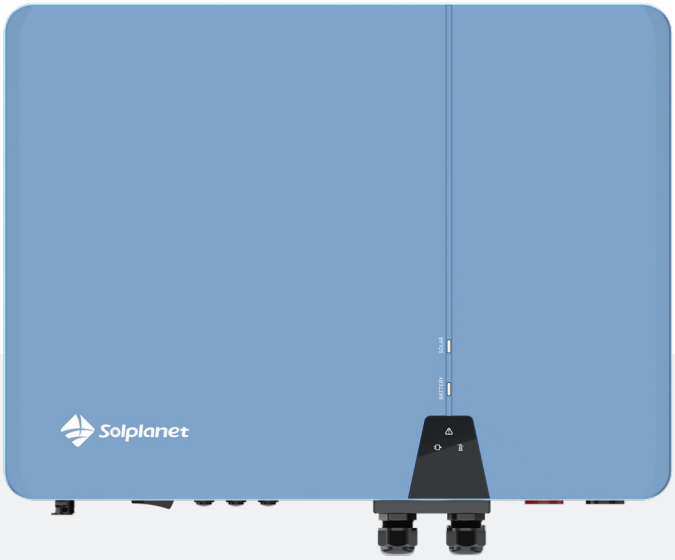
Three phase hybrid inverters 5 to 12 kW

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

		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 %									
Generator 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									
Efficiency	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	28.0 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: Wi-Fi (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	● / ●									
	Certificates (More available upon request)	AS/NZS 4777.2, TOR Stromerzeugungsanlagen Typ A, C10/11, TR 3.3.1, FD C11-519-11, EN 50549-1, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, VDE-AR-N 4105, IEC 60068-2-x, IEC 61683. IEC 61727, IEC 62116, IEC 63027, NTS Type A. RD 647, UNE 217001, UNE 217002, NA/EEA-NE7, G99-1, PORTARIA Nº 140									

● standard features / ○ optional features / - not available

1) AFCI functionality was released in April 2025, please confirm version with Solplanet's sales staff before purchase.

2) When connecting to Solplanets' Ai-HB G2 Series batteries (with only 5 kWh, i.e. two modules), limitations as below apply:

1. The maximum open circuit voltage of PV shall not exceed 750 V;
2. The battery nominal 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 36 A, less than 50 A.