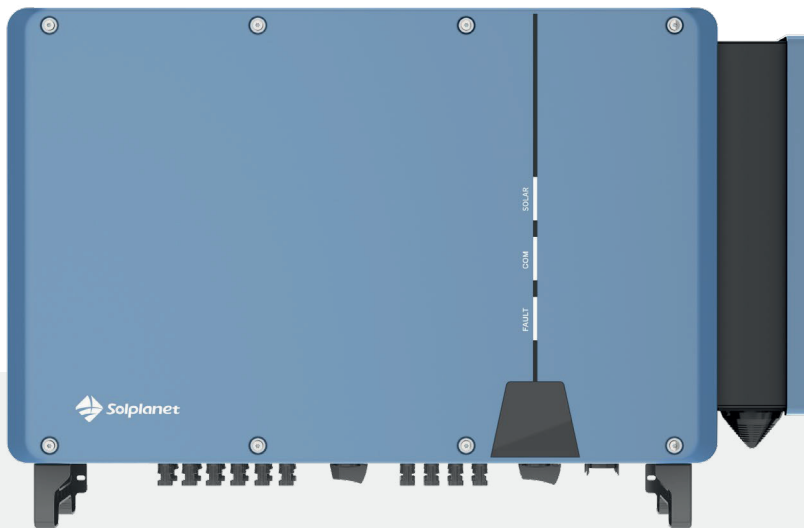


Three phase inverters 80 to 110 kW

# ASW LT Series



Models:  
ASW80K-LT  
ASW100K-LT  
ASW110K-LT



## Easy-to-install

- Toolless DC connection via Phoenix Contact connectors
- Type II surge protection DC and AC
- IP66 rated design for outdoor use



## Higher Yields

- 150 % PV array oversizing for higher yields
- “ShadeSol” shadow management function
- 16 A input current per string, ideal for bifacial and large area PV modules
- 10 MPPT's for flexible PV array design



## User-friendly

- 24/7 system monitoring
- Quick setup and commissioning with Solplanet apps
- Fuse free design with string-level management

# Technical Datasheet

ASW 80K-LT

ASW 100K-LT

ASW 110K-LT

|                         |                                                                                               |                                                                                        |                        |                        |
|-------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------|------------------------|
| Input (DC)              | Max. PV array power                                                                           | 120000 Wp STC                                                                          | 150000 Wp STC          | 165000 Wp STC          |
|                         | Max. input voltage                                                                            | 1100 V                                                                                 |                        |                        |
|                         | MPP voltage range / rated input voltage                                                       | 200V - 1000 V / 630 V                                                                  |                        |                        |
|                         | Min. input voltage                                                                            | 200 V                                                                                  |                        |                        |
|                         | Initial. feed-in voltage                                                                      | 250 V                                                                                  |                        |                        |
|                         | Max. operating input current                                                                  | 32 A                                                                                   |                        |                        |
|                         | Max. short circuit current                                                                    | 48 A                                                                                   |                        |                        |
|                         | No. of independent MPPT inputs / strings per MPPT input                                       | 8/2                                                                                    | 10/2                   | 10/2                   |
| Output (AC)             | Rated active power                                                                            | 80000 W                                                                                | 100000 W               | 110000 W               |
|                         | Max. apparent AC power                                                                        | 88000 VA                                                                               | 110000 VA <sup>1</sup> | 121000 VA <sup>1</sup> |
|                         | AC nominal voltage                                                                            | 220 V / 380 V<br>230 V / 400 V                                                         |                        |                        |
|                         | AC voltage range                                                                              | 312 V - 528 V                                                                          |                        |                        |
|                         | AC grid frequency / range                                                                     | 50 Hz / 45 Hz - 55 Hz<br>60 Hz / 55 Hz - 65 Hz                                         |                        |                        |
|                         | Nominal AC output current                                                                     | 115.8 A                                                                                | 144.3 A                | 158.8 A                |
|                         | Max. AC output current                                                                        | 127.0 A                                                                                | 158.8 A                | 174.7 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 % / 98.4 %                                                                        |                        |                        |
|                         | DC switch                                                                                     | ●                                                                                      |                        |                        |
|                         | Ground fault monitoring / grid monitoring                                                     | ● / ●                                                                                  |                        |                        |
|                         | DC reverse polarity protection / AC short circuit protection                                  | ●                                                                                      |                        |                        |
|                         | AC Overcurrent Protection                                                                     | ●                                                                                      |                        |                        |
|                         | DC Surge Protection                                                                           | Type II                                                                                |                        |                        |
|                         | AC Surge Protection                                                                           | Type II                                                                                |                        |                        |
|                         | All pole sensitive residual current monitoring unit                                           | ●                                                                                      |                        |                        |
|                         | Anti-islanding protection                                                                     | ●                                                                                      |                        |                        |
|                         | Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1) | I / AC: III; DC: II                                                                    |                        |                        |
| General data            | Dimensions (W / H / D)                                                                        | 984/ 640 / 330 mm                                                                      |                        |                        |
|                         | Weight                                                                                        | 85 kg                                                                                  |                        |                        |
|                         | Operating temperature range                                                                   | -25°C ... +60°C                                                                        |                        |                        |
|                         | Self-consumption (at night)                                                                   | < 3 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                                                                                   |                        |                        |
|                         | Max. permissible value for relative humidity (non-condensing)                                 | 100%                                                                                   |                        |                        |
|                         | Max. operating altitude                                                                       | 4000 m                                                                                 |                        |                        |
|                         | EMC                                                                                           | Class B                                                                                |                        |                        |
|                         |                                                                                               |                                                                                        |                        |                        |
| Features                | DC connection                                                                                 | Phoenix Contact                                                                        |                        |                        |
|                         | AC connection                                                                                 | OT/DT Terminal (Max.240mm2)                                                            |                        |                        |
|                         | LED indicators (Status / Fault / Communication)                                               | ●                                                                                      |                        |                        |
|                         | Communication interface (RS485/ WiFi /4G)                                                     | ● / ● / O                                                                              |                        |                        |
|                         | Modbus sunspec protocol <sup>2</sup>                                                          | ●                                                                                      |                        |                        |
|                         | Certificates and approvals (more available on request)                                        | CE, EN50549, IEC62109, IEC62116, IEC61727, IEC61683, IEC61000, AS/NZS4777, C10/C11,G99 |                        |                        |

● standard features ○ optional features

Data at nominal conditions. All information is subject to change.

1- Overload setting is disabled as default for EU and AS/NZS4777 grid codes, rated active power equals the max. apparent AC power

2- Sunspec 100 and 700 series protocols are supported

Version: July 2022

