

ON/OFF GRID HYBRID SOLAR INVERTER PH1100 EU Series

5~12KW | Three Phase | 380VAC

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.











■ Max. 6 pcs parallel for on-grid and off-grid operation

■ AC couple to retrofifit existing solar system

■ Support multiple batteries parallel

■ Max. charging/discharging current of 240A

■ Support storing energy from diesel generator

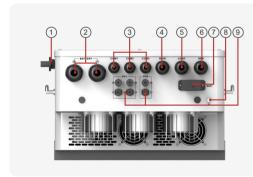
■ 48V low voltage battery, transformer isolation design

■ IP65 water-proof and dust-proof

■ "Time of use" function: a maximum of 6 time segments can be set

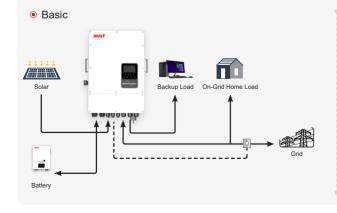
■ Wifi monitoring

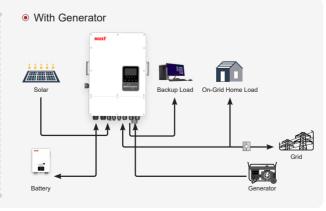
Back panel description



- 1. DC switch
- 2. Battery input connectors
- 3. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal 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	PH1100- 5KL3-EU	PH1100- 6.5KL3-EU	PH1100- 8KL3-EU	PH1100- 10KL3-EU	PH1100- 12KL3-EU	
Rated power	5000W	6500W	8000W	10000W	12000W	
BATTERY INPUT DATA					1	
Battery type		Lead-ac	id battery / Lithium	battery		
Battery voltage	48V					
Battery voltage range	40~60V					
Charging curve	3-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	8000W	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 26A/13A					
No.of MPP Trackers		.5, y 15A	2	207	,	
No.of Strings per MPP Tracker	1+1				2+1	
AC INPUT/OUTPUT DATA				_		
Rated AC Input/ Output Power	5000W	6500W	8000W	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	18.2/17.4A	
Max AC Input/ Output Current	8.4/8A	10.8/10.4A	13.4/12.8A	16.7/15.9A	20/19.1A	
	11.4/10.9A	14.7/14.1A	18.2/17.4A	22.7/21.7A	27.3/26.1A	
Max. Three-phase Unbalanced Output Current	11.4/10.9A				27.5/20.1A	
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			
EFFICIENCY	l		07.50/			
Max. Efficiency	≥97.5%					
Euro Efficiency			97.0%			
PROTECTION						
Integrated	PV Arc Fault Detection, Anti-islanding Protection, PV String Input Reverse Polarity Protectio 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					
GENERAL DATA		_	,, , , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Operating Temperature Range (°C)		-20°C	to +60°C, >45°C De	erating		
Cooling	Smart cooling					
Noise (dB)	≤55dB					
Communication with BMS	Wi-Fi/USB/GPRS/RS485/CAN					
Machine Dimension (W*H*D)(mm)	WI-FI/OSD/GPRS/RS465/CAN 444*654.2*259.2					
Package Dimension (W*H*D)(mm)	567*816*404					
N.W(kg)	35					
	37					
G.W(kg)						
Protection Degree	IP65					
Installation Style	Wall-mounted 5 Years					
Warranty			J ICUIS			

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