

ASW3000H-S / 3680H-S / 4600H-S / 5000H-S

> Single-Phase Hybrid Inverters 3kW to 5kW

- Features rich AI-home app
- Galvanically isolated low voltage battery
- Integrated emergency power supply function
- Integrated smart energy management system



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Technical data	ASW3000H-S	ASW3680H-S	ASW4600H-S	ASW5000H-S
Input (DC)				
Max PV array power	3900 Wp STC	5000 Wp STC	6500 Wp STC	6500 Wp STC
Max input voltage	550 V			
MPP voltage range / rated input voltage	100 V to 530 V / 360 V			
Min input voltage / start voltage	100 V / 125 V			
Number of independent MPP trackers / strings per MPP input	2 / (1/1)			
Max input current / per MPP tracker	12 A			
Battery input (DC)				
Nominal battery voltage	48 V			
Battery voltage range	40 V to 60 V			
Max charging power	3000 W			
Max discharging power	3000 W			
Max charging current / Max discharging current	63 A / 63 A			
AC output (on-grid)				
AC nominal power	3000 W	3680 W	4600 W	5000 W
Max AC apparent power to Utility Grid	3000 VA	3680 VA	4600 VA	5000 VA
Max AC apparent power from Utility Grid	5900 VA	5900 VA	5900 VA	5900 VA
AC voltage range / Nominal AC voltage	180 V to 280 V / 230 V	180 V to 280 V / 230 V	180 V to 280 V / 230 V	180 V to 280 V / 230 V
Rated AC grid frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
AC grid frequency / range	-5 Hz ... +5 Hz	-5 Hz ... +5 Hz	-5 Hz ... +5 Hz	-5 Hz ... +5 Hz
Max AC current to Utility Grid	13.1 A	16 A	20 A	21.8 A
Max AC current from Utility Grid	25.7 A			
Power factor at rated power / adjustable displacement	> 0.99 / 0.8 leading ... 0.8 lagging			
Harmonics THDi (@ Nominal power)	< 3 %			
EPS output				
Max output apparent power	2700 VA			
Peak output apparent power	4000 VA, 10s			
Nominal output voltage	230 V			
Nominal output frequency	50 Hz / 60 Hz			
Max output current	12 A			
Max switch time	250 ms			
Output THDv (@ Linear load)	< 3 %			
Efficiency				
MPPT efficiency	99.9 %			
Euro efficiency / Max efficiency	97 % / 97.6 %			
Max battery to load efficiency	94 %			
Safety protection				
DC-side disconnection device	●			
PV string- / Battery input reverse polarity protection	● / ●			
All-pole sensitive residual current monitoring unit	●			
Anti-islanding protection	●			
Ground fault protection	●			
AC output over current protection / short circuit current protection	● / ●			
AC over voltage protection	●			
Protection class (as per IEC 62109-1) / overvoltage category (as per IEC 62109-1)	I / AC: III; DC: II			
General data				
Dimensions (W / H / D)	490 / 418 / 208 mm			
Device weight	< 28 kg	< 28 kg	< 30 kg	< 30 kg
Operating temperature range	-25 °C ... +60 °C			
Noise emissions (typical)	< 30 dB(A)			
Standby consumption	< 7 W			
Topology	Isolated			
Cooling Concept	Natural convection			
Degree of protection (as per IEC 60529)	IP65			
Climatic category (according to IEC 60721-3-4)	4K4H			
Max permissible value for relative humidity (non-condensing)	100 %			
Max operating altitude	4000m (> 3000 m power derating)			
Features				
User interface	LED & App			
Communication with BMS	RS485 / CAN			
Communication with meter	RS485			
Communication with portal	WIFI / Ethernet			
Other communication	DRM			
Integrated power control / Zero export control	● / ●			

● Standard ○ Optional -N/A

Data at nominal conditions. All information is subject to change. Version: February 2020