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

		ASW 05kH-T2	ASW 06kH-T2	ASW 08kH-T2	ASW 10kH-T2	ASW 12kH-T2
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

		ASW 05kH-T2-O	ASW 06kH-T2-O	ASW 08kH-T2-O	ASW 10kH-T2-O	ASW 12kH-T2-O
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