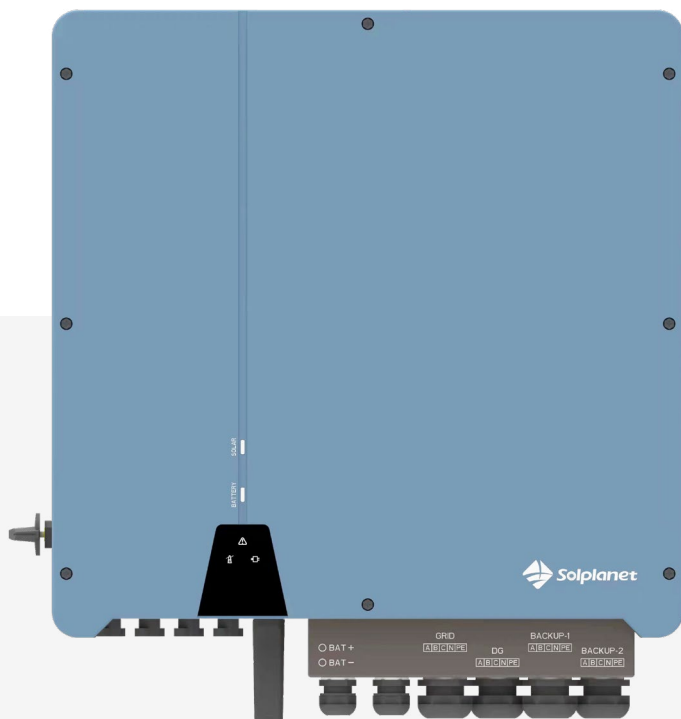


Three phase hybrid inverters 8 to 12 kW

# Three phase hybrid inverters



ASW H-T1 SERIES  
ASW08H-T1  
ASW10H-T1  
ASW12H-T1



## Easy-to-install

- Quick setup and commissioning with Solplanet apps
- Compact wall mount design



## Reliable

- Smart energy management
- UPS capability - power during blackouts
- IP65 rated design for outdoor use



## User-friendly

- User friendly app interface
- Online monitoring via Wi-Fi and Solplanet apps
- Support unbalanced output

