 A		
Output (AC backup) during off-grid mode			
Rated voltage	3 / N / PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V		
Rated frequency	50 Hz / 60 Hz		
THDv (linear load)	< 3 %		
Backup switch time	0 ms		
Rated output power	10000 W	12000 W	15000 W
Peak output power (10S)	15000 VA	18000 VA	22500 VA
Protection & Function			
Grid monitoring	Yes		
PV / Battery input reverse polarity protection	Yes		
AC short-circuit protection	Yes		
Leakage current protection	Yes		
Arc fault circuit interrupter (AFCI)	Yes		
DC switch (solar)	Yes		
Surge Protection	DC Type II / AC Type II		
PID Zero	Yes		
Active anti-islanding method	Yes		
Parallel operation on grid port	Master-slave mode		
General Data			
Topology (Inverter)	Non-isolated		
Degree of protection	IP66		
Protective class	class I		
Overvoltage category	III [AC]; II [PV]; II [BATTERY]		
Dimensions (W × H × D)	788 mm × 375 mm × 255 mm		
Weight	≤ 41 kg		
Mounting method	Floor stand		
Operating ambient temperature range ⁴⁾	-25°C to 60°C		
Allowable relative humidity range (Non-condensing)	0 % – 95 %		
Cooling method	Natural convection		
Max. operating altitude	2000 m		
Noise (Typical)	30 dB (A)		
Display	LED		
Communication	RS485, WLAN, Ethernet, CAN, FE		
DI / DO	DI × 2 / DO × 3 / DRMO × 1		
DC connection type	Plug and play connector (PV, Max. 6 mm²)		
Battery connection type	Stackable		
AC connection type	OT terminal (Max. 16 mm²)		
Compliance	IEC/EN 62109-1, IEC/EN 62109-2, IEC 60730-1, IEC/EN 62477-1, IEC 60068, IEC/EN 62920, EN 61000-6-1/-3, EN 61000-6-2/-4, CISPR 11, EN 55011, IEC 62116 IEC 61727, IEC 61683, EN 50530, EN50549-1/2		
Scalability	Energy Bridge		
Country of manufacture	China		

	SMD060	SMD090	SMD100
System Data			
Battery type	LiFePO4 Prismatic Cell		
Cell capacity	314 Ah		
Cycle life ⁵⁾	10000		
Energy (usable) ⁶⁾	5.7 kWh	8.7 kWh	9.7 kWh
Nominal energy	6.0 kWh	9.0 kWh	10.0 kWh
Operating voltage	300 V – 950V		
Max. charging/discharging current	7.8 A / 9.4 A	11.7 A / 14.1 A	13.0 A / 15.7 A
Max. charging/discharging power	3100 W / 3800 W	4660 W / 5690 W	5180 W / 6300 W
Rated. charging/discharging power	3100W / 3000 W	4660 W / 4500 W	5180 W / 5000 W
Peak charging/discharging power(10S)	3410W / 4150 W	5120 W / 6270 W	5700 W / 6720 W
Depth of discharge ⁷⁾	Max. 100%DOD (settable)		
Display	SOC indicator, Status indicator		
Communication interface	CAN		
Protection			
Over/under voltage protection	Yes		
Over current protection	Yes		
Over/under temperature protection	Yes		
Disconnecter	Yes		
General Data			
Dimensions (W*H*D)	788 mm × 280 mm × 255 mm		
Weight(±1)	58 kg	76 kg	79 kg
Installation location	Indoor / Outdoor		
Mounting method	Floor stand		
Operating ambient temperature range	Charge: -20 to 50 °C ; Discharge: -20 to 50 °C		
Degree of protection	IP66		
Allowable relative humidity range (Non-condensing)	5 % – 95 %		
Max. operating altitude	Max. 2000 m		
Cooling method	Natural convection		
Certificates	CE, CB, IEC 62619, IEC 62040, UN38.3, VDE 2510-50, IEC62477, IEC63056		
Scalability	2 in parallel		
Number of modules per controller	1 ~ 6		
Country of manufacture	China		

¹⁾ Input voltage exceeding the MPPT operating voltage range triggers inverter protection.

²⁾ Please refer to the user manual for the full load MPPT voltage range.

³⁾ Please refer to the user manual and modify the settings based on actual load power.

⁴⁾ >45°C Derating"

⁵⁾ Life cycle test conditions: 90% DOD, 0.5C charge & discharge at 25°C.

⁶⁾ Refers to the usable energy capacity. Battery must be recharged within 7 days after being fully discharged to keep battery healthy.

⁷⁾ Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.