

Three phase hybrid inverters 15 to 30 kW

ASW TH Series



Models:

ASW015K-TH

ASW020K-TH

ASW025K-TH

ASW29.9K-TH

ASW030K-TH



Optimal performance

- 4 MPPTs, up to 40 A input per MPPT
- Up to 200 % PV array oversizing
- Up to 100 A charge / discharge current
- ShadeSol shadow management
- Dynamic export power control
- Integrated parallel function in on-grid mode with symmetric power output¹



Safe & reliable

- String-level current monitoring
- DC SPD Type II surge protection
- IP66 rated design for indoor and outdoor use
- Optimal battery voltage range, 120-800 V
- Intelligent operation modes and smart battery management
- UPS-level switching time < 10 ms
- Asymmetrical power output



User-friendly

- Compatible with diesel generators²
- Quick and easy-to-install with standard tools
- Smart setup, commissioning and monitoring via Solplanet App
- Anti-theft design

Technical Datasheet

ASW015K-TH

ASW020K-TH

ASW025K-TH

ASW29.9K-TH

ASW030K-TH

PV input	Max. PV array power	30000 Wp		40000 Wp	50000 Wp	59800 Wp	60000 Wp
	Max. input voltage	1000 V					
	MPP voltage range / rated input voltage	150 V - 950 V / 630 V					
	Min. input voltage / start voltage	95 V / 180 V					
	No. of independent MPPT trackers / strings per MPPT input	4 / 1			4 / 2		
	Max. input current / Max. power per MPP tracker	20 A / 15000 W	20 A / 15000W		40 A / 25000 W	40 A / 25000 W	40 A / 25000 W
	Max. short-circuit current per MPP tracker	25 A			50 A		
Battery input	Battery voltage range	120 V - 800 V					
	Max. charge power from PV and AC side	30000 W	40000 W		50000 W	59800 W	60000 W
	Max. charge power from AC side	15000 W	20000 W		25000 W	29900 W	30000 W
	Max. discharge power	15000 W	20000 W		25000 W	29900 W	30000 W
	Max. charge current / Max. discharge current	50 A			100 A		
	No. of independent battery inputs	1			2		
	Battery type	LiFePO4					
AC input	Nominal AC voltage	3/N/PE, 220 V / 380 V 3/N/PE, 230 V / 400 V 3/N/PE, 240 V / 415 V					
	Rated grid frequency	50 Hz / 60 Hz					
	Max. input power from grid	30000 W	40000 W		50000 W	50000 W	50000 W
	Max. input current from grid	43.5 A	58.0 A		72.5 A	72.5 A	72.5 A
	AC output	Nominal AC voltage	3/N/PE, 220 V / 380 V 3/N/PE, 230 V / 400 V 3/N/PE, 240 V / 415 V				
AC voltage range		270 V - 480 V					
Rated AC grid frequency		50 Hz / 60 Hz					
AC grid frequency range		45 Hz - 55 Hz / 55 Hz - 65 Hz					
Rated apparent power		15000 VA	20000 VA		25000 VA	29900 VA	30000 VA
Max. apparent power		15000 VA	20000 VA		25000 VA	29900 VA	30000 VA
Rated grid output current(@400V)		21.7 A	29.0 A		36.2 A	43.3 A	43.4 A
Max. grid output current		23.9 A	31.9 A		39.8 A	47.6 A	47.8 A
Power factor at rated power / adjustable range		1 / 0.8 leading - 0.8 lagging					
Harmonics THDi		< 3 % (of nominal power)					
EPS output		Nominal AC voltage	3/N/PE, 220 V / 380 V 3/N/PE, 230 V / 400 V 3/N/PE, 240 V / 415 V				
	Nominal output frequency	50 Hz / 60 Hz					
	Rated apparent power	15000 VA	20000 VA		25000 VA	29900 VA	30000 VA
	Max. apparent power (@400 V, continuous on-grid/off-grid)	16500 VA	22000 VA		27500 VA	32890 VA	33000 VA
	Rated current (@400V)	21.7 A	29.0 A		36.2 A	43.3 A	43.4 A
	Max. current (@400 V, continuous on-grid / off-grid)	23.9 A	31.9 A		39.8 A	47.6 A	47.8 A
	Max. power on each phase (@400 V, continuous on-grid / off-grid)	5500 W	7333 W		9166 W	10963 W	11000 W
	Peak output apparent power (off-grid up to 10s)	30000 VA	40000 VA		45000 VA	45000 VA	45000 VA
	Max. switch time	< 10 ms					
Output THDv (@ Linear load)	2 %						
Effi- ciency	MPPT efficiency	99.9 %					
	European efficiency / Max. efficiency	97.2 % / 98.0 %			97.9 % / 98.4 %		
Safety protection	DC / AC 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)	○						
General data	Supported grid types	TN-S, TN-C, TN-C-S, TT					
	Dimensions (W / D / H)	769 / 285 / 491 mm					
	Weight	52.0 kg			58.0 kg		
	Operating temperature range	-30 °C ~ 60 °C					
	Cooling concept	Smart cooling					
	Degree of protection (as per IEC 60529)	IP66					
	Relative humidity	100 %					
Features	Max. operating altitude	4000 m					
	HMI	LED, App					
	BMS interface	CAN					
	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	● / 3					
	Digital input (dry contact) / No. of inputs	● / 7					
Integrated power control / export power control	● / ●						

● standard features / ○ optional features / - not available

¹ Parallel function requires integration with Solplanet's Ai-Hub energy management system when operating in on-grid mode. This function is supported in models produced from August 2025 onward and with software version R008 or higher.

² Integration with diesel generator is supported in models produced from November 2025 onward.

