

# HYBRID SOLAR INVERTER

## PH1100 EU-G2 Series

3~10KW | Single Phase | IP66



### Hybrid Energy Management

Integrates solar, battery, generator & grid for efficient use.

### Smart Control & Monitoring

4.3" touch display + WiFi for easy operation.

### Robust Outdoor Protection

IP66 design for reliable outdoor installation.

### Flexible Parallel Expansion

Up to 9 units in parallel for on/off-grid systems.

### Fast Charge & Discharge

Max. 210A charge/discharge with 6 time period settings.

### AC-Coupling Function

Works with existing solar systems for quick upgrades.



### MAIN PARAMETER

| MODEL                                     | PH11-3KL1-EU-G2                                                                                                                                                                                                                                                                                        | PH11-3.6KL1-EU-G2 | PH11-4KL1-EU-G2 | PH11-5KL1-EU-G2 | PH11-6KL1-EU-G2 | PH11-7KL1-EU-G2 | PH11-7.6KL1-EU-G2 | PH11-8KL1-EU-G2 | PH11-10KL1-EU-G2 |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-------------------|-----------------|------------------|
| BATTERY INPUT DATA                        |                                                                                                                                                                                                                                                                                                        |                   |                 |                 |                 |                 |                   |                 |                  |
| Battery type                              | Lead-acid battery / Lithium battery                                                                                                                                                                                                                                                                    |                   |                 |                 |                 |                 |                   |                 |                  |
| Battery voltage                           | 48V                                                                                                                                                                                                                                                                                                    |                   |                 |                 |                 |                 |                   |                 |                  |
| Charging curve                            | 4-stage adaptive with maintenance/Equalization                                                                                                                                                                                                                                                         |                   |                 |                 |                 |                 |                   |                 |                  |
| Maximum charging/discharging power        | 3000W                                                                                                                                                                                                                                                                                                  | 3600W             | 4000W           | 5000W           | 6000W           | 7000W           | 7600W             | 8000W           | 10000W           |
| Maximum charging/discharging current      | 75A                                                                                                                                                                                                                                                                                                    | 90A               | 100A            | 120A            | 135A            | 175A            | 190A              | 190A            | 210A             |
| PV STRING INPUT DATA                      |                                                                                                                                                                                                                                                                                                        |                   |                 |                 |                 |                 |                   |                 |                  |
| Max. DC Input Power                       | 6000W                                                                                                                                                                                                                                                                                                  | 7200W             | 8000W           | 10000W          | 12000W          | 14000W          | 15200W            | 16000W          | 20000W           |
| Maximum DC voltage                        | 550V                                                                                                                                                                                                                                                                                                   |                   |                 |                 |                 |                 |                   |                 |                  |
| Start-up Voltage                          | 125V                                                                                                                                                                                                                                                                                                   |                   |                 |                 |                 |                 |                   |                 |                  |
| Full Load DC Voltage Range                | 167-500V                                                                                                                                                                                                                                                                                               | 200-500V          | 153-500V        | 192-500V        | 230-500V        | 218-500V        | 238-500V          | 250-500V        | 278-500V         |
| Minimum voltage for grid connection       | 150V                                                                                                                                                                                                                                                                                                   |                   |                 |                 |                 |                 |                   |                 |                  |
| Maximum input current                     | 18A+18A                                                                                                                                                                                                                                                                                                | 18A+18A           | 26A+26A         | 26A+26A         | 26A+26A         | 32A+32A         | 32A+32A           | 32A+32A         | 36A+36A          |
| No.of MPP Trackers                        | 2                                                                                                                                                                                                                                                                                                      | 2                 | 2               | 2               | 2               | 2               | 2                 | 2               | 2                |
| Input terminal type                       | H4/MC4                                                                                                                                                                                                                                                                                                 |                   |                 |                 |                 |                 |                   |                 |                  |
| AC INPUT/OUTPUT DATA                      |                                                                                                                                                                                                                                                                                                        |                   |                 |                 |                 |                 |                   |                 |                  |
| Rated AC Input/Output Active Power        | 3000W                                                                                                                                                                                                                                                                                                  | 3600W             | 4000W           | 5000W           | 6000W           | 7000W           | 7600W             | 8000W           | 10000W           |
| Max. AC Input/Output Apparent Power       | 3300VA                                                                                                                                                                                                                                                                                                 | 3960VA            | 4400VA          | 5500VA          | 6600VA          | 7700VA          | 8360VA            | 8800VA          | 11000VA          |
| Rated Input/Output Voltage/Range          | 220/230/240VAC                                                                                                                                                                                                                                                                                         |                   |                 |                 |                 |                 |                   |                 |                  |
| Rated Input/Output Grid Frequency/Range   | 60Hz±5Hz/ 50Hz±5Hz                                                                                                                                                                                                                                                                                     |                   |                 |                 |                 |                 |                   |                 |                  |
| Rated output power factor                 | 1                                                                                                                                                                                                                                                                                                      |                   |                 |                 |                 |                 |                   |                 |                  |
| Power Factor Adjustment Range             | 0.8 leading to 0.8 lagging                                                                                                                                                                                                                                                                             |                   |                 |                 |                 |                 |                   |                 |                  |
| Total Harmonics Current Distortion (THDi) | <3%                                                                                                                                                                                                                                                                                                    |                   |                 |                 |                 |                 |                   |                 |                  |
| Grid Type                                 | Single phase                                                                                                                                                                                                                                                                                           |                   |                 |                 |                 |                 |                   |                 |                  |
| DC Current Injection                      | 0.5%                                                                                                                                                                                                                                                                                                   |                   |                 |                 |                 |                 |                   |                 |                  |
| EFFICIENCY                                |                                                                                                                                                                                                                                                                                                        |                   |                 |                 |                 |                 |                   |                 |                  |
| Max. Efficiency                           | 97.5%                                                                                                                                                                                                                                                                                                  |                   |                 |                 |                 |                 |                   |                 |                  |
| Euro Efficiency                           | 96.5%                                                                                                                                                                                                                                                                                                  |                   |                 |                 |                 |                 |                   |                 |                  |
| MPPT Efficiency                           | >99%                                                                                                                                                                                                                                                                                                   |                   |                 |                 |                 |                 |                   |                 |                  |
| PROTECTION                                |                                                                                                                                                                                                                                                                                                        |                   |                 |                 |                 |                 |                   |                 |                  |
| Integrated                                | Islanding protection, Output overcurrent protection, Output overvoltage protection, DC switch rating for each MPPT, Grid monitoring, Output over current protection, Gird overvoltage protection-varistor, Integrated all-pole sensitive leakage current, ISO monitoring, over temperature protection. |                   |                 |                 |                 |                 |                   |                 |                  |
| Surge Protection                          | AC Type III                                                                                                                                                                                                                                                                                            |                   |                 |                 |                 |                 |                   |                 |                  |
| Overvoltage Category                      | AC Type III                                                                                                                                                                                                                                                                                            |                   |                 |                 |                 |                 |                   |                 |                  |

