

Three phase hybrid inverters 8 to 12 kW

ASW H-T3 Series



Models (w/ EPS):

ASW08kH-T3

ASW10kH-T3

ASW12kH-T3

Models (w/o EPS):

ASW08kH-T3-O

ASW10kH-T3-O

ASW12kH-T3-O



Easy-to-install

- Quick & easy-to-install with basic 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 output¹⁾
- UPS level switching time < 10 ms
- IP66 rated design for outdoor use



User-friendly

- 3 independent MPPTs for flexible and higher kWp PV array design
- Setup, commissioning and monitoring via the Solplanet app
- Intelligent work modes and customisable battery management for DOD / Time of Use / Power setting
- Max. 16 A input current, ideal for bifacial and large PV modules

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					
	MPP voltage range / rated input voltage	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	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					
	Max. charging / discharging power	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 / 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	
	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 %						
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	●					
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	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					
	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



Technical Datasheet

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PV input	Max. PV array power	12000 Wp		15000 Wp		18000 Wp	
	Max. input voltage	1100 V					
	MPP voltage range / rated input voltage	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	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 voltage range	120 V to 600 V					
	Max. charging / discharging power	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 / 380 V; 230 / 400 V; 240 / 415 V					
	Rated grid frequency	50 Hz / 60 Hz					
	Max. input power from grid	8000 W		10000 W		12000 W	
	Max. input current from grid	11.6 A		14.5 A		17.4 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					
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	Harmonics THDi (@Nominal power)	< 3 % (of nominal power)					
	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	●					
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	26 kg					
	Operating temperature range	-25 °C ... +60 °C					
	Cooling concept	Natural convection					
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	Digital output (dry contact) / No. of outputs	● / 2					
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	Integrated power control / export power control	● / ●					

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