ON/OFF GRID HYBRID SOLAR INVERTER

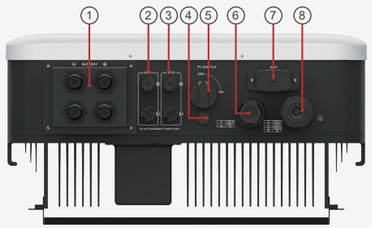
PH1100 PRO Series

3.6~6KW | Single Phase | IP66 | WIFI | BMS

This is a flexible and intelligent energy storage solar inverter with a wide range of MPPT Voltage.
Combining functions of off grid and on grid. This hybrid solar inverter can power all kinds of appliances in home or office, and can also be used in power stations.

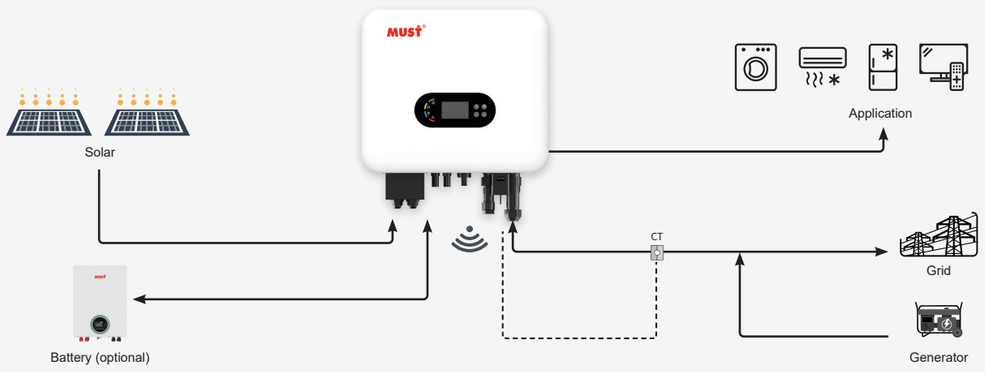
- Multiple operation modes: Grid-tie,off grid with storage backup
- IP66 water-proof and dust-proof
- MPPT voltage range 120-500V
- Support LCD display&Smart LCD setting
- Available Export control CT sensor function
- Multiple communications: RS485,GPRS and wifi etc
- Full protection function:Over-voltage,over-frequency, over-current, over-temperature,and AC short-circuit automatic protection
- Intelligent BMS battery management function
- Fanless low-noise design
- Wifi monitoring

Back panel description



1. Battery input terminals and cover
2. PV1 input terminals
3. PV2 input terminals
4. Breather valve
5. PV input switch
6. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals and cover
7. Wi-Fi com module
8. AC input & output terminals and cover

Solar system connection



MODEL	PH11-3648 PRO	PH11-4048 PRO	PH11-4648 PRO	PH11-5048 PRO	PH11-6048 PRO
Rated power	3600W	4000W	4600W	5000W	6000W
Nominal Battery System Voltage	48V				
PV INPUT(DC)					
Maximum recommended DC power	4700W	5200W	6000W	6500W	7800W
Nominal DC operating voltage	360V				
Maximum DC voltage	500V				
MPPT voltage range	120V~500V				
Maximum input current	15A / 15A				
No.of MPP tracker	2				
Strings per MPP tracker	1				
INVERTER INPUT/ OUTPUT(AC)					
Nominal AC input/ output power	3600W	4000W	4600W	5000W	6000W
Nominal input/ output voltage; range	220/230/240V;180-280V				
AC grid frequency; range	50/60Hz; 45~55/55-65Hz				
Nominal input/ output current	15.6A	17.5A	20A	21.7A	26A
Maximum input/ output current	16A	18.1A	20.8A	22.7A	27.2A
Inrush current (spike/duration)	57.5A/5.2us				
Total harmonic distortion i(THDi)	<3%				
Power factor at rated power	1				
Displacement power factor	0.8leading~0.8lagging				
Grid type	Single phase				
BATTERY MODE OUTPUT(AC)					
Output Rated Power	3600W	4000W	4600W	5000W	6000W
Nominal output voltage; accuracy range	230±1%				
Output ferequency; accuracy range	50/60Hz (optional)±0.2%				
Output rated current	15.6A	17.5A	20A	21.7A	26A
Output waveform	Pure sine wave				
Peak power	5400W,10s	6000W,10s	6900W,10s	7500W,10s	9000W,10s
Total harmonic distortion v (linear load)	<3%				
BATTERY & CHARGER					
Battery type	Lead-acid battery / Lithium battery				
Battery voltage	48V				
Battery voltage range	40~60V				
Charging curve	3-stage adaptive with maintenance				
Protection	Over-current protection / Over-temperature protection				
Maximum charging power	3600W	4000W	4600W	5000W	6000W
Maximum charging currernt	75A	85A	95A	100A	125A
EFFICIENCY					
Maximum efficiency	97.1%				
Euro-efficiency	96.5%				
MPPT efficiency	99.8%				
PROTECTION DEVICES					
DC switch rating for each MPPT; Grid monitoring; Output over current protection; Output overvoltage protection-varistor; Ground fault monitoring; Integrated all-pole sensitive leakage current					
GENERAL					
Machine Dimension (W*H*D)(mm)	420*480*215				
Package Dimension (W*H*D)(mm)	610*327*595				
N.W(kg)	30				
G.W(kg)	32				
DC connection	H4 / MC4				
AC connection	Terminal Block				
Display	LED+LCD				
Communication interfaces	Wi-Fi / USB / GPRS / RS485				
Ingress protection rating	IP66				
Humidity	0~95% RH(No codensing)				
Operating temperature range	-25°C+60°C With derating above 45°C				
Cooling concept	Natural				
Altitude	<3000m				
CERTIFICATION & STANDARDS					
CE-EMC+LVD (EN6100-6-3: 2007, EN6100-6-1:2017+EN IEC62109-1:2010, EN IEC62109-2:2011); CE-LVD(EN62477-1:2022); IEC60529; EN50549-1:2019 Poland Type A, (NC RfG:2016, PSE:2018, PTPiREE:2021); C10/C11; UNE217001-2020; UNE217002-2020, NTS-631:2021 (Type A); G98+G99					

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