



Three-phase Residential Energy Storage System

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Sirius PV

Residential Energy Storage System

Three-phase ESS
SiriuStorage
5K3 -12K3 Series



Independent

- Built-in EMS function with multi-mode operation
- Real uninterruptible power supply, switching time <10ms
- Stronger back up power up to 20kW



Simple

- All-in-one design
- Modular installation & Quick plug connector
- Multiple battery expansion & Multiple system expansion



Safe

- Physical and electrical dual isolation
- Modular fire protection integration.
- AFCI function integration (optional)



Smart

- Multi-point real-time monitoring, adaptive SOC management
- PACK-level battery management, active balance of charging and discharging
- Intelligent energy management with weather forecast function

System Specification

Items	SiriuStorage 5K3 Series	SiriuStorage 6K3 Series	SiriuStorage 8K3 Series	SiriuStorage 10K3 Series	SiriuStorage 12K3 Series
System components					
Inverter model	SiriuStorage 5K3	SiriuStorage 6K3	SiriuStorage 8K3	SiriuStorage 10K3	SiriuStorage 12K3
Number of Inverter	1				
Battery system model	SiriuStorage 5h				
Number of battery module	1~8				
General					
Cell technology	LiFePO4				
System capacity	5~40kWh				
Rated system power	5kW	6kW	8kW	10kW	12kW
Dimension (W*H*D)	800*1995*240mm/31.49*78.54*9.45in (four battery modules, with foundation)				
Noise emission	<30dB				
Cooling type	Natural cooling				
Altitude	3000 m (Derating above 2000 m)				
Operating temperature	-20~50°C/-4~122°F				
Recommended operating temperature	15~30°C/59~86°F				
Operating humidity	0~100%RH (Non-condensing)				
Display	LED & APP				
Installation method	Floor or Wall-mounted (optional)				
Communication Interface	Portal-WiFi (standard)/4G (optional), Meter-RS485, EMS-RS485 (sunspec)				

Hybrid Inverter Specification

Items	SiriuStorage 5K3 Series	SiriuStorage 6K3 Series	SiriuStorage 8K3 Series	SiriuStorage 10K3 Series	SiriuStorage 12K3 Series
DC Input (PV)					
Recommended Max. PV input power	23kWp		29kWp		
Max. PV input voltage	1000Vdc				
No. of MPPTs	2				
No. of PV strings per MPPT	1/1		2/1		
Max. PV input current	16A/16A		27A/16A		
Max. short current	20A/20A		34A/20A		
MPPT voltage range	150~900Vdc				
Starting voltage	180Vdc				
DC (PV) switch	Yes				
DC Input (Battery)					
Battery voltage range	650~900Vdc				
AC Input and Output (On-grid)					
Rated AC output power	5kW	6kW	8kW	10kW	12kW
Rated AC output voltage	380/400Vac, 3W/N/PE				
Grid voltage range	323-418Vac/340-440Vac				
Max. output current	7.9A	9.6A	12.8A	16A	17.4A
Max. input current	14.4A	17.4A	23.2A	26A	26A
Rated grid frequency	50Hz/60Hz				
Grid frequency range	45~55Hz/55~65Hz				
Power factor	>0.99 (rated power)				
Adjustable power factor	0.8 (leading)~0.8 (lagging)				
THDI	<3% (rated power)				
AC Output (Back-up)					
Rated AC output voltage	380/400Vac, 3W/N/PE				
Rated output frequency	50/60Hz				
Rated output power	5kW	6kW	8kW	10kW	12kW
Peak output power	12kW, 60s		20kW, 60s		
Peak output current	18.2A, 60s		30.4A, 60s		
Switch time ¹	<10ms (without parallel), <300ms (parallel)				
Support the unbalance load	Yes				
Efficiency					
Max. efficiency	98.3%				
European efficiency	97.5%				
General					
Weight	27kg/59.52lb (including side plates)				
Dimension (W*H*D)	800*400*200mm/31.49*15.75*7.87in (including side plates)				
Enclosure type	IP65				
Certification	EN IEC 62109-1/2, EN IEC 61000-6-1/2/3/4, EN 50549-1 NC RfG, PPDS, CEI 0-21, VDE AR-N-4105, VDE V 0124-100, TOR Erzeuger Typ A				

*Specifications are subject to change without prior notice.

*1: Except for countries with special requirements.