

Three phase inverters 45 to 60 kW

ASW LT-G3 Series



Models:
ASW45K-LT-G3
ASW50K-LT-G3
ASW60K-LT-G3



Easy-to-install

- Phoenix Contact connectors for reliable tool-free DC connection
- Compact wall mount design
- Fuse-free design thereby reducing BOS cost
- Setup, commissioning and monitoring via the Solplanet app



Higher Yields

- 150 % PV array oversizing for higher yields
- Up to 5 MPPT's for flexible PV array design
- Max. 20 A input current per string, ideal for bifacial and large area PV modules
- ShadeSol - improved generation under non-ideal conditions



Reliable & Safe

- Type II AC & DC Surge Protection
- Integrated DC switches
- IP66 rated design for outdoor use

Technical Datasheet

ASW45K-LT-G3

ASW50K-LT-G3

ASW60K-LT-G3

Input (DC)	Max. PV array power	67500 Wp STC	75000 Wp STC	90000 Wp STC	
	Max. input voltage	1100 V			
	MPP voltage range / rated input voltage	200 V - 1000 V / 630 V			
	Min. input voltage	200 V			
	Initial. feed-in voltage	250 V			
	Max. operating input current	40 A / 32 A / 32 A / 40 A	40 A / 32 A / 32 A / 40 A / 32 A	40 A / 32 A / 32 A / 40 A / 32 A	
	Max. short circuit current	60 A / 48 A / 48 A / 60 A	60 A / 48 A / 48 A / 60 A / 48 A	60 A / 48 A / 48 A / 60 A / 48 A	
	No. of independent MPPT inputs / strings per MPPT input	4 / 2	5 / 2	5 / 2	
Output (AC)	Rated active power	45000 W	50000 W	60000 W	
	Rated apparent power	45000 VA	50000 VA	60000 VA	
	Max. apparent power	49500 VA ¹	55000 VA ¹	66000 VA ¹	
	AC nominal voltage	220 V / 380 V 230 V / 400 V			
	AC voltage range	180 V to 305 V / 312 V to 528 V			
	AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz			
	Max. output current	75.2 A	83.6 A	95.3 A	
	Adjustable power factor range	0.8 leading to 0.8 lagging			
	Feed-in phases	3 / 3-N-PE			
	Harmonic distortion (THD) at rated output	<= 3%			
Efficiency & Protection	Max. efficiency / European efficiency	98.6% / 98.3%			
	DC switch	●			
	Ground fault monitoring / grid monitoring	● / ●			
	DC reverse polarity protection / AC short circuit protection	● / ●			
	All-pole-sensitive residual-current monitoring unit	●			
	Anti-islanding Protection	●			
	Surge protection	● / Type II			
	Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC: III; DC: II			
	Sunspec protocol	●			
	General data	Dimensions (W / H / D)	670 / 640 / 270 mm		
Weight		40 kg	43 kg	43 kg	
Operating temperature range		-25°C ... +60°C			
Self-consumption (at night)		< 1 W			
Topology		Non-isolated			
Cooling concept		Active cooling			
Degree of protection (according to IEC 60529)		IP66			
Climatic category (according to IEC 60721-3-4)		4K4H			
Relative humidity (non-condensing)		100%			
Max. operating altitude		4000 m			
Features	DC connection	Plug-in connector			
	AC connection	OT/DT Connector			
	Mounting type	Wall-mount bracket			
	LED indicators (Status / Fault / Communication)	●			
	Communication interface	● / ● / ○ / ○ (RS485 / Wi-Fi / LAN / 4G)			
	Country of manufacture	China			
	Certificates and approvals (more available on request)	CE, IEC 62109-1/2, IEC 61727, IEC 62116, IEC 61683, G98/G99, VDE 4110, VED 4105, EN 50549-1/2			

● Standard features / ○ optional features / – not available

1- For European and AS/NZS4777 grid codes the max. apparent AC power is equal to the rated power

2- Zero export installations supported with 2-pin RS485 for connection to approved smart meters

3- DRED supported with RS485 communication for Australia & New Zealand

Version: July 2023

