

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



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



User-friendly

- 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 to 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 to 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		
AC input	Battery type	LiFePO4					
	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 to 480 V					
Rated AC grid frequency		50 Hz / 60 Hz					
AC grid frequency range		45~55 Hz / 55~65 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 to 0.8 lagging					
Harmonics THDi (@ Nominal power)		< 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	99.90%					
	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	●					
General data	Supported grid types	TN-S, TN-C, TN-C-S, TT					
	Dimensions (W / H / D)	769 mm / 491 mm / 285 mm					
	Weight	52.0 kg			58.0 kg		
	Colour	● Morandi blue					
	Operating temperature range	-30 °C ... +60 °C					
	Cooling concept	Smart cooling					
	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					
	Communication Interfaces	Dongle: WiFi (2.4 GHz) / LAN (100 Mbps) Inverter: RS485 (ModBus RTU, Sunspec 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	● / ●					