### OTHER PARAMETER

| MODEL                            | PH11-3KL1-EU-G2                                                       | PH11-3.6KL1-EU-G2 | PH11-4KL1-EU-G2 | PH11-5KL1-EU-G2 | PH11-6KL1-EU-G2 | PH11-7KL1-EU-G2 | PH11-7.6KL1-EU-G2 | PH11-8KL1-EU-G2 | PH11-10KL1-EU-G2 |
|----------------------------------|-----------------------------------------------------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-------------------|-----------------|------------------|
| GENERAL DATA                     |                                                                       |                   |                 |                 |                 |                 |                   |                 |                  |
| Operating Temperature Range (°C) | -25°C~+60°C, >45°C Derating                                           |                   |                 |                 |                 |                 |                   |                 |                  |
| Cooling                          | Intelligent Fan                                                       |                   |                 |                 |                 |                 |                   |                 |                  |
| Noise (dB)                       | ≤50dB                                                                 |                   |                 |                 |                 |                 |                   |                 |                  |
| Altitude                         | 3000m, >3000mDerating                                                 |                   |                 |                 |                 |                 |                   |                 |                  |
| Topology                         | Battery-side transformer isolation, PV-side non-transformer isolation |                   |                 |                 |                 |                 |                   |                 |                  |
| Communication                    | USB/ WiFi/ Eternet(optional)                                          |                   |                 |                 |                 |                 |                   |                 |                  |
| Display                          | 4.3-inch touch screen                                                 |                   |                 |                 |                 |                 |                   |                 |                  |
| Protection Degree                | IP66                                                                  |                   |                 |                 |                 |                 |                   |                 |                  |
| MECHANICAL SPECIFICATIONS        |                                                                       |                   |                 |                 |                 |                 |                   |                 |                  |
| Machine Dimension (W*H*D)(mm)    | 372*564*241                                                           |                   |                 |                 |                 |                 |                   |                 |                  |
| Package Dimension (W*H*D)(mm)    | 479*652*363                                                           |                   |                 |                 |                 |                 |                   |                 |                  |
| N.W(kg)                          | 22                                                                    |                   |                 |                 |                 |                 |                   |                 |                  |
| G.W(kg)                          | 25                                                                    |                   |                 |                 |                 |                 |                   |                 |                  |
| Warranty                         | 10 year                                                               |                   |                 |                 |                 |                 |                   |                 |                  |

### CERTIFICATION & STANDARDS

CE-EMC+LVD (EN6100-6-3, EN6100-6-1+EN IEC 62109-1, EN IEC 62109-2); CE-LVD(EN 62477-1) ; IEC 60529; EN50549-1; Poland Type A, (NC RfG:2016, PSE:2018, PTPIREE:2021)C10/C11; UNE217001-2020; UNE217002-2020, NTS-631 (Type A); G98+G99

\*The technical specifications of this document are subject to change without any notice