

HYBRID SOLAR INVERTER PH1100 EU Series



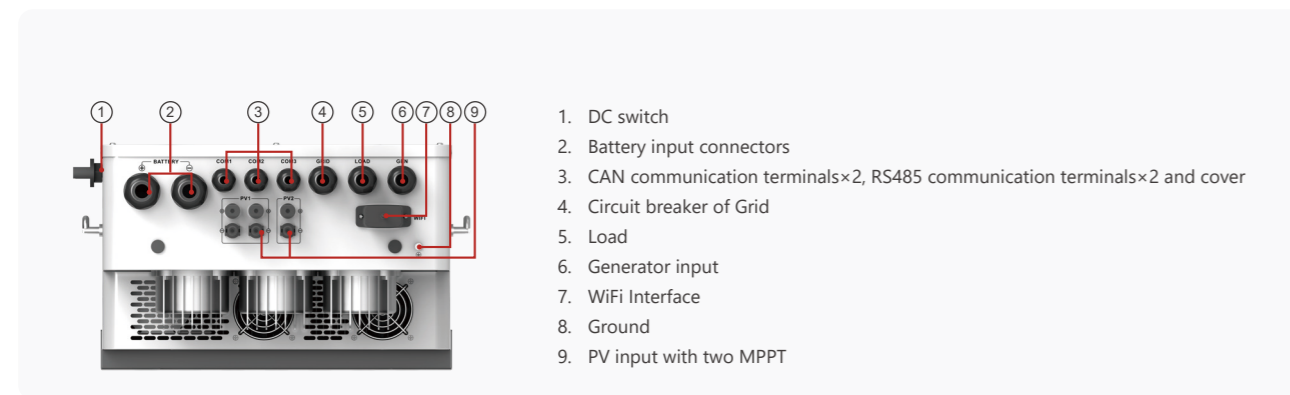
5~16KW | Three Phase | 380VAC | IP66

The PH1100 EU series is a three-phase on/off-grid bidirectional energy storage inverter with a compact design and high power density. It supports lithium and lead-acid batteries, provides a stable 380V/400V three-phase output, and features remote monitoring and multiple safety protections. It is widely used in home energy storage, small commercial energy storage, smart microgrids, and off-grid power supply in remote areas.

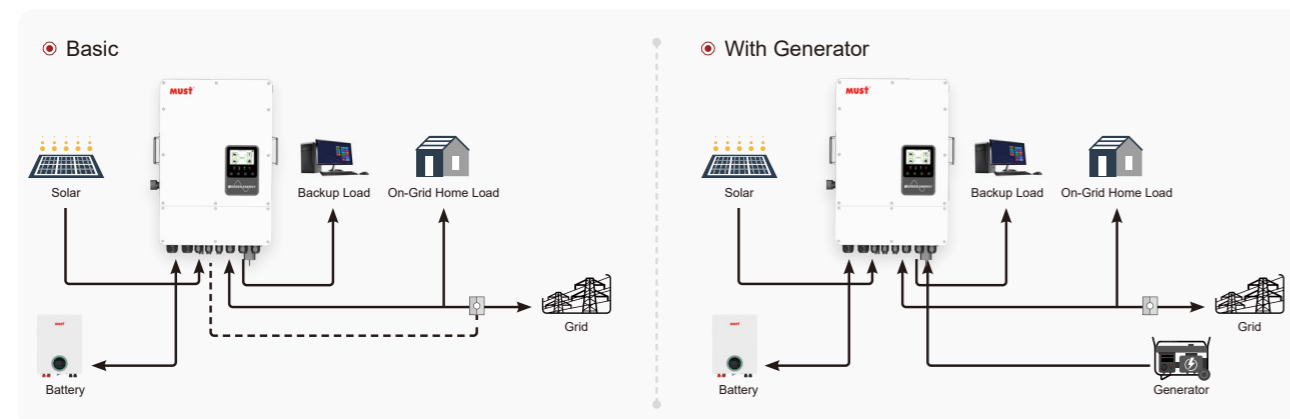


- 100% unbalanced output
- Max. 10 pcs parallel for on-grid and off-grid operation
- AC couple to retrofit existing solar system
- Support multiple batteries parallel
- Max. charging/discharging current of 320A
- Support storing energy from diesel generator
- 48V low voltage battery, transformer isolation design
- IP66 water-proof and dust-proof
- "Time of use" function: a maximum of 6 time segments can be set
- Wifi monitoring

