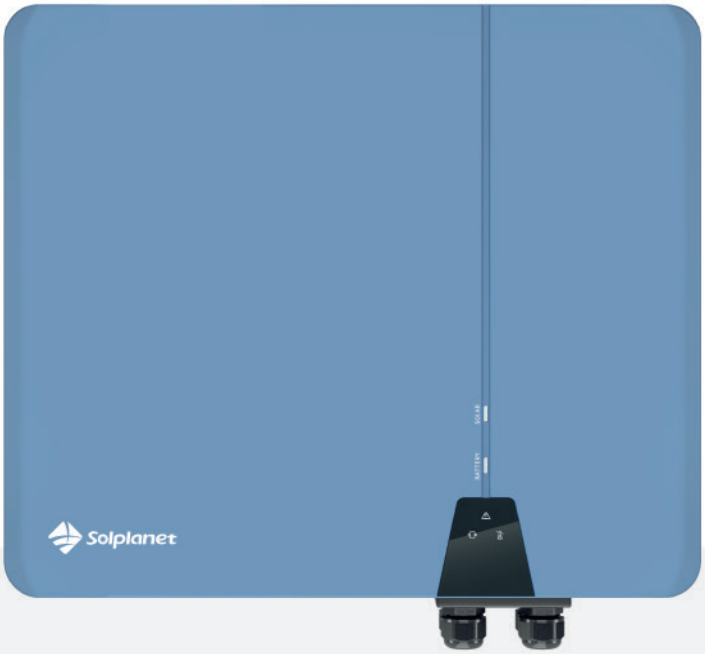
Three phase hybrid inverters 5 to 12 kW

ASW H-T2/T3 Series



Models :
ASW05kH-T2
ASW08kH-T3
ASW10kH-T3
ASW12kH-T3

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 of H-T2 series and max. 16 A input current of H-T3 series, ideal for bifacial and large PV modules
- Supporting parallel for on-grid and off-grid operation

Technical Datasheet

		ASW05kH-T2		ASW08kH-T3		ASW10kH-T3		ASW12kH-T3	
PV input	Max. PV array power	7500 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		3 / 1					
	Max. input current / Max. power per MPP tracker	20 A	7500 W	16 A	10000 W	16 A	10000 W	16 A	10000 W
	Max. short-circuit current per MPP tracker	30 A		24 A					
Battery input	Battery voltage range	120 V - 600 V							
	Max. charging / discharging power	5000 W		8000 W		10000 W		12000 W	
	Max. charging current / Max. discharging 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		16000 W		20000 W		24000 W	
	Max. input current from grid	14.5 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		8000 VA		9999 VA		12000 VA	
	Max. apparent power	5000 VA		8000 VA		9999 VA		12000 VA	
	Rated grid output current (@400 V)	7.3 A		11.6 A		14.5 A		17.4 A	
	Max. grid output current (@400 V)	8.0 A		12.8 A		16.0 A		19.2 A	
	Harmonics THDi (@Nominal power)	< 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		8000 VA		9999 VA		12000 VA	
	Rated current (@400 V)	7.3 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	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	5333 W	2667 W	6666 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	16000 VA	16000 VA	19998 VA	19998 VA	24000 VA	24000 VA
	Max. switch time	< 10 ms							
	Output THDv (@Linear load)	2 %							
Effi-ciency	MPPT efficiency	99.9 %							
	Euro efficiency / Max. efficiency	97.2 % / 98.0 %				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	Power factor at rated power / adjustable displacement	1 / 0.8 leading - 0.8 lagging							
	Dimensions (W / H / D)	545 / 465 / 205 mm							
	Weight	24.5 kg		26.0 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							
	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 batteries (with only 5 kWh, i.e. two modules), limitations as below apply:
1. The maximum voltage of PV shall not exceed 750 V
2. The battery 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