

Three phase hybrid inverters 5 to 12 kW

ASW H-T2 Series



Models:

ASW05kH-T2	ASW05kH-T2-O
ASW06kH-T2	ASW06kH-T2-O
ASW08kH-T2	ASW08kH-T2-O
ASW10kH-T2	ASW10kH-T2-O
ASW12kH-T2	ASW12kH-T2-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

- Setup, commissioning and monitoring via the Solplanet app
- Intelligent work modes and customisable battery management for DOD / Time of Use / Power setting
- Max. 20 A input current, ideal for bifacial and large PV modules

Technical Datasheet

PV input	Max. PV array power	7500 Wp		9000 Wp	12000 Wp	15000 Wp	18000 Wp
	Max. input voltage	1100 V					
	MPP voltage range / rated input voltage	150 V to 950 V / 630 V			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	2 / 1					
	Max. input current per MPP tracker	20 A					
	Max. short-circuit current per MPP tracker	30 A					
Battery input	Battery voltage range	120 V to 600 V					
	Max. charging / discharging power	5000 W	6000 W	8000 W	10000 W	12000 W	
	Max. charging current / Max. discharging current	36 A					
	Rated charging current / Rated 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	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA	
	Max. apparent power	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA	
	Rated grid output Current (@400 V)	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A	
	Max. grid output current (@400 V)	8.0 A	9.6 A	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	10000 W	12000 W	16000 W	20000 W	24000 W	
	Max. input current from grid	14.5 A	17.4 A	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	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA	
	Peak output apparent power	2 times of rated power, 10 s					
	Rated Current (@400 V)	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A	
	Max. switch time	< 10 ms					
	Output THDv (@Linear load)	2 %					
Effi- ciency	MPPT efficiency	99.9 %					
	Euro efficiency / Max. efficiency	97.2 % / 98.0 %	97.5 % / 98.2 %	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	24.5 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 / 4G					
	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) For European and AS/NZS4777 .2: 2020, the max. apparent AC power is equal to the rated power

Version: May 2023



Technical Datasheet

PV input	Max. PV array power	7500 Wp	9000 Wp	12000 Wp	15000 Wp	18000 Wp
	Max. input voltage	1100 V				
	MPP voltage range / rated input voltage	150 V to 950 V / 630 V		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	2 / 1				
	Max. input current per MPP tracker	20 A				
	Max. short-circuit current per MPP tracker	30 A				
Battery input	Battery voltage range	120 V to 600 V				
	Max. charging / discharging power	5000 W	6000 W	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	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA
	Max. apparent power	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA
	Rated grid output Current (@400 V)	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A
	Max. grid output current(@400 V)	8.0 A	9.6 A	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	5000 W	6000 W	8000 W	10000 W	12000 W
	Max. input current from grid	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A
Effi- ciency	MPPT efficiency	99.9 %				
	Euro efficiency / Max. efficiency	97.2 % / 98.0 %	97.5 % / 98.2 %	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	24.5 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

1) For European and AS/NZS4777 .2: 2020, the max. apparent AC power is equal to the rated power

Version: May 2023

