

HYBRID SOLAR INVERTER

PH1100 PRO Series

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



Hybrid Operation Modes

Supports grid-tie, off-grid, and backup with storage

IP66 Rugged Design

Waterproof and dustproof for indoor & outdoor use

Wide MPPT Range

MPPT voltage range from 120~500V for higher solar yield

Smart Control & Display

LCD screen with smart settings and WiFi monitoring

Intelligent BMS Integration

Built-in BMS for safe and efficient battery management

Full Protection & Silent Running

Complete electrical protections with fanless, low-noise design



MAIN PARAMETER

MODEL	PH11-3648 PRO	PH11-4048 PRO	PH11-5048 PRO	PH11-6048 PRO
Rated power	3600W	4000W	5000W	6000W
Nominal Battery System Voltage	48V			
PV INPUT(DC)				
Maximum recommended DC power	4700W	5200W	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	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	21.7A	26A
Maximum input/ output current	16A	18.1A	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	5000W	6000W
Nominal output voltage; accuracy range	230V±1%			
Output frequency; accuracy range	50/60Hz (optional)±0.2%			
Output rated current	15.6A	17.5A	21.7A	26A
Peak power	5400W,10s	6000W,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			
Maximum charging power	3600W	4000W	5000W	6000W
Maximum charging current	75A	85A	100A	125A
EFFICIENCY				
Maximum efficiency	97.1%			
Euro-efficiency	96.5%			
MPPT efficiency	99.8%			

PROTECTION DEVICES

Islanding protection, Output overcurrent protection, Output overvoltage protection, DC switch rating for each MPPT, Grid monitoring, Output over current protection, Grid overvoltage protection-varistor, Integrated all-pole sensitive leakage current, ISO monitoring, over temperature protection.

OTHER PARAMETER

MODEL	PH11-3648 PRO	PH11-4048 PRO	PH11-5048 PRO	PH11-6048 PRO
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 condensing)			
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