Three phase hybrid inverters 5 to 12 kW

ASW H-T2 Series

Models :
ASW05kH-T2
ASW06kH-T2
ASW08kH-T2
ASW10kH-T2
ASW12kH-T2

Easy-to-install

- Quick and easy-to-install with standard tools
- Compact wall mount design
- Simple battery and smart meter interfaces for quick and secure installation

Safe & reliable

- Up to 150 % PV array oversizing for higher yields
- Available with or without asymmetrical power output [1]
- UPS level switching time < 10 ms
- IP66 rated design for indoor and outdoor use
- Arc fault circuit interrupter (AFCI) [2]
- ShadeSol shadow management

User-friendly

- Smart setup, commissioning and monitoring via Solplanet App
- Intelligent operation modes and smart battery management for DOD / Time of Use / Power setting
- Max. 20 A input current, ideal for bifacial and large PV modules
- Supporting parallel for on-grid and

Technical Datasheet

		ASW05kH-T2	ASW06kH-T2	ASW08kH-T2	ASW10kH-T2	ASW12kH-T2
PV input	Max. PV array power	7500 Wp	9000 Wp	12000 Wp	15000 Wp	18000 Wp
	Max. input voltage	1100 V [5]				
	MPP voltage range / rated input voltage	150 V - 950 V / 630 V		200 V - 950 V / 630 V [3]		
	Min. input voltage / start voltage	60 V / 180 V				
	No. of independent MPPT trackers / strings per MPPT input	2 / 1				
	Max. input current / Max. power per MPP tracker	20 A / 7500 W	20 A / 9000 W	20 A / 10000 W	20 A / 10000 W	20 A / 10000 W
	Max. short-circuit current per MPP tracker	30 A				
Battery input	Battery voltage range	120 V - 600 V [5]				
	Max. charge / discharge power	5000 W	6000 W	8000 W	10000 W	12000 W
	Max. charge current / Max. discharge current	30 A [5]				
	Battery type	LiFePO4				
AC input	Rated grid voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V				
	Rated grid frequency	50 Hz / 60 Hz				
	Max. input power from grid	10000 W	12000 W	16000 W	20000 W	24000 W
	Max. input current from grid	14.5 A	17.4 A	23.2 A	29.0 A	34.8 A
AC output	AC voltage range / Nominal AC voltage	270 V - 480 V / 3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V				
	Rated AC grid frequency	50 Hz / 60 Hz				
	AC grid frequency range	45 Hz - 55 Hz / 55 Hz - 65 Hz				
	Rated apparent power	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA
	Max. apparent power	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA
	Rated grid output current (@400 V)	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A
	Max. grid output current (@400 V)	8.0 A	9.6 A	12.8 A	16.0 A	19.2 A
	Power factor at rated power / adjustable range	1 / 0.8 leading - 0.8 lagging				
	Harmonics THDi	< 3 % (of nominal power)				
EPS output	Nominal output voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V				
	Nominal output frequency	50 Hz / 60 Hz				
	Rated apparent power	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA
	Rated current (@400 V)	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A
	Max. current (@400 V, continuous on-grid / off-grid)	14.5 A / 7.3 A	17.4 A / 8.7 A	23.2 A / 11.6 A	29.0 A / 14.5 A	34.8 A / 17.4 A
	Max. power on each phase (@400 V, continuous on-grid / off-grid)	3333 W / 1667 W	4000 W / 2000 W	5333 W / 2667 W	6667 W / 3333 W	8000 W / 4000 W
	Peak output apparent power (@400 V, continuous on-grid / off-grid up to 10s)	10000 VA / 10000 VA	12000 VA / 12000 VA	16000 VA / 16000 VA	20000 VA / 20000 VA	24000 VA / 24000 VA
	Max. switch time	< 10 ms				
	Output THDv (@Linear load)	2 %				
Efficiency	MPPT efficiency	99.9 %				
	European efficiency / Max. efficiency	97.2 % / 98.0 %	97.5 % / 98.2 %	97.9 % / 98.4 %		
Safety protection	DC surge protection (Type II, according to EN/IEC 61643-11)	●				
	Insulation resistance detection	●				
	PV string input reverse polarity protection	●				
	Battery input reverse polarity protection	●				
	Ground fault monitoring	●				
	Residual current monitoring unit	●				
	AC short circuit protection	●				
	Anti-islanding protection	●				
	Arc fault circuit interrupter (AFCI)	○ [2]				
General data	Dimensions (W / H / D)	545 / 465 / 205 mm				
	Weight	24.5 kg				
	Operating temperature range	-25 °C ~ 60 °C				
	Cooling concept	Natural convection				
	Noise emission	< 35 dB				
	Degree of protection (as per IEC 60529)	IP66				
	Relative humidity	100 %				
	Max. operating altitude	4000 m				
Features	HMI	LED, App				
	BMS interface	CAN				
	Smart meter interface	RS485				
	Communication interfaces	Dongle: Wi-Fi (2.4 GHz) / LAN (100 Mbps) Inverter: RS485 (ModBus RTU), LAN (100 Mbps, Modbus TCP only) [4]				
	Digital output (dry contact) / No. of outputs	● / 2				
	Digital input (dry contact) / No. of inputs	● / 4				
	Integrated power control / export power control	● / ●				
	Certificates (more available upon request)	AS / NZS 4777.2, TOR Stromerzeugungsanlagen Typ A, C10 / 11, TR 3.3.1, FD C11 - 519 - 11, EN 50549 - 1, EN 61000 - 6 - 1, EN 61000-6-2, EN 61000 - 6 - 3, EN 61000 - 6 - 4, VDE-AR-N 4105, IEC 60068 - 2 - x, IEC 61683. IEC 61727, IEC 62116, IEC 63027, NTS Type A. RD 647, UNE 217001, UNE 217002, NA / EEA-NE7, G99 - 1, PORTARIA Nº 140				

● standard features / ○ optional features / - not available

[1] Asymmetrical power output functionality released in August 2024, please confirm version with Solplanet's sales staff before purchase.

[2] AFCI functionality released in April 2025, please confirm version with Solplanet's sales staff before purchase.

[3] The latest optimised platform design supports MPP voltage range at 150 V - 950 V, pending subsequent certificate updates.

[4] Modbus TCP functionality released in April 2025, please confirm version with Solplanet's sales staff before purchase.

[5] When connecting to Solplanet's Ai-HB G2 Series batteries (with only 5 kWh, i.e. two modules), limitations as below apply:

1. The maximum open circuit voltage of PV shall not exceed 750 V;
2. The battery nominal voltage range is reduced to 102.4 V for the particular operation;
3. The maximum charging and discharging current depends on the operating point and is within the range greater than 25 A, less than 30 A.