

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 off-grid operation

Technical Datasheet

ASW05kH-T2ASW06kH-T2ASW08kH-T2ASW10kH-T2ASW12kH-T2

PV input	Max. PV array power	7500 Wp		9000 Wp	12000 Wp	15000 Wp	18000 Wp
	Max. input voltage	1100 V ^s					
	MPP voltage range / rated input voltage	150 V - 950 V / 630 V			200 V - 950 V / 630 V ^s		
	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 ^s					
	Max. charge / discharge power	5000 W	6000 W	8000 W	10000 W	12000 W	
	Max. charge / discharge current	30 A ^s					
	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 %					
Effi- ciency	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 / D / H)	545 / 205 / 465 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 N° 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.

