

SunStorage **HOME**

STE-6/9A-4/5/6/8/10/12HT-25

Stackable Design

Storage System for
Residential Scenario



Smart Three-phase Design

Adopting a modular approach with internal plugin connections between modules for easy installation.



Up to 150% high DC/AC

Power oversizing capability delivers more PV power to supply loads and charge batteries simultaneously.



Expandable Capacity

Flexible expansion by mixing old & new batteries, plus self-heating for all-climate reliability, allows flexible expansion up to 6 battery packs.



Seamless on/off Grid switch

<10ms seamless auto switching. Smooth transition to backup power ensures continuity during power outages.



Inverter Models	STE-4HT-25	STE-5HT-25	STE-6HT-25	STE-8HT-25	STE-10HT-25	STE-12HT-25
PV Input						
Start-up Voltage(V)				135		
Max. PV Input Voltage(V)*				1000		
Rated PV Input Voltage(V)				620		
MPPT Operating Voltage Range(V)*	120~950	120~950	120~950	200~950	200~950	200~950
No. of MPP Trackers	2	2	2	2	2	2
Max. Input Current per MPPT(A)	15/15	15/15	15/15	15/15	15/15	15/15
Grid Side(On-Grid)						
Rated Output Power(kW)	4	5	6	8	10	12
Max. Output Apparent Power(kVA)	4.4	5.5	6.6	8.8	11	13.2
Rated AC Voltage(V)			3L/N/PE; 220/380; 230/400; 240/415			
Rated AC Frequency(Hz)			50/60			
Rated Output Current(A)	6.1/5.8/5.6	7.6/7.3/6.9	9.1/8.7/8.3	12.1/11.6/11.1	15.2/14.5/13.9	18.2/17.4/16.7
Max. Output Current(A)	6.7	8.3	10.0	13.3	16.5	20
Power Factor			0.8 leading ...0.8 lagging			
THDi (@Rated Power)			< 3%			
Max. Input Apparent Power(kVA)**	8.0	10.0	12.0	16.0	16.5	16.5
Max. AC Input Current(A)	11.6	14.5	17.4	23.2	23.9	23.9
Back-up Side (Off-Grid)						
Rated Output Power(kW)	4	5	6	8	10	12
Peak Output Apparent Power(kVA)	9@10s	9@10s	9@10s	18@10s	18@10s	18@10s
Rated Output Voltage(V)			3L/N/PE; 220/380; 230/400; 240/415			
Rated Output Frequency(Hz)			50/60			
Rated Output Current(A)	6.1/5.8/5.6	7.6/7.3/6.9	9.1/8.7/8.3	12.1/11.6/11.1	15.2/14.5/13.9	18.2/17.4/16.7
On/Off-grid Switching Time(ms)			< 10			
THDv (@Linear Load)			< 3%			
Efficiency						
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%
Max. Efficiency	98.10%	98.10%	98.10%	98.20%	98.20%	98.20%
European Efficiency	97.30%	97.30%	97.30%	97.40%	97.40%	97.40%
Protection						
Integrated Protection	DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection /Surge protection(DC/AC: Type II/Type II) / Over-temperature protection / Residual current protection /Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection					
General Data						
Dimensions(W×H×D mm)	534×418×210(Inverter)					
Weight(kg)	26					
Ingress Protection	IP65					
Standby Self-consumption(W)	< 15					
Topology	Transformerless					
Operating Temperature Range(°C)	-30~60					
Relative Humidity(%)	0~100					
Max. Operation Altitude(m)	3000					
Over Voltage Category	II(PV+Battery), III(Mains)					
Cooling	Natural Convection					
Noise Level(dB)	< 25					
Display	LED & OLED					
Communication	CAN, RS485					
Battery Model			STE-6A-DC		STE-9A-DC	
Specifications						
Battery Type	LiFePO ₄					
Nominal Capacity(kWh)	6.02				9.04	
Rated Charge/Discharge Power(kW)	3				4.5	
Peak Charge/Discharge Power(10 seconds)(kW)	4.5				6.75	
Usable Energy(90% DoD)(kWh)	5.83				8.76	
Scalability	1~6					
General Data						
Dimensions(W×H×D mm)	745×345×310					
Weight(kg)	69.3				87.4	
Installation Method	Floor stacked					
Cooling	Natural Convection					
Ingress Protection	IP65					
Relative Humidity	5% to 95%, Non-condensation					
Operating Altitude(m)	< 3000					
Operating Temperature Range(°C)	-20~55 (Charging: 0~55, discharging: '-20~55)					
Storage Temperature Range(°C)	-30~60					
Display	LED					
Warranty	10 years					
Control Box			STE-CB-6U			
Operating Voltage Range(Three Phase)(V)	600-900					
Weight(kg)	8.2					
Dimensions(W×H×D mm)	745×345×160					
Communication	CAN					

*:PV Max. input voltage is 950V without batter, or 850V with batter, otherwise inverter will be waiting;

**Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;