Back panel description



Solar system connection



MODEL	PH11-5KL3-EU	PH11-6.5KL3-EU	PH11-8KL3-EU	PH11-10KL3-EU	PH11-12KL3-EU	PH11-13KL3-EU	PH11-14.2KL3-EU	PH11-15KL3-EU	PH11-16KL3-EU
Rated power	5000W	6500W	8000W	10000W	12000W	13000W	14200W	15000W	16000W
BATTERY INPUT DATA									
Battery type	Lead-acid battery / Lithium battery								
Battery voltage	48V								
Battery voltage range	40~60V								
Charging curve	4-stage adaptive with maintenance/Equalization								
Charging Strategy for Li-Ion Battery	Self-adaption to BMS								
Overcurrent / Overtemperature Protection	Yes / Yes								
Max. Charging/Discharging Power	5000W	6500W	8000W	10000W	12000W	13000W	14200W	15000W	16000W
Max. Charge/Discharge Current	120A	150A	190A	210A	240A	260A	280A	300A	320A
PV STRING INPUT DATA									
Max. DC Input Power	10000W	13000W	16000W	20000W	24000W	26000W	28400W	30000W	32000W
Rated PV Input Voltage	550V			550V			550V		
Maximum DC voltage	800V			800V			800V		
Start-up Voltage	160V			160V			160V		
Minimum voltage for grid connection	200V			200V			200V		
Full Load DC Voltage Range	395V~650V	500V~650V	400V~650V	357V~650V	429V~650V	464V~650V	507V~650V	536V~650V	571V~650V
Enter high voltage error recovery point	800V			800V			800V		
MPPT voltage range	200~650V			200~650V			200~650V		
Maximum input current	13A+13A		20A+20A		36A+20A		36A+20A		
No.of MPP Trackers	2		2		2		2		
No.of Strings per MPP Tracker	1+1		2+1		2+1		2+1		
AC INPUT/OUTPUT DATA									
Rated AC Input/ Output Power	5000W	6500W	8000W	10000W	12000W	13000W	14200W	15000W	16000W
Max AC Input/ Output Power	5500VA	7150VA	8800VA	11000VA	13200VA	14300VA	15620VA	16500VA	17600VA
Rated AC Input/ Output Current	7.6A/7.2A	9.8A/9.42A	12.1A/11.6A	15.2A/14.5A	18.2A/17.4A	19.7A/18.8A	21.6A/20.6A	22.8A/21.7A	24.3A/23.2A
Max AC Input/ Output Current	8.4A/8A	10.8A/10.4A	13.4A/12.8A	16.7A/15.9A	20A/19.1A	21.6A/20.6A	23.7A/22.6A	25.0A/23.8A	26.8A/25.5A
Max. 3-Phase Unbalanced Current	11.4A/10.9A	14.7A/14.1A	18.2A/17.4A	22.7A/21.7A	27.3A/26.1A	27.0A/25.7A	32.5A/30.9A	30.9A/29.5A	33.1A/31.5A
Power Factor Adjustment Range	0.8 leading to 0.8 lagging								
Rated Input/Output Voltage	220/380,230/400Vac								
Rated Input/Output Grid Frequency	60Hz±5Hz/50Hz±5Hz								
Grid Type	Three Phase								
THDi	<3% (of nominal power)								
DC Current Injection	0.5%								
EFFICIENCY									
Max. Efficiency	≥97.6%			97.5%			97.5%		
Euro Efficiency	97.0%			96.5%			96.5%		
MPPT Efficiency	99.5%								
PROTECTION									
Integrated	Islanding protection, Output overcurrent protection, Output overvoltage protection, DC switch rating for each MPPT, Grid monitoring, Output over current protection, Grid overvoltage protection-varistor, Integrated all-pole sensitive leakage current, ISO monitoring, over temperature protection.								
Surge Protection	AC Type III								
Overvoltage Category	AC Type III								
GENERAL DATA									
Operating Temperature Range	-25°C to +60°C, >45°C Derating								
Cooling	Intelligent Fan								
Noise	≤55dB								
Communication with BMS	RS485/CAN								
Machine Dimension (W*H*D)(mm)	446*692*260 (excluding connectors and racks)								
Package Dimension (W*H*D)(mm)	567*816*404								
N.W(kg)	38 (Excluding Connectors and Brackets)								
G.W(kg)	42								
Protection Degree	IP66								
Installation Style	Wall-mounted								
Warranty	5 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy								
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