

## ON/OFF GRID HYBRID SOLAR INVERTER PH1100 EU Series

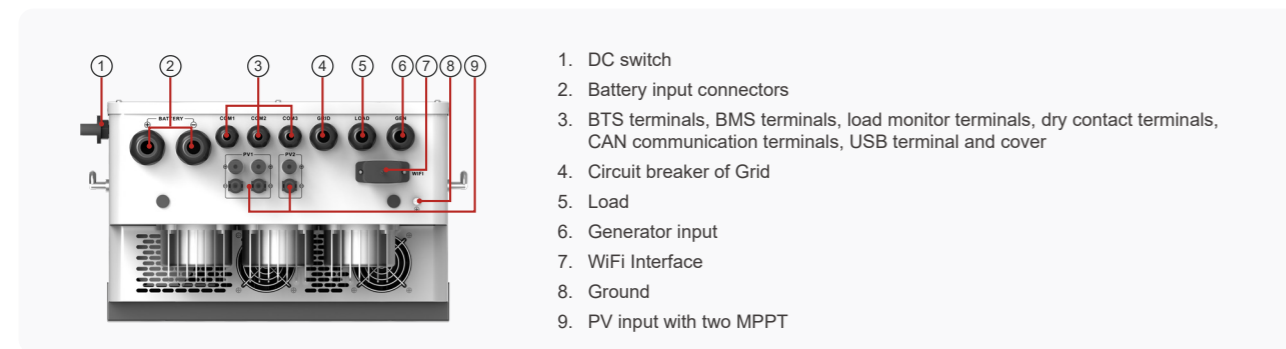
8~12KW | Three Phase | 230VAC

PH1100 EU is brand new three phase hybrid inverter with low battery voltage 48V, ensuring system safe and reliable. With compact design and high-power density, this series supports 1.3 DC/AC ratio, saving device investment. It supports three phase unbalanced output, extending the application scenarios. Equipped with CAN port (x2) BMS and parallel, x1 RS485 port for BMS, x1 RS232 port for remotely control, x1 DRM port, which makes the system smart and flexible.

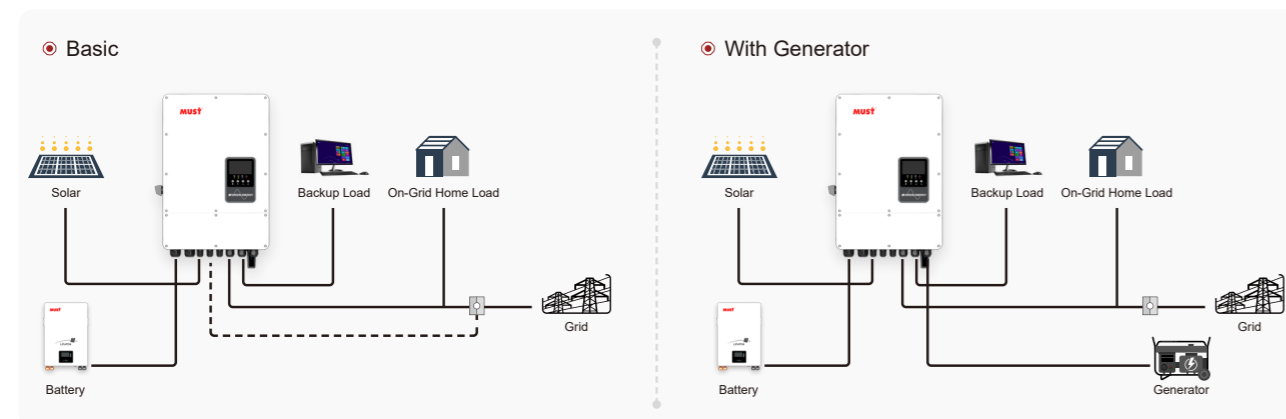


- 100% unbalanced output, each phase; Max. output up to 50% rated power
- Max. 10 pcs parallel for on-grid and off-grid operation
- AC couple to retrofit existing solar system
- Support multiple batteries parallel
- Max. charging/discharging current of 240A
- Support storing energy from diesel generator
- 48V low voltage battery, transformer isolation design
- IP65 water-proof and dust-proof
- 6 time periods for battery charging/discharging
- Wifi monitoring

