PP-S2

Residential Single-Phase All-In-One Energy Storage System
3.6-10kW / 4.99-19.9kWh

Max. 2 times
Photovoltaic Oversizing

16 A
Max. PV Input Current Per String

50 A
Fast Charge / Discharge Current

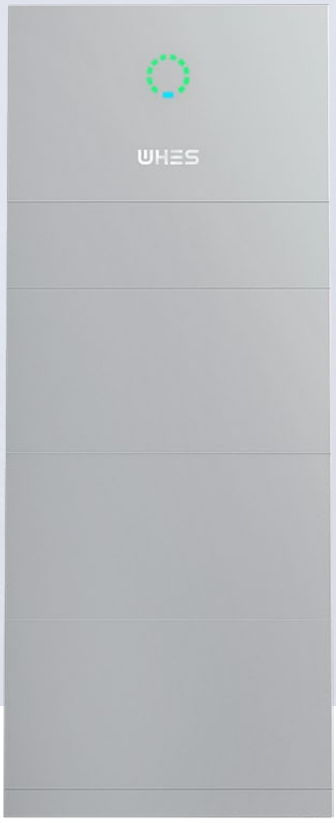
< 10 ms
EPS Switching Time Full House Backup Available [1]

-20 °C
Operating Temperature, Heating Module Inside

Built-in FSS
Built-in Aerosol Fire Suppression System

Powered by ECOS Smart Home From WHES

Battery Heating Technology



Convenient
- Built-in meter function simplifies communication wiring.
- Integrated plug-in terminal , saving 75% installation time between modules.

Flexible
- 4.992kWh per battery module, up to 4 battery modules for a single unit.
- Supports up to 5 units in parallel.

Safe
- Four-layer protection design, including built-in fire suppression system.
- Supports AFCI for enhanced system safety.
- Long life cell, meeting the most stringent safety standards – UL9540A.

Friendly
- Supports optional intelligent heating module, providing a wider operating temperature range.
- < 25 dB, no noise pollution.
- Supports DRM, Ripple Control, and §14a EnWG.

Contact Us
www.whes.com
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[1] Only for SIA-8/10kW.

PP-S2

Technical Specifications

Model	SIA-3.6kW	SIA-4.6kW [1]	SIA-5kW	SIA-6kW	SIA-8kW	SIA-10kW
PV Input						
Max. PV Input Power	7360 Wp	9200 Wp	10000 Wp	12000 Wp	16000 Wp	20000 Wp
Max. Input Voltage	600 V					
Rated Input Voltage	360 V					
Start-up Voltage	90 V					
MPPT Voltage Range	50...560 V					
Max. Input Current	32 A (16 A * 2)				64 A (32 A * 2)	
Max. Input Short Circuit Current	44 A (22 A * 2)				88 A (44A * 2)	
No. of MPPT	2				2	
No. of PV Strings per MPPT	1				2	
Battery Model						
Battery Type	LFP , 3.2 V / 52 Ah					
Battery PACK Configuration	1P*30S, 4.992 kWh					
Battery Capacity	4.992...19.968 kWh					
Voltage Range	80...500 V					
Max. Charging/Discharging Current	50 / 50 A					
AC Input/Output						
Rated Input/Output Power	7360 W / 3680 W	9200 W / 4600 W	10000 W / 5000 W	12000 W / 6000 W	14490 W / 8000 W	14490 W / 10000 W
Max. Apparent Input/Output Power	7360 VA / 3680 VA	9200 VA / 4600 VA	10000 VA / 5000 VA	12000 VA / 6000 VA	14490 VA / 8000 VA	14490 VA / 10000 VA
Rated Input / Output Current	32 A / 16 A	40 A / 20 A	43.5 A / 21.8 A	52.2 A / 26.1 A	63 A / 34.8 A	63 A / 43.5 A
Max. Input / Output Current	32 A / 16 A	40 A / 20 A	43.5 A / 21.8 A	52.2 A / 26.1 A	63 A / 34.8 A	63 A / 43.5 A
Rated Output Voltage	1/N/PE, 220 V / 230 V / 240 V					
Rated Frequency	50/60 Hz					
Power Factor	1 (-0.8...+0.8 adjustable)					
Total Harmonic Distortion (THDi)	< 3%					
EPS Output						
Rated Outpout Power [2]	3680 W	4600 W	5000 W	6000 W	8000 W	10000 W
Peak Apparent Output Power	1.5 times of rated power, 10s	1.5 times of rated power, 10s	1.5 times of rated power, 10s	1.5 times of rated power, 10s	1.5 times of rated power, 10s	14490W, 10S
Rated Output Voltage	1/N/PE, 220 V / 230 V / 240 V					
Rated Output Current	16 A	20 A	21.8 A	26.1 A	34.8 A	43.5 A
Rated Frequency	50/60 Hz					
Back-up Switch Time	< 10 ms					
Power Factor	1 (-0.8...+0.8 adjustable)					
Total Harmonic Distortion (THDi)	< 2%					
Efficiency						
PV Max. Efficiency	97.80%					
PV Europe Efficiency	97.30%					
Protection						
Over/Under Voltage Protection, DC Isolation Protection, DC Injection Monitoring, Residual Current Detection, Anti-islanding Protection, Over LoadProtection, Battery Input Reverse Polarity Protection, PV Reverse Polarity Protection, Surge Protection, Over Heat Protection, AFCI (optional)						
General Data						
Topology	Non-isolated					
Dimensions (W*D*H)	600*350*370 mm (Inverter module), 600*350*210 mm (High Voltage Box and Base), 600*350*305 mm (Battery module)					
Weight	27.4 kg (Inverter module), 11 kg (High Voltage Box and Base), 57 kg (Battery module)					
Operating Temperature Range	-20°C...+55°C [3]					
Relative Humidity	0%...95%					
Altitude	≤3000 m					
Cooling	Natural Convection					
Noise	< 25 dB					
Ingress Protection	IP 65					
Display	LED / APP					
Communication	RS485 / CAN					
Installation	Floor-standing					
Standard [4]	UN 38.3, IEC 61000, IEC 62619, IEC 63056, IEC 62109, IEC 62040, AS/NZS 4777.2, EN 50549-1/-10, G98/G99, CEI 0-21					

[1] Only for Germany.

[2] Depends on the input power of the photovoltaic and batteries.

[3] This is the operating temperature when the intelligent heating module is built-in, if not, the operating temperature is Charge: 0°C...50°C, Discharge: -20°C...+55°C.

[4] For all standards refer to the certificates category on the WHES website.

* The product features a shiny silver color design with a mirror-like logo, which exhibits subtle color variations under different lighting conditions.

* All information reflects the current state of technology at the time of printing and is subject to change. Despite careful editing, no liability is assumed.