# Technical DataSheet

ASW08kH-T1

ASW10kH-T1

ASW12kH-T1

|                   |                                                                 |                                                      |            |               |
|-------------------|-----------------------------------------------------------------|------------------------------------------------------|------------|---------------|
| PV Input          | Max. PV array power                                             | 12 kWp STC                                           | 15 kWp STC | 18 kWp STC    |
|                   | Max. input voltage                                              | 1000 V                                               |            |               |
|                   | MPP voltage range                                               | 180 V ~ 850 V                                        |            |               |
|                   | Min. input voltage / start voltage                              | 125 V/ 180 V                                         |            |               |
|                   | No. of independent MPPT trackers / strings per MPPT input       | 2 / (1/1)                                            |            |               |
|                   | Max. input current per MPP tracker                              | 13 A                                                 |            |               |
|                   | Max. short-circuit current per MPP tracker                      | 25A                                                  |            |               |
| Battery input     | Battery type                                                    | LiFePO4                                              |            |               |
|                   | Battery voltage range                                           | 125 V to 600 V                                       |            |               |
|                   | Max. charging/ discharging power                                | 8.8KW/8.8KW                                          | 11kW/11kW  | 13.2kW/13.2kW |
|                   | Max. charging current / discharging current                     | 50 A / 50 A                                          |            |               |
|                   | Rated. charging current / discharging current                   | 40 A / 40 A                                          |            |               |
| AC output         | Nominal AC voltage                                              | 3W+N+PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V |            |               |
|                   | AC voltage range                                                | 360V~440V                                            |            |               |
|                   | Rated AC grid frequency                                         | 50 Hz / 60 Hz                                        |            |               |
|                   | AC grid frequency range                                         | 50 Hz±5Hz / 60 Hz±5Hz                                |            |               |
|                   | Rated active power                                              | 8 kW                                                 | 10 kW      | 12 kW         |
|                   | Rated apparent power                                            | 8 kVA                                                | 10 kVA     | 12 kVA        |
|                   | Max. apparent power                                             | 8.8 kVA                                              | 11 kVA     | 13.2 kVA      |
|                   | Rated grid output Current (@400V)                               | 11.6 A                                               | 14.5 A     | 17.4 A        |
|                   | Max. grid output current                                        | 12.7A                                                | 15.9A      | 19.1A         |
|                   | Harmonics THDi (@ Nominal power)                                | < 3%                                                 |            |               |
| AC input          | Rated grid voltage                                              | 3W+N+PE, 220 / 380 V; 230 / 400 V; 240 / 415 V       |            |               |
|                   | Rated grid frequency                                            | 50Hz / 60Hz                                          |            |               |
|                   | Rated apparent power                                            | 16 kW                                                | 20 kW      | 24 kW         |
|                   | Max. input apparent power from grid                             | 17.6 kVA                                             | 22 kVA     | 26.4 kVA      |
|                   | Rated input current from grid                                   | 23.1 A                                               | 28.9 A     | 34.7 A        |
|                   | Max. input current from grid                                    | 25.5 A                                               | 31.8 A     | 38.2 A        |
| EPS output        | Nominal output voltage                                          | 3W+N+PE, 220 / 380 V; 230 / 400 V; 240 / 415 V       |            |               |
|                   | Nominal output frequency                                        | 50 Hz / 60 Hz                                        |            |               |
|                   | Rated apparent power                                            | 8 kVA                                                | 10 kVA     | 12 kVA        |
|                   | Max. output apparent power                                      | 8 kVA                                                | 10 kVA     | 12 kVA        |
|                   | Peak output apparent power                                      | 8.8 kVA                                              | 11 kVA     | 13.2 kVA      |
|                   | Rated Current (@400V)                                           | 11.6 A                                               | 14.5 A     | 17.4 A        |
|                   | Max. output current                                             | 12.7 A                                               | 15.9 A     | 19.1 A        |
|                   | Max. switch time                                                | ≤20 ms                                               |            |               |
|                   | Output THDi (@ Linear load)                                     | <2%                                                  |            |               |
| Efficiency        | MPPT efficiency                                                 | ≥99.5%                                               |            |               |
|                   | Max efficiency                                                  | 97.90%                                               | 98.20%     | 98.20%        |
|                   | Euro efficiency                                                 | 97.20%                                               | 97.50%     | 97.50%        |
|                   | Max. battery to load efficiency                                 | 97.50%                                               | 97.50%     | 97.60%        |
| 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                               | ●                                                    |            |               |
|                   | AC output short circuit current protection                      | ●                                                    |            |               |
|                   | AC over voltage protection                                      | ●                                                    |            |               |
|                   | Protection class (as per IEC 62109-1)                           | I                                                    |            |               |
|                   | overvoltage category (as per IEC 62109-1)                       | AC: III; DC: II                                      |            |               |
| General data      | Power factor at rated power / adjustable displacement           | ≥0.99 / 0.8 leading to 0.8 lagging                   |            |               |
|                   | Dimensions (W / H / D)                                          | 530 / 200 / 560 mm                                   |            |               |
|                   | Device weight                                                   | 30kg                                                 | 31kg       | 32kg          |
|                   | Operating temperature range                                     | -25 °C ... +60 °C                                    |            |               |
|                   | Noise emissions (typical)                                       | < 35 dB(A)                                           |            |               |
|                   | Standby consumption                                             | < 3 W                                                |            |               |
|                   | Cooling concept                                                 | Natural convection                                   |            |               |
|                   | Ingress protection rating (as per IEC 60529)                    | IP65                                                 |            |               |
|                   | Climatic category (according to IEC 60721-3-4)                  | 4K4H                                                 |            |               |
|                   | "Max. permissible value for relative humidity (non-condensing)" | 0~95%                                                |            |               |
|                   | Max. operating altitude                                         | 4000m (>2000m power derating)                        |            |               |
|                   | Country of Manufacture                                          | THE PEOPLE'S REPUBLIC OF CHINA                       |            |               |



Technical DataSheet

ASW08kH-T1

ASW10kH-T1

ASW12kH-T1

|                   |                                                |                                                       |
|-------------------|------------------------------------------------|-------------------------------------------------------|
| Features          | Inverter topology (Solar/ battery)             | Transformerless / Transformerless                     |
|                   | User interface                                 | LED & App                                             |
|                   | Communication with BMS                         | RS485 / CAN                                           |
|                   | Communication with meter                       | RS485                                                 |
|                   | Communication with portal                      | WIFI stick                                            |
|                   | Integrated power control / Zero export control | ● / ●                                                 |
| Certif-<br>icates | Grid                                           | EN 50549-1,RfG 3                                      |
|                   | Safty                                          | EN 62109-1, EN 62109-2                                |
|                   | EMC                                            | IEC 61000-6-1/-2/-3/-4, IEC 61000-3-11, IEC61000-3-12 |

● Standard features / ○ optional features / – not available  
Version: July 2022

