

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 off-grid operation

Technical Datasheet

Technical Datasheet		ASW08kH-T3		ASW10kH-T3		ASW12kH-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 to 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	16 A	10000 W	16 A	10000 W
	Max. short-circuit current per MPP tracker	24 A					
Battery input	Battery voltage range	120 V to 600 V ⁵⁾					
	Max. charging / discharging power	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 / 380 V; 230 / 400 V; 240 / 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	270V to 480V / 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	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 to 0.8 lagging					
	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	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 %					
Efficiency	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⁾					
	Dimensions (W / H / D)	545 / 465 / 205 mm					
General data	Weight	26 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: WiFi (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		● / ●					

● 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 150V-950V, 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 high voltage batteries (with only 5 kWh, i.e. two modules), limitations as below apply:

1. The maximum voltage of PV shall not exceed 750V
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 25A, less than 30A



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