

HIGH FREQUENCY SOLAR INVERTER

PV1800 VPM II Series

1~4KW | 24V | 40~60A

This is a multi-function inverter/charger, combining functions of inverter, MPPT 40A/60A solar charge controller and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.



- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built in MPPT 40A/60A solar charge controller
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support USB, RS485, CAN monitoring function
- WIFI remote monitoring (optional)
- Compatible to generator
- PV/ AC activation function
- Smart battery pack BMS communication function (CAN Port)

Back panel description

1.2KW

3.5KW/4KW

1. AC output

2. AC input

3. Circuit breaker

4. PV input

5. Battery input

6. Power on/off switch

7. Dry contact

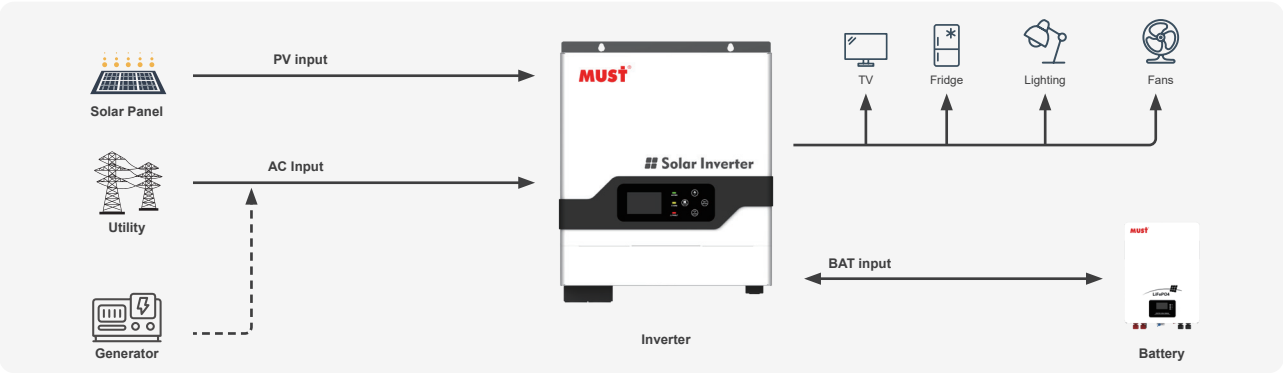
8. USB Communication port

9. RS-485,CAN Communication port

10. USB WiFi port (optional)

11. Ground

Solar system connection



MODEL	PV18-1012 VPM II	PV18-1512 VPM II	PV18-1224 VPM II	PV18-2224 VPM II	PV18-3224 VPM II	PV18-3524 VPM II	PV18-4024 VPM II
Default Battery System Voltage	12VDC	12VDC	24VDC	24VDC	24VDC	24VDC	24VDC
INVERTER OUTPUT							
Rated Power	1000VA/1000W	1500VA/1500W	1200VA/1200W	2200VA/2200W	3200VA/3200W	3500VA/3500W	4000VA/4000W
Surge Power	2000VA	3000VA	2400VA	4400VA	6400VA	7000VA	8000VA
Waveform	Pure sine wave						
AC Voltage Regulation (Batt.Mode)	230VAC						
Inverter Efficiency(Peak)	90%~93%						
Transfer Time	10ms(UPS / VDE4105) / 20ms(APL)						
AC INPUT							
Voltage	230VAC						
Selectable Voltage Range	170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VDE)						
Frequency Range	50Hz / 60Hz (Auto sensing)						
BATTERY							
Normal voltage	12VDC		24VDC				
Floating Charge Voltage	13.8VDC		27.4VDC				
Overcharge Protection	15VDC		30VDC				
SOLAR CHARGER & AC CHARGER							
Maximum PV Array Open Circuit Voltage	105VDC	145VDC	120VDC	160VDC	160VDC	160VDC	160VDC
PV Array MPPT Voltage Range (Typ.)	15~75VDC	15~130VDC	30~96VDC	30~128VDC	30~128VDC	30~128VDC	30~128VDC
Standby Power Consumption	2W						
Maximum PV Array Power	600W	720W	1000W	1600W	1600W	1600W	1600W
Maximum Solar Charge Current	45A	60A	40A	60A	60A	60A	60A
Maximum Efficiency	98%						
Maximum AC Charge Current	20A	20A	30A	40A	60A	60A	60A
Maximum Charge Current	65A	70A	70A	100A	120A	120A	120A
MECHANICAL SPECIFICATIONS							
Machine Dimension (W*H*D) (mm)	224*337*98	255*318*110	224*337*98	254.5*367.4*103	254.5*367.4*103	318*367.4*121	318*367.4*121
Package Dimension (W*H*D) (mm)	300*410*178	355*402*206	299*292*184	436*331*189	436*331*189	549*410*200	549*410*200
N.W (kg)	3.6	5.5	4.7	5.5	5.5	5.9	5.9
G.W (kg)	4.3	6.0	5.5	6.5	6.5	7.2	7.2
OTHER							
Humidity	5% to 95% Relativ Humidity (Non-condensing)						
Operating Temperature	0°C~50°C						
Storage Temperature	-15°C -60°C						
Communication Interface	USB/WIFI (optional)						
Warranty	2years						
CERTIFICATION & STANDARDS							
CE-EMC+LVD(EN6100-6-3, EN6100-6-1+EN IEC62109-1, EN IEC62109-2)							

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HIGH FREQUENCY SOLAR INVERTER

PV1800 ECO Series



2~6.2KW | Dual output

PV1800 ECO is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. PV1800 ECO Series can run without battery. The Maximum PV input voltage can reach 400V/450V/500V, which can help customers make full use of solar energy.



- Pure sine wave output
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in MPPT solar charge controller
- Wide PV input voltage range
- Can provide the power to the load without battery
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support RS485,CAN monitoring function
- Dual outputs for smart load management
- Can communicate with lithium batteries (CAN port)

