

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.



Technical Datasheet

Technical Datasheet		ASW05kH-T2-O		ASW06kH-T2-O		ASW08kH-T2-O		ASW10kH-T2-O		ASW12kH-T2-O	
PV input	Max. PV array power	7500 Wp		9000 Wp		12000 Wp		15000 Wp		18000 Wp	
	Max. input voltage	1100 V									
	MPP voltage range / rated input voltage	150 V to 950 V / 630 V				200 V to 950 V / 630 V ²⁾					
	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 to 600 V									
	Max. charging / discharging power	5000 W		6000 W		8000 W		10000 W		12000 W	
	Max. charging current / Max. discharging current	30 A									
	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	5000 W		6000 W		8000 W		10000 W		12000 W	
	Max. input current from grid	7.3 A		8.7 A		11.6 A		14.5 A		17.4 A	
AC output	AC voltage range / Nominal AC voltage	270 V to 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	45~55 Hz / 55~65 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 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	
	Harmonics THDi (@ Nominal power)	< 3 % (of nominal power)									
Efficiency	MPPT efficiency	99.9 %									
	Euro 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	●									
General data	Power factor at rated power / adjustable displacement	1 / 0.8 leading to 0.8 lagging									
	Dimensions (W / H / D)	545 mm / 465 mm / 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									
	Max. relative humidity	100%									
	Max. operating altitude	4000 m									
	Features	User interface	LED & App								
BMS interface		CAN									
Smart meter interface		RS485									
Internet communication interfaces		Wifi / LAN									
Digital output (dry contact) / No. of outputs		● / 2									
Digital input (dry contact) / No. of inputs		● / 4									
Integrated power control / export power control		● / ●									

● 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) The latest optimised platform design supports MPP voltage range at 150V-950V, pending subsequent certificate updates.
Version: Sep 2024



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