

Three phase hybrid inverters 8 to 12 kW

ASW H-T3 Series



Models:

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

- 3 independent MPPTs for flexible and higher kWp PV array design
- Smart setup, commissioning and monitoring via Solplanet App
- Intelligent operation modes and smart battery management for DOD / Time of Use / Power setting
- Max. 16 A input current, ideal for bifacial and large PV modules
- Supporting parallel for on-grid and

Technical Datasheet

ASW08kH-T3ASW10kH-T3ASW12kH-T3

PV input	Max. PV array power	12000 Wp		15000 Wp	18000 Wp
	Max. input voltage	1100 V ⁵			
	MPP voltage range / rated input voltage	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	3 / 1			
	Max. input current / Max. power per MPP tracker	16 A / 10000 W			
	Max. short-circuit current per MPP tracker	24 A			
Battery input	Battery voltage range	120 V - 600 V ⁵			
	Max. charge / discharge power	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 / 380 V / 400 V / 415 V			
	Rated grid frequency	50 Hz / 60 Hz			
	Max. input power from grid	16000 W	20000 W	24000 W	
	Max. input current from grid	23.2 A	29.0 A	34.8 A	
AC output	AC voltage range / Nominal AC voltage	220 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	8000 VA	10000 VA	12000 VA	
	Max. apparent power	8000 VA	10000 VA	12000 VA	
	Rated grid output current (@400 V)	11.6 A	14.5 A	17.4 A	
	Max. grid output current(@400 V)	12.8 A	16.0 A	19.2 A	
	Power factor at rated power / adjustable displacement	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		8000 VA	10000 VA	12000 VA	
Rated current (@400 V)		11.6 A	14.5 A	17.4 A	
Max. current (@400 V, continuous on-grid / off-grid)		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)		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)		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 %	97.9 % / 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	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			
	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.

