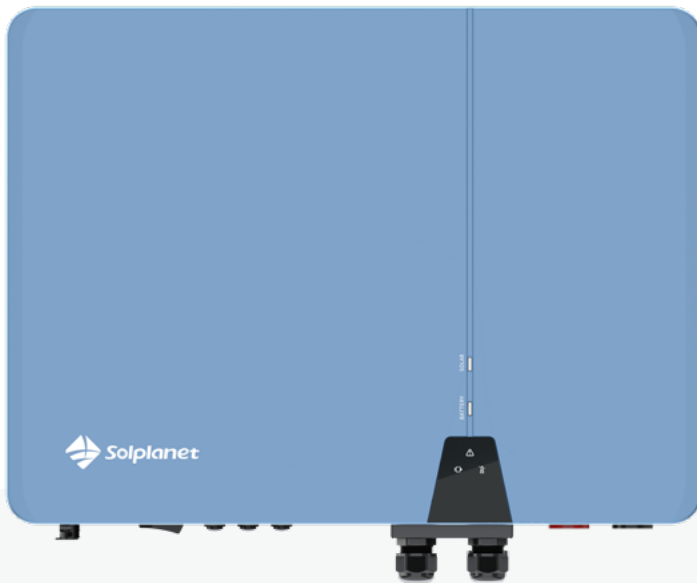


Three phase hybrid inverters 5 to 12 kW

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

	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 - 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		
	Max. short-circuit current per MPP tracker	30 A				
Battery input	Battery voltage range	120 V - 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. discharge power	5000 W	6000 W	8000 W	10000 W	12000 W
	Max. charge current / Max. discharge 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 - 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 Hz - 55 Hz / 55 Hz - 65 Hz				
	Rated apparent power	5000 VA	6000 VA	8000 VA	10000 VA	12000 VA
	Max. apparent power	5500 VA	6600 VA	8800 VA	11000 VA	13200 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 - 0.8 lagging				
	Harmonics THDi	< 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 V / 380 V; 230 V / 400 V; 240 V / 415 V				
	Rated AC frequency	50 Hz / 60 Hz				
Efficiency	MPPT efficiency	99.9%				
	European 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				
	Relative humidity	100%				
	Max. operating altitude	4000 m				
Features	HMI	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, MoBus 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 N° 140				

● 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 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.

