

Three phase hybrid inverters 8 to 12 kW

ASW H-T3-DG Series



Models:

ASW08kH-T3-DG

ASW10kH-T3-DG

ASW12kH-T3-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 outdoor use
- DC SPD surge protection
- Arc fault circuit interrupter (AFCI) ¹
- ShadeSol shadow management



User-friendly

- 3 independent MPPTs for flexible and higher kWp PV array design
- Max. 50A 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. 16 A input current, ideal for bifacial and large PV modules
- Supporting parallel for on-grid and off-grid operation

Technical Datasheet		ASW08kH-T3-DG		ASW10kH-T3-DG		ASW12kH-T3-DG	
PV input	Max. PV array power	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	3 / 1					
	Max. input current / Max. power per MPP tracker	16 A	10000 W	16 A	10000 W	16 A	10000 W
	Max. short-circuit current per MPP tracker	24 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	8000 W		10000 W		12000 W	
	Max. discharging power	8000 W		10000 W		12000 W	
	Max. charging current / Max. discharging current	50 A ²					
AC input	Battery type	LiFePO4					
	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	16000 W		20000 W		24000 W	
	Max. input current from grid	23.2 A		29.0 A		34.8 A	
AC output	AC voltage range / Nominal AC voltage	270V to 480V / 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	8000 VA		10000 VA		12000 VA	
	Max. apparent power	8000 VA		10000 VA		12000 VA	
	Rated grid output current (@400 V)	11.6 A		14.5 A		17.4 A	
	Max. grid output current(@400 V)	12.8 A		16.0 A		19.2 A	
	Power factor at rated power / adjustable displacement	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	8000 VA		10000 VA		12000 VA	
	Rated current (@400 V)	11.6 A		14.5 A		17.4 A	
	Max. current (@400 V, continuous on-grid / off-grid)	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)	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)	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	12000 VA		15000 VA		18000 VA	
	Max. charging power of battery	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 %		97.9 % / 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	29.5 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					
	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 N° 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 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.

