

SPLIT-PHASE HYBRID SOLAR INVERTER PH1100 US Series

5~10KW | Split Phase | AC 120V/240V | IP66

PH1100 US is brand new split 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's applicable to 110VAC/120VAC markets demands, which matches AC 110VAC/120V single phase, or two phase 220V/240V; 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.

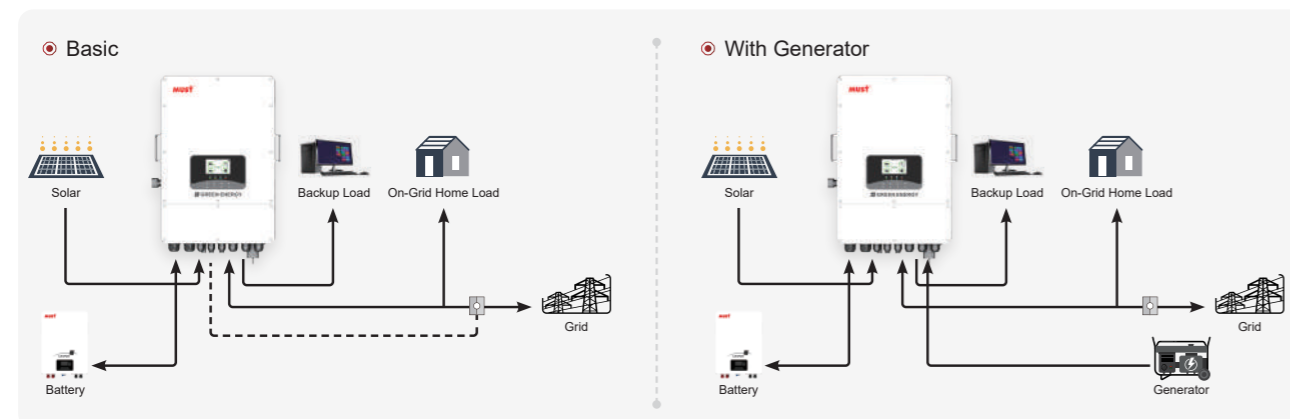


- 100% unbalanced output, each phase max. output up to 50% rated power
- Max. 6 pcs parallel for on-grid and off-grid operation
- AC couple to retrofit existing solar system
- Support multiple batteries parallel
- Max. charging/discharging current of 220A
- Support storing energy from diesel generator
- 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. 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	PH11-5KL2-US	PH11-6KL2-US	PH11-8KL2-US	PH11-10KL2-US
Rated power	5000W	6000W	8000W	10000W
BATTERY INPUT DATA				
Battery type	Lead-acid battery / Lithium battery			
Battery voltage	48V			
Battery voltage range	40~64V			
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	5000W	6000W	8000W	10000W
Maximum charging/discharging current	110A	130A	170A	220A
PV STRING INPUT DATA				
Max. DC Input Power	6500W	7800W	10400W	13000W
Maximum DC voltage	600V			
Start-up Voltage	125V			
Full Load DC Voltage Range	150~500V			
Rated PV Input Voltage	370V			
Minimum voltage for grid connection	150V			
Enter high voltage error recovery point	600V			
Maximum input current	16A/16A	16A/16A	32A/16A	32A/16A
No.of MPP Trackers	2	2	2	2
Input terminal type	H4/MC4			
AC INPUT/OUTPUT DATA				
Rated AC Input/ Output Power	5000W	6000W	8000W	10000W
Max AC Input/ Output Power	5000W	6000W	8000W	10000W
AC Input/ Output Rated Current	20.8A/19.2A	25A/23A	33.3A/30.7A	41.6A/38.4A
Rated Input/Output Voltage/Range	120V/240V:208V			
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	Split Phase			
DC Current Injection	<0.5%			
EFFICIENCY				
Max. Efficiency	97.5%			
Euro Efficiency	96.5%			
MPPT Efficiency	99.5%			
PROTECTION				
Integrated	Islanding protection, Output overcurrent protection, Output overvoltage protection, PV input polarity reverse protection, DC Switch (optional), Ground Fault Sensing, leakage current monitoringprotection			
Surge Protection	DC Type III/AC Type III			
Overvoltage Category	DC Type II/AC Type III			
GENERAL DATA				
Operating Temperature Range (°C)	-25°C~ +60°C, >45°C Derating			
Cooling	Fan cooling			
Noise (dB)	≤50dB			
Altitude	3000m, >3000mDerating			
Topology	Battery-side transformer isolation, PV-side non-transformer isolation			
Communication	USB/ WiFi/ Ethernet(optional)			
Display	4.3-inch touch screen			
Protection Degree	IP66			
Installation Style	Wall-mounted			
MECHANICAL SPECIFICATIONS				
Machine Dimension (W*H*D)(mm)	446*692*260 (excluding connectors and racks)			
Package Dimension (W*H*D)(mm)	816*404*567			
N.W(kg)	38			
G.W(kg)	42			
Warranty	5 Year the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy			
CERTIFICATION & STANDARDS				
NBT32004-2013				

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