

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 and 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
- Cover design, choice from a delightful range of colours
- 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 / 15000 W		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				
	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	
	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 %									
Efficiency	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	●									
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 / ● Earl red / ● Scandinavian grey									
	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	● / ●									

● standard features ○ optional features - not available

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