

Three phase hybrid inverters 8 to 12 kW

Three phase hybrid inverters



Models:

ASW08kH-T3 ASW08kH-T3-O

ASW10kH-T3 ASW10kH-T3-O

ASW12kH-T3 ASW12kH-T3-O



Easy-to-install

- Phoenix Contact connectors for reliable tool-free DC connection
- Compact wall mount design
- Simple battery and smart meter interfaces for faster installation



Reliable

- Up to 150 % PV array oversizing for higher yields
- 100% unbalanced three phase AC output
- ShadeSol - improved generation under non-ideal conditions
- UPS level switching time < 10 ms
- IP66 rated design for outdoor use



User-friendly

- 3 independent MPPT's 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

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		
	Min. input voltage / start voltage	60 V / 180 V		
	No. of independent MPPT trackers / strings per MPPT input	3 / 1		
	Max. input current per MPP tracker	16 A		
	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 output	AC voltage range / nominal AC voltage	270 V to 480 V / 3/N/PE, 220 / 380 V; 230 / 400 V; 240 / 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)		
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
EPS output	Nominal output voltage	3/N/PE, 220 / 380 V; 230 / 400 V; 240 / 415 V		
	Nominal output frequency	50 Hz / 60 Hz		
	Rated apparent power	8000 VA	10000 VA	12000 VA
	Peak output apparent power	2 times of rated power, 10 s		
	Rated Current (@400 V)	11.6 A	14.5 A	17.4 A
	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	●		
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		
	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

Version: May 2023



Technical Datasheet

ASW08kH-T3-O

ASW10kH-T3-O

ASW12kH-T3-O

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		
	Min. input voltage / start voltage	60 V / 180 V		
	No. of independent MPPT trackers / strings per MPPT input	3 / 1		
	Max. input current per MPP tracker	16 A		
	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 output	AC voltage range / nominal AC voltage	270 V to 480 V / 3/N/PE, 220 / 380 V; 230 / 400 V; 240 / 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)		
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
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	●		
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		
	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
Version: May 2023

