

ON/OFF GRID HYBRID SOLAR INVERTER PH1100 EU Series

5~12KW | Three Phase | 380VAC

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.





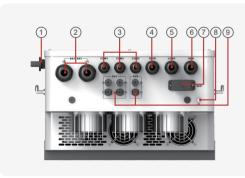






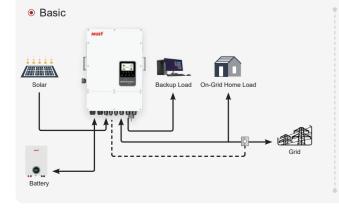
- 100% unbalanced output
- Max. 6 pcs parallel for on-grid and off-grid operation
- AC couple to retrofit existing solar system
- Support multiple batteries parallel
- Max. charging/discharging current of 240A
- Support storing energy from diesel generator
- 48V low voltage battery, transformer isolation design
- IP66 water-proof and dust-proof
- "Time of use" function: a maximum of 6 time segments can be set
- Wifi monitoring

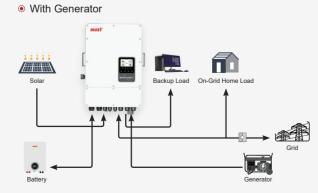
Back panel description



- 1. DC switch
- 2. Battery input connectors
- 3. CAN communication terminals×2, RS485 communication terminals×2 and cover
- 4. Circuit breaker of Grid
- 5. Load
- 6. Generator input
- 7. WiFi Interface
- 8. Ground
- 9. PV input with two MPPT

Solar system connection







MODEL	PH11- 5KL3-EU	PH11- 6.5KL3-EU	PH11- 8KL3-EU	PH11- 10KL3-EU	PH11- 12KL3-El
Rated power	5000W	6500W	8000W	10000W	12000W
BATTERY INPUT DATA					
Battery type	Lead-acid battery / Lithium battery				
Battery voltage	48V				
Battery voltage range	40~64V				
Charging curve	4-stage adaptive with maintenance/Equalization				
Charging Strategy for Li-lon Battery	Self-adaption to BMS				
Over-current protection/ Over-temperature protection	Yes / Yes				
Maximum charging/discharging power	5000W	6500W	W0008	10000W	12000W
Maximum charging/discharging current	120A	150A	190A	210A	240A
PV STRING INPUT DATA					
Max. DC Input Power	6500W	8450W	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		15A+15A		13A+	-26A
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1 2+1				
AC INPUT/OUTPUT DATA					
Rated AC Input/ Output Power	5000W	6500W	W0008	10000W	12000W
Max AC Input/ Output Power	5500W	7150W	8800W	11000W	13200W
AC Input/ Output Rated Current	7.6/7.2A	9.8/9.42A	12.1/11.6A	15.2/14.5A	18.2/17.4
Max AC Input/ Output Current	8.4/8A	10.8/10.4A	13.4/12.8A	16.7/15.9A	20/19.1A
Max. Three-phase Unbalanced Output Current	11.4/10.9A	14.7/14.1A	18.2/17.4A	22.7/21.7A	27.3/26.1/
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		
EFFICIENCY					
Max. Efficiency	≥97.6%				
Euro Efficiency			97.0%		
PROTECTION					
Integrated	Islanding protection, PV input polarity reverse protection, insulationresistance detection, surge protection,leakage current monitoringprotection,output current protection, output short circuit protectionoutput overvoltage protection				
Surge Protection	DC Type III/AC Type III				
Overvoltage Category	DC Type II/AC Type III				
GENERAL DATA					
Operating Temperature Range (°C)	-25°C to +60°C, >45°C Derating				
Cooling	Fan cooling				
Noise (dB)	≤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				
			5 Years		

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