

HYBRID SOLAR INVERTER

PH1100 US Series

6.5~12KW | Three Phase | IP66



High-Efficiency PV Input

- Dual Independent MPPT Inputs (3 PV Strings: 2+1)
- 600V PV open-circuit voltage, 36A + 20A input current

Powerful Energy Storage

- Max. 250A charging/discharging current
- 2× rated peak output for 10s (Off-grid)

Flexible System Integration

- Dedicated generator port
- Supports AC coupling

Scalable Commercial Solution

- Up to 10 units in parallel (Max. 120kW system)
- Max. 66.66A grid bypass current (per phase)

Smart Energy Management

- Smart Load control
- Time-slot charging/discharging for peak-valley optimization

Reliable & User-Friendly Design

- Dual activation via Grid or PV
- Three-phase input/output without neutral (N) wire



MAIN PARAMETER

MODEL	PH11-6.5KL3-US	PH11-8KL3-US	PH11-10KL3-US	PH11-12KL3-US
Rated power	6500W	8000W	10000W	12000W
BATTERY TERMINAL PARAMETERS				
Battery Type	Lead-acid battery/lithium battery			
Battery Voltage	48V			
Battery Voltage Rang	40-64V			
Charging curve	Three-stage /equal charging			
Lithium battery charging management system	Adaptive BMS System			
Maximum charging/discharging power	6500W	8000W	10000W	12000W
Maximum charging/discharging current	135A	170A	210A	250A
PV INPUT DATA				
Maximum DC input power	13000W	16000W	20000W	24000W
Maximum input power of eachPV (PV1/PV2)	9120W/5070W	11250W/6240W	14060W/7800W	16780W/9360W
Rated PV input voltage	380V			
Maximum DC Voltage	600V			
Starting voltage	125V			
MPPT voltage range	150V-540V			
Full load MPPT voltage range	233-540V	286-540V	358-540V	429-540V
PV maximum input current	36A+20A			
PV maximum short circuit current	54A+30A			
MPPT quantity	2			
Number of MPPT strings perchannel	2+1			
GENERATOR INPUT				
Rated AC Input active power	6500W	8000W	10000W	12000W
Max.AC In apparent power	7150VA	8800VA	11000VA	13200VA
Rated AC Input current	18A/19.7A	22.2A/24.2A	27.7A/30.3A	33.3A/36.3A
AC INPUT/OUTPUT PARAMETERS				
Rated AC Input/Output active power	6500W	8000W	10000W	12000W
Rated AC Input/Output apparent power	7150VA	8800VA	11000VA	13200VA
Rated AC Input/Output Current	18A/19.7A	22.2A/24.2A	27.7A/30.3A	33.3A/36.3A
Maximum AC Input/Output current	19.8A/21.6A	24.4A/26.6A	30.4A/33.3A	36.6A/39.9A
Maximum output short-circuit current	100A			
Gird bypass current	66.6A			
Peak power(off-grid)	2 times rated power,10 seconds			
Power factor adjustment range	0.8 lead - 0.8 lag			
AC Input/Output frequency and voltage	50/60Hz;3L/N/PE 120/208V 110/190V			
Grid typed	Three phases			
Current harmonic distortion rate (at rated power)	THD<3%(linear load)			
Grid DC component	<0.5% In			
EFFICIENCY				
Maximum efficiency	97.5%			
European Weighted Efficiency	96.5%			
MPPT efficiency	99.5%			

OTHER PARAMETER

MODEL	PH11-6.5KL3-US	PH11-8KL3-US	PH11-10KL3-US	PH11-12KL3-US
PROTECT				
Integrated	Islanding protection,PV input polarity reverse protection,insulation resistance detection,surge protection,leakage current monitoring protection,output current protection,output short circuit protection,output overvoltage protection, Overcurrent protection, Overheating protection			
BASIC PARAMETERS				
Working temperature	-25~60°C, >45°C derating			
Cooling method	Intelligent air cooling			
Noise	<60dB			
BMS Communication	RS485;CAN			
Weight	50kg			
Dimensions	446*656*285mm(excluding connectors and racks)			
Protection Level	IP66			
Installation Method	Wall-mounted			
Warranty	5 years			

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