

## ON/OFF GRID HYBRID SOLAR INVERTER PH1100 LV Series

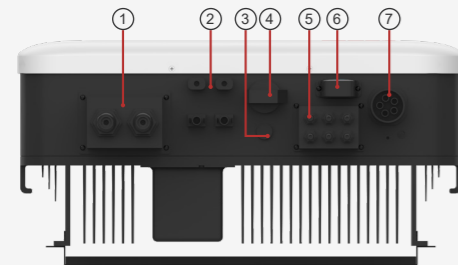
3.6~4KW | Single Phase | 120VAC | IP65

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.



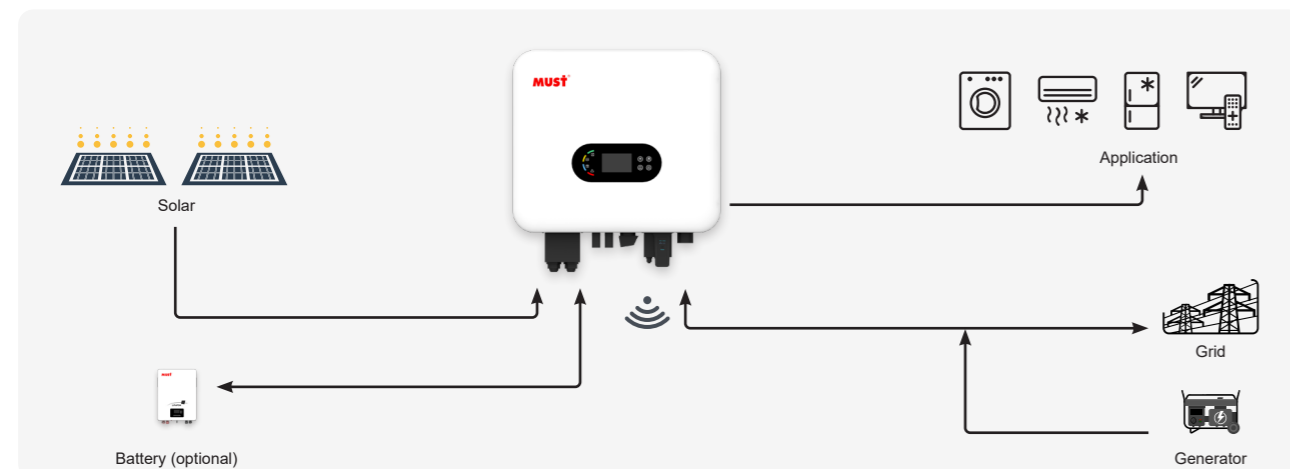
- Multiple operation modes: Grid-tie, off grid with storage backup
- IP65 water-proof and dust-proof
- MPPT voltage range 120-500V
- Support LCD display & Smart LCD setting
- Available Export control CT sensor function
- Multiple communications: USB, RS485, GPRS and wifi etc
- Full protection function: 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. PV input terminals
3. Breather valve
4. PV input switch
5. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
6. Wi-Fi com module
7. AC input & output terminals and cover

### Solar system connection



MODEL	PH11-3648 LV	PH11-4048 LV
Rated Power	3600W	4000W
Nominal Battery System Voltage	48V	
<b>PV INPUT(DC)</b>		
Maximum recommended DC power	4600W	5200W
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	
<b>INVERTER INPUT/ OUTPUT(AC)</b>		
Nominal AC input/ output power	3600W	4000W
Nominal input/ output voltage; range	110/120/130V; 90~140V	
AC grid frequency; range	50/60Hz; 45~55/55-65Hz	
Nominal input/ output current	30A	34A
Maximum input/ output current	33A	36A
Inrush current (spike/duration)	72A/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	
<b>BATTERY MODE OUTPUT(AC)</b>		
Output Rated Power	3600W	4000W
Nominal output voltage; accuracy range	120±1%	
Output frequency; accuracy range	50/60Hz (optional)±0.2%	
Output rated current	30A	34A
Output waveform	Pure sine wave	
Peak power	5400W,10s	6000W,10s
Total harmonic distortion v (linear load)	<3%	
<b>BATTERY &amp; CHARGER</b>		
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
Maximum charging current	75A	85A
<b>EFFICIENCY</b>		
Maximum efficiency	97.1%	
Euro-efficiency	96.5%	
MPPT efficiency	99.8%	
<b>PROTECTION DEVICES</b>		
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		
<b>MECHANICAL SPECIFICATIONS</b>		
Machine Dimension (W*H*D)(mm)	420*480*215	
Package Dimension (W*H*D)(mm)	610*324*595	
N.W(kg)	30	
G.W(kg)	32	
<b>GENERAL</b>		
DC connection	H4 / MC4	
AC connection	Terminal Block	
Display	LED+LCD	
Communication interfaces	Wi-Fi / USB / GPRS / RS485	
Ingress protection rating	IP65	
Humidity	0~95% RH(No condensing)	
Operating temperature range	-20°C+60°C With derating above 45°C	
Cooling concept	Natural	
Altitude	<3000m	
Standard Warranty	5years	
<b>CERTIFICATION &amp; STANDARDS</b>		
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