

Low Voltage Battery 5 to 20 kWh

Ai-LB-G3 Series



Models:
ASW5120-LB-G3



Optimal performance

- Low self and standby consumption
- Enhanced SOC measurement accuracy for optimal battery management
- Supports up to 1C charge / discharge rate



Safe & Reliable

- IP66 rated design for indoor and outdoor use
- Designed in accordance with global safety standards
- Integrated fire suppression system
- Smarter and safer battery management system for precise diagnostics
- Integrated MOSFET and dual fuse protection for superior safety and reliability

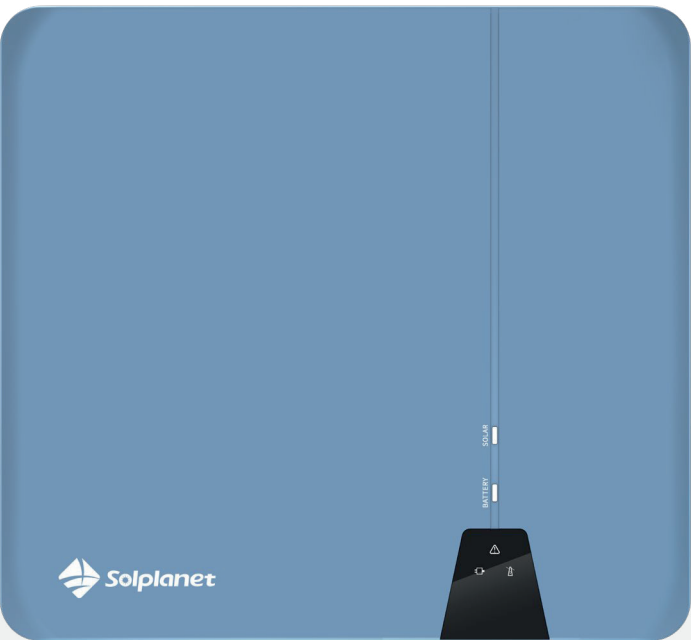


User-friendly

- Stackable up to 4 modules, 20.48 kWh per tower
- Elegant design with concealed cable management
- Compact, lightweight modules for easier handling and installation
- 5 selections for operating (LED) indicator via Solplanet App

Single phase hybrid inverters 3 to 6 kW

ASW H-S2 Series



Models:
ASW3000H-S2
ASW3680H-S2
ASW4000H-S2
ASW5000H-S2
ASW6000H-S2



Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Solplanet apps
- Compact wall mount design



Reliable

- Smart energy management
- UPS capability - power during blackouts
- IP66 rated design for outdoor use



User-friendly

- User friendly app interface
- Online monitoring via Wi-Fi and Solplanet apps
- ShadeSol shadow management

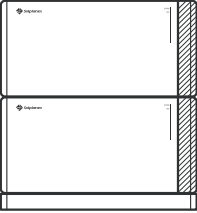
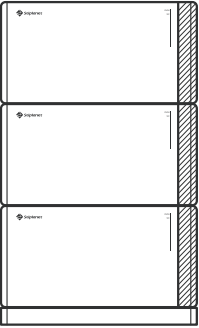
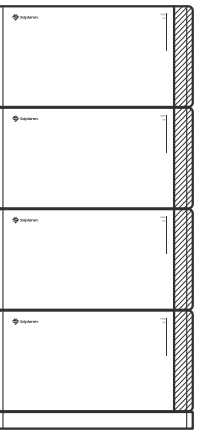
Technical Datasheet