Back panel description

2KW

3.6-6KW

1. Ground

2. AC Input

3. Main Load

4. Second Load

5. Battery Input

6. Power ON/OFF switch

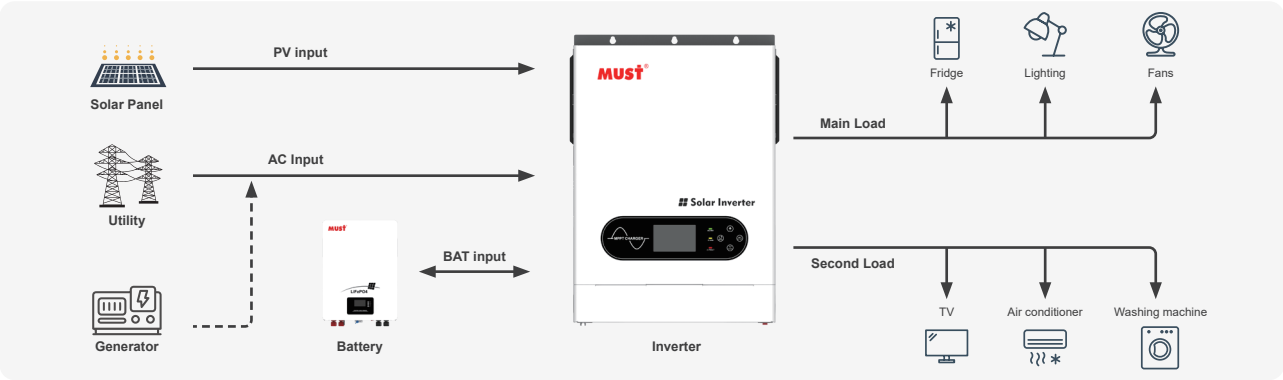
7. PV input

8. RS-485/CAN Communication port

9. WiFi port

10. Dry Contact

Solar system connection



MODEL	PV18-2012 ECO	PV18-3624 ECO	PV18-4024 ECO	PV18-6048 ECO	PV18-6248 ECO
Nominal Battery System Voltage	12VDC	24VDC	24VDC	48VDC	48VDC
INVERTER OUTPUT					
Rated Power (Main+Second Load)	2000VA/2000W	3600VA/3600W	4000VA/4000W	6000VA/6000W	6200VA/6200W
Battery Mode (Main+Second Load)	2000VA/1600W	3000VA/3000W	3500VA/3500W	5500VA/5500W	6200VA/6200W
Surge Power	3200W	6000W	7000W	11000W	12400W
Waveform	Pure sine wave				
AC Voltage Regulation (Batt.Mode)	230VAC±5%(Setting)				
Inverter Efficiency(Peak)	90~93%				
Transfer Time	10ms (UPS / VDE4105) / 20ms (APL)				
AC INPUT					
Voltage	230VAC±5%				
Selectable Voltage Range	170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VED4105)				
Frequency Range	50Hz / 60Hz(Auto sensing)				
BATTERY					
Normal voltage	12VDC	24VDC	24VDC	48VDC	48VDC
Floating Charge Voltage	13.7VDC	27.4VDC	27.4VDC	54.8VDC	54.8VDC
Overcharge Protection	15VDC	30VDC	30VDC	60VDC	60VDC
