

Three phase hybrid inverters 5 to 12 kW

ASW H-T2-DG Series



Models:

ASW05kH-T2-DG

ASW06kH-T2-DG

ASW08kH-T2-DG

ASW10kH-T2-DG

ASW12kH-T2-DG



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
- Asymmetrical power output
- UPS level switching time < 10 ms
- IP66 rated design for indoor and outdoor use
- DC SPD surge protection
- Arc fault circuit interrupter (AFCI) ¹⁾
- ShadeSol shadow management



User-friendly

- Max. 50 A charge / discharge current
- Compatible with diesel generator
- Smart setup, commissioning and monitoring via Solplanet App
- Intelligent operation modes and smart battery management for DOD / Time of Use / Power setting
- Max. 20 A input current, ideal for bifacial and large PV modules
- Supporting parallel for on-grid and off-grid operation

Technical Datasheet

Technical Datasheet			ASW05kH-T2-DG		ASW06kH-T2-DG		ASW08kH-T2-DG		ASW10kH-T2-DG		ASW12kH-T2-DG	
PV input	Max. PV array power	7500 Wp		9000 Wp		12000 Wp		15000 Wp		18000 Wp		
	Max. input voltage	1100 V ²⁾										
	MPP voltage range / rated input voltage	150 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 / Max. power per MPP tracker	20 A	7500 W	20 A	9000 W	20 A	10000 W	20 A	10000 W	20 A	10000 W	
	Max. short-circuit current per MPP tracker	30 A										
Battery input	Battery voltage range	120 V to 600 V ²⁾										
	Max. charging power from PV and grid	12000 W										
	Max. charging power from grid	5000 W		6000 W		8000 W		10000 W		12000 W		
	Max. discharging power	5000 W		6000 W		8000 W		10000 W		12000 W		
	Max. charging current / Max. discharging current	50 A ²⁾										
	Battery type	LiFePO4										
AC input	Rated grid voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 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		
AC output	AC voltage range / Nominal AC voltage	270 V to 480 V / 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	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		
	Power factor at rated power / adjustable range	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	5000 VA		6000 VA		8000 VA		10000 VA		12000 VA		
	Rated current (@400 V)	7.3 A		8.7 A		11.6 A		14.5 A		17.4 A		
	Max. current (@400 V, continuous on-grid / off-grid)	14.5 A	7.3 A	17.4 A	8.7 A	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)	3333 W	1667 W	4000 W	2000 W	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)	10000 VA	10000 VA	12000 VA	12000 VA	16000 VA	16000 VA	20000 VA	20000 VA	24000 VA	24000 VA	
	Max. switch time	< 10 ms										
	Output THDv (@ Linear load)	2 %										
Genera- tor side	Max. input apparent power	7500 VA		9000 VA		12000 VA		15000 VA		18000 VA		
	Max. charging power of battery	5000 W		6000 W		8000 W		10000 W		12000 W		
	Rated AC voltage	3/N/PE, 220 / 380 V; 230 / 400 V; 240 / 415 V										
	Rated AC frequency	50 Hz / 60 Hz										
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	●										
	Arc fault circuit interrupter (AFCI)	○ ¹⁾										
General data	Dimensions (W / H / D)	625 / 465 / 241 mm										
	Weight	28 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										
	Communication interfaces	Dongle: WiFi (2.4 GHz) / LAN (100 Mbps) Inverter: RS485 (ModBus RTU), LAN (100 Mbps, Modbus TCP only)										
	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⁾ AFCI functionality released in April 2025, please confirm version with Solplanet's sales staff before purchase.

²⁾ 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