		ASW3000H-S2	ASW3680H-S2	ASW4000H-S2	ASW5000H-S2	ASW6000H-S2
PV Input	Max. PV array power	5500 Wp STC	6180 Wp STC	6500 Wp STC	7500 Wp STC	9000 Wp STC
	Max. input voltage	550 V				
	MPP voltage range / rated input voltage	40 V to 530 V / 380 V				
	Min. input voltage / start voltage	40 V/ 50 V				
	No. of independent MPPT trackers / strings per MPPT input	2 / 1				
	Max. input current per MPP tracker	16 A				
	Max. short-circuit current per MPP tracker	20 A				
Battery input	Nominal battery voltage	48 V				
	Battery voltage range	40 V to 60 V				
	Max. charging / discharging power	5000 W / 5000 W				
	Max. charging current / Max. discharging current	100 A / 100A				
	Battery type	LiFePO4				
	Compatible Battery	Aiswei Ai-LB series ^{*3}				
AC output	AC voltage range / Nominal AC voltage	180 V to 280 V / 220, 230 V				
	Rated AC grid frequency	50 Hz / 60 Hz				
	AC grid frequency range	50 Hz±5Hz / 60 Hz±5Hz				
	Rated active power	3000 W	3680 W	4000 W	5000 W ^{*1}	6000 W
	Rated apparent power	3000 VA	3680 VA	4000 VA	5000 VA ^{*1}	6000 VA
	Max. apparent power	3000 VA	3680 VA	4000 VA	5000 VA ^{*1}	6000 VA
	Rated grid output Current (@230V)	13.1 A	16 A	17.4 A	21.7 A ^{*2}	26.1 A
	Max. grid output current	13.6 A	16 A	18.2 A	22.7 A ^{*2}	27.3 A
	Harmonics THDi (@ Nominal power)	< 3%				
AC input	Rated grid voltage	a.c. 220, 230V				
	Rated apparent power	6000 VA				
	Max. input apparent power from grid	6000 VA				
	Rated input current from grid	a.c. 26.1 A				
	Max. input current from grid	a.c. 27.3 A				
EPS output	Nominal output voltage	220, 230 V				
	Nominal output frequency	50 Hz / 60 Hz				
	Rated apparent power	5000 VA				
	Max. output apparent power	5000 VA				
	Peak output apparent power	7500 VA, 10s				
	Rated Current (@230V)	21.7A				
	Max. output current	21.7A				
	Max. switch time	≤ 10 ms				
	Output THDi (@ Linear load)	<3%				
Effi- ciency	MPPT efficiency	99.90%				
	Euro efficiency / Max. efficiency	97% / 97.6%				
	Max. battery to load efficiency	94.70%				
Safety protection	DC-side disconnection device	●				
	PV string- / Battery input reverse polarity protection	● / ●				
	All-pole sensitive residual current monitoring unit	●				
	Anti-islanding protection	●				
	Ground fault protection	●				
	AC output over current / short circuit current protection	● / ●				
	AC over voltage protection	●				
	Protection class (as per IEC 62109-1) / overvoltage category (as per IEC 62109-1)	I / AC: III; DC: II				
	Arc fault circuit interrupter (AFCI)	○ ⁴				
General data	Power factor at rated power / adjustable displacement	≥0.99 / 0.8 leading to 0.8 lagging				
	Dimensions (W / H / D)	483 / 455 / 193.5 mm				
	Device weight	25.1kg				
	Operating temperature range	-25 °C ... +60 °C				
	Noise emissions (typical)	30 dB(A)				
	Standby consumption	< 10 W				
	Cooling concept	Natural convection				
	Degree of protection (as per IEC 60529)	IP66				
	Climatic category (according to IEC 60721-3-4)	4K4H				
	Max. permissible value for relative humidity (non-condensing)	100%				
	Max. operating altitude	4000m (>3000m power derating)				
	Country of manufacture	THE PEOPLE'S REPUBLIC OF CHINA				
Features	User interface	LED & App				
	Communication with BMS	CAN				
	Communication with meter	RS485				
	Communication with portal	WIFI stick / LAN				
	Other communication	DRM				
	Integrated power control / Zero export control	● / ●				

● Standard features / ○ optional features / – not available
*1 For VDE-AR-N4105,Smax=Sn=4600VA,Pn=4600W *2 For AS/NZS4777.2,Iac max=21.7A *3 Including but not limited to the listed models, please check the website@solplanet for more compatible models * Please consult local sales team for product availability



Technical Datasheet

System Data	Battery module	ASW5120-LB-G3			
	Module number	1	2	3	4
					
	Cell type	LiFePO4			
	Rated capacity	100 Ah			
	Nominal energy ¹	5.12 kWh	10.24 kWh	15.36 kWh	20.48 kWh
	Usable energy ²	4.86 kWh	9.72 kWh	14.59 kWh	19.45 kWh
	Nominal battery voltage	51.2 V			
	Battery voltage range	40 V ~ 58.4 V			
	Recommended charge / discharge current	60 A	120 A	180 A	210 A
General Data	Max. charge / discharge current	100 A	200 A	210 A	210 A
	Rated charge / discharge power	3.07 kW	6.14 kW	9.22 kW	10.75 kW
	Max. charge / discharge power	5.12 kW	10.24 kW	10.75 kW	10.75 kW
	Dimensions (W / D / H)	630 / 185 / 320 mm	630 / 185 / 640 mm	630 / 185 / 960 mm	630 / 185 / 1280 mm
	Module weight	46.0 kg	92.0 kg	138.0 kg	184.0 kg
	Base weight	2.6 kg			
	Installation location	Indoor / Outdoor			
	Mounting method	Floor mounted / Wall mounted			
	Operating temperature range	Charging: -8 °C ~ 58 °C Discharging: -18 °C ~ 58 °C			
	Storage temperature range	-20°C ~ 60°C			
	Cooling concept	Natural convection			
	Protective class	II			
	Degree of protection	IP66			
	Relative humidity	5 % ~ 95 % RH, non-condensing			
	Max. operating altitude	4000 m (> 3000 m derating)			
	Communication	CAN			
	Certification	IEC 62619, IEC 62040, IEC 62477 , IEC 63056, IEC 61000			
	Life cycle ³	6000 times			
	Round-trip efficiency	≥ 95 %			

1. Nominal energy is defined under the following conditions: battery voltage 40 ~ 58.4V, 0.5C charge & discharge at +25 °C.
2. Usable energy is defined under the following conditions: 0.5C charge & discharge at +25 °C, 95 % DOD.
3. Life cycle is defined under the following conditions: 0.5C charge & discharge at 25 °C (One cycle a day), 90 % DOD, 70 % EOL.
*For reference only. Please refer to the official release for final content.

Version: Nov 2024