SOLAR CHARGER & AC CHARGER					
Maximum PV Array Open Circuit Voltage	400VDC	400VDC	450VDC	450VDC	500VDC
Maximum PV Input Current	16A	18A	18A	28A	28A
Charging Algorithm	3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li)				
Maximum PV Array Power	2000W	4000W	4000W	6000W	6200W
PV Array MPPT Voltage Range(Typ.)	30~320VDC		60~360VDC		120~450VDC
Maximum Solar Charge Current	80A	100A	100A	100A	120A
Maximum AC Charge Current	80A	60A	60A	100A	100A
Maximum Charge Current	80A	100A	100A	100A	120A
MECHANICAL SPECIFICATIONS					
Machine Dimension (W*H*D)(mm)	290*367*111	318*454*122.5			
Package Dimension (W*H*D)(mm)	446*394*187	544.5*410*200			
N.W (kg)	6	7.8	8.0	9.0	10
G.W (kg)	7.2	9.3	9.5	10.2	11.6
OTHER					
Humidity	5% to 95% Relative humidity (Non-condensing)				
Operating Temperature	-10°C~50°C				
Storage Temperature	-15°C~60°C				
Communication Interface	USB/WIFI/RS-485/CAN				
Warranty	2 year				
Anti-dust Kit	none	yes	yes	yes	yes
CERTIFICATION & STANDARDS					
CE					

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HIGH FREQUENCY SOLAR INVERTER

PV1800 PRO II Series

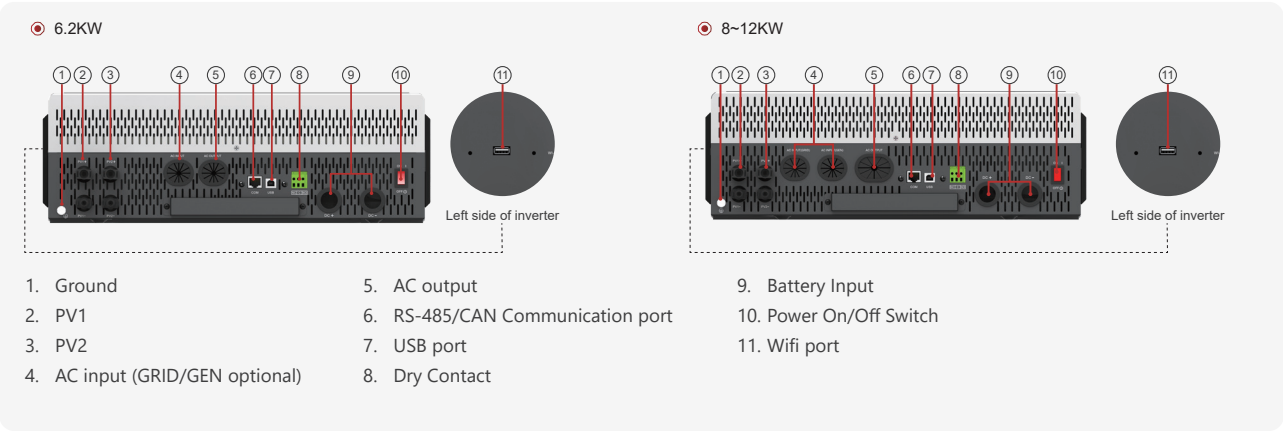
6.2~12KW | PV500V | 120A~150A | Dual output

