

SPLIT-PHASE HYBRID SOLAR INVERTER

PH1100 US Series

5~12KW | Split Phase | AC 120V/240V | IP66



High-Power Safe Charging & Discharging

- Max. charging/discharging current of 220A
- 48V low voltage battery, transformer isolation design

Flexible Parallel & Multi-Source Energy Storage

- Max. 10 pcs parallel for on-grid and off-grid operation
- Support storing energy from diesel generator

Split-Phase Output (120/240V)

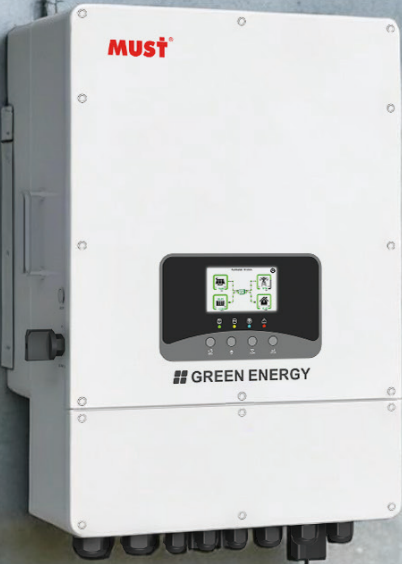
- Supports 100% unbalanced loads
- Each phase (L1 / L2) delivers up to 50% of rated power

Smart Remote Management

- WiFi monitoring for real-time system status
- "Time of use" function: a maximum of 6 time segments can be set

Comprehensive Protection Design

- IP66 water-proof and dust-proof
- Multiple safety protections: islanding protection, DC switch for each MPPT, grid monitoring, over-temperature protection ect.



MAIN PARAMETER

MODEL	PH11-5KL2-US	PH11-6KL2-US	PH11-8KL2-US	PH11-10KL2-US	PH11-12KL2-US
Rated power	5000W	6000W	8000W	10000W	12000W
BATTERY INPUT DATA					
Battery type	Lead-acid battery / Lithium battery				
Battery voltage	48V				
Battery voltage range	40~60V				
Charging curve	4-stage adaptive with maintenance/Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Maximum charging/discharging power	5000W	6000W	8000W	10000W	12000W
Maximum charging/discharging current	120A	150A	190A	220A	240A
PV STRING INPUT DATA					
Max. DC Input Power	10000W	12000W	16000W	20000W	24000W
Maximum DC voltage	600V				
Start-up Voltage	125V				
Full Load DC Voltage Range	250-540V	300-540V	285-540V	357-540V	428-540V
Rated PV Input Voltage	370V				
Minimum voltage for grid connection	150V				
Enter high voltage error recovery point	600V				
Maximum input current	20A/20A		36A/20A		
No.of MPP Trackers	2				
Input terminal type	H4/MC4				
AC INPUT/OUTPUT DATA					
Rated AC Input/Output Active Power	5000W	6000W	8000W	10000W	12000W
Max. AC Input/Output Apparent Power	5500VA	6600VA	8800VA	11000VA	13200VA
Rated AC Input/Output Current	20.8A	25A	33.3A	41.6A	50A
Max. AC Input/Output Current	22.9A	27.5A	36.6A	45.8A	55A
Max. AC Input Power (grid to load)	10000W	12000W	16000W	20000W	20000W
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, DC switch rating for each MPPT, Grid monitoring, Output over current protection, Gird overvoltage protection-varistor, Integrated all-pole sensitive leakage current, ISO monitoring, over temperature protection. Battery over-current protection, Battery over-temperature protection				
Surge Protection	AC Type III				
Overvoltage Category	AC Type III				

OTHER PARAMETER

MODEL	PH11-5KL2-US	PH11-6KL2-US	PH11-8KL2-US	PH11-10KL2-US	PH11-12KL2-US
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/ Enترنت(optional)				
Display	4.3-inch touch screen				
Protection Degree	IP66				
MECHANICAL SPECIFICATIONS					
Machine Dimension (W*H*D)(mm)	446*687*285 (excluding connectors and racks)				
Package Dimension (W*H*D)(mm)	567*404*816				
N.W(kg)	38 (Excluding Connectors and Brackets)				
G.W(kg)	42				
Warranty	5 Year				
CERTIFICATION & STANDARDS					
NBT32004-2013					

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