### Back panel description



### Solar system connection



| MODEL  | PH1100-8KL3-EU  | PH1100-10KL3-EU | PH1100-12KL3-EU |
|--|---|-----------------|-----------------|
| Rated power  | 8000  | 10000           | 12000           |
| <b>Battery Input Data</b>                            |   |                 |                 |
| Battery type   | Lead-acid battery / Lithium battery   |                 |                 |
| Battery voltage                                      | 48V   |                 |                 |
| Battery voltage range                                | 40~60V  |                 |                 |
| Charging curve                                       | 3-stage adaptive with maintenance/Equalization  |                 |                 |
| Charging Strategy for Li-Ion Battery                 | Self-adaption to BMS  |                 |                 |
| Over-current protection/ Over-temperature protection | Yes / Yes   |                 |                 |
| Maximum charging/discharging power                   | 8000W   | 10000W          | 12000W          |
| Maximum charging/discharging current                 | 190A  | 210A            | 240A            |
| <b>PV String Input Data</b>                          |   |                 |                 |
| Max. DC Input Power                                  | 10400W  | 13000W          | 15600W          |
| Rated PV Input Voltage                               | 550V  |                 |                 |
| Maximum DC voltage                                   | 800V  |                 |                 |
| Start-up Voltage                                     | 160V  |                 |                 |
| Minimum voltage for grid connection                  | 310V  |                 |                 |
| Full Load DC Voltage Range                           | 350-650V  |                 |                 |
| Enter high voltage error recovery point              | 800V  |                 |                 |
| MPPT voltage range                                   | 200~650V  |                 |                 |
| Maximum input current                                | 13A/13A   | 26A/13A         | 26A/13A         |
| No. of MPP Trackers                                  | 2   |                 |                 |
| No. of Strings per MPP Tracker                       | 1+1   | 2+1             | 2+1             |
| <b>AC Output Data</b>                                |   |                 |                 |
| Rated AC Output Power                                | 8000W   | 10000W          | 12000W          |
| Max AC Output Power                                  | 8800W   | 11000W          | 13200W          |
| AC Output Rated Current                              | 12.1/11.6A  | 15.2/14.5A      | 18.2/17.4A      |
| Max AC Output Current                                | 13.4/12.8A  | 16.7/15.9A      | 20/19.1A        |
| Max. Three-phase Unbalanced Output Current           | 18.2/17.4A  | 22.7/21.7A      | 27.3/26.1A      |
| Power Factor Adjustment Range                        | 0.8 leading to 0.8 lagging  |                 |                 |
| Rated Input/Output Voltage                           | 220/380,230/400Vac  |                 |                 |
| Rated Input/Output Grid Frequency/Range              | 50/60;45~55/55-65   |                 |                 |
| Grid Type  | Three Phase   |                 |                 |
| Total Harmonics Current Distortion (THDi)            | <3% (of nominal power)  |                 |                 |
| DC Current Injection                                 | <0.5% In  |                 |                 |
| <b>Efficiency</b>                                    |   |                 |                 |
| Max. Efficiency                                      | ≥97.5%  |                 |                 |
| Euro Efficiency                                      | 97.0%   |                 |                 |
| <b>Protection</b>                                    |   |                 |                 |
| Integrated   | PV Arc Fault Detection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection  |                 |                 |
| Surge Protection                                     | DC Type III/AC Type III   |                 |                 |
| Overvoltage Category                                 | DC Type II/AC Type III  |                 |                 |
| <b>General Data</b>                                  |   |                 |                 |
| Operating Temperature Range (°C)                     | -20°C to +60°C, >45°C Derating  |                 |                 |
| Cooling  | Smart cooling   |                 |                 |
| Noise (dB)   | ≤55dB   |                 |                 |
| Communication with BMS                               | Wi-Fi/USB/GPRS/RS485/CAN  |                 |                 |
| Weight (kg)  | 35  |                 |                 |
| Cabinet Size (WxHxD mm)                              | 444*654.2*259.2   |                 |                 |
| Protection Degree                                    | IP65  |                 |                 |
| Installation Style                                   | Wall-mounted  |                 |                 |
| Warranty   | 5 Years<br>the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy   |                 |                 |
| <b>Certification &amp; Standards</b>                 |   |                 |                 |
| Grid Regulation                                      | CE-EMC+LVD (EN6100-6-3:2007, EN6100-6-1:2017+EN IEC 62109-1:2010, EN IEC 62109-2:2011); CE-LVD(EN 62477-1:2022) ; IEC 60529; EN50549-1:2019; Poland Type Aand B, (NC RfG:2016, PSE:2018, PTPIREE:2021) C10/C11; UNE217001-2020; UNE217002-2020, NTS-631:2021 (Type A); G98+G99+G100 |                 |                 |