PV1800 PRO II is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. PV1800 PRO II Series can run without battery. The Maximum PV input voltage can reach 500V and MPPT voltage range is 90~430Vdc, built-in two MPPTs solar charge controller, which can help customers make full use of solar energy.

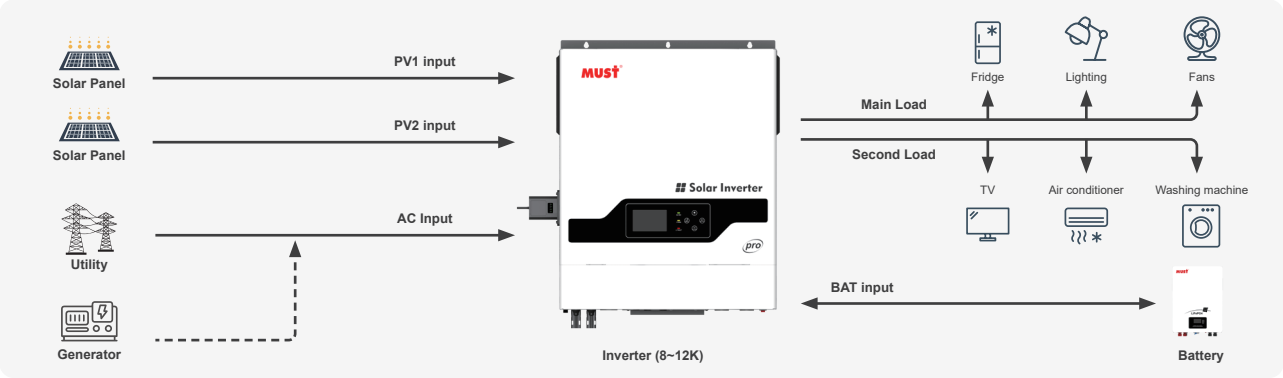


- Dual output for smart load management
- Smart color LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in Two MPPTs solar charge controller
- Wide MPPT voltage range is 90~450V, the maximum PV input voltage can reach 500V
- Can provide the power to the load without battery
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- With BMS lithium battery communication function
- With AC/PV lithium battery activation function
- Support USB, RS485 monitoring function
- Parallel operation up to 6 units (optional)
- WIFI remote monitoring (optional)

