

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



AUTHORIZED DISTRIBUTOR:



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# 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 <sup>1</sup>  | 55000 VA <sup>1</sup>            | 66000 VA <sup>1</sup>            |
|   | 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<br>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   |   | ● / ● / ○ / ○<br>(RS485 / Wi-Fi / LAN / 4G)  |                                  |                                  |
| Country of manufacture  |   | China  |                                  |                                  |
| Certificates and approvals (more available on request)  |   | CE, IEC 62109-1/2,<br>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