Back panel description



Solar system connection



MODEL	PV18-6248 PRO II	PV18-8048 PRO II	PV18-10048 PRO II	PV18-11048 PRO II	PV18-12048 PRO II
Default Battery System Voltage	48VDC				
INVERTER OUTPUT					
Rated Power	6200VA/6200W	8000VA/8000W	10000VA/10000W	11000VA/11000W	12000VA/12000W
Surge Power	12400W	16000W	20000W	22000W	24000W
Waveform	Pure sine wave				
AC Voltage Regulation (Batt.Mode)	230VAC±5%(Setting)				
Inverter Efficiency(Peak)	92%				
Transfer Time	10ms(UPS / VDE4105) / 20ms(APL)				
AC INPUT					
Voltage	230VAC				
Selectable Voltage Range	170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VDE)				
Frequency Range	50Hz / 60Hz (Auto sensing)				
BATTERY					
Normal voltage	48VDC				
Floating Charge Voltage	54.8VDC				
Overcharge Protection	60VDC				
SOLAR CHARGER & AC CHARGER					
Maximum PV Array Open Circuit Voltage	500VDC				
Charging Algorithm	3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li)				
Maximum PV Array Power	4000W*2	4000W*2	5000W*2	6000W*2	6000W*2
Maximum PV Input Current	18A*2	18A*2	27A*2(40A max)	27A*2(40A max)	27A*2(40A max)
PV Array MPPT Voltage Range	90~430VDC				
Maximum Solar Charge Current	120A	120A	150A	150A	150A
Maximum AC Charge Current	100A	120A	150A	150A	150A
Maximum Charge Current	120A	120A	150A	150A	150A
MECHANICAL SPECIFICATIONS					
Machine Dimension (W*H*D)(mm)	425*473*145	425*527*145			
Package Dimension (W*H*D)(mm)	/	/	/	/	/
N.W (kg)	/	/	/	/	/
G.W (kg)	/	/	/	/	/
OTHER					
Humidity	5% to 95% Relativ Humidity (Non-condensing)				
Operating Temperature Range	0°C~50°C				
Storage Temperature Range	-15°C~60°C				
Warranty	2 year				
CERTIFICATION & STANDARDS					

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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.

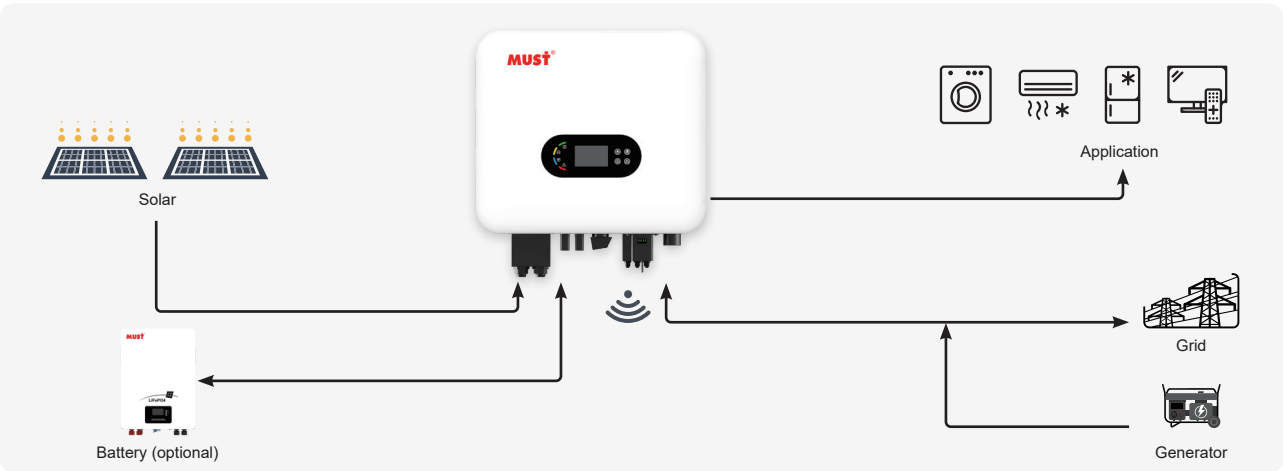


- Multiple operation modes: Grid-tie,off grid with storage backup
- IP66 water-proof and dust-proof
- MPPT voltage range 120-500V
- Support LCD display&Smart LCD setting
- Available Export control CT sensor function
- Multiple communications:USB,RS485,GPRS and wifi etc
- Full protection function:Over-voltage,over-frequency, 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 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 current	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 condensing)				
Operating temperature range	-25°C+60°C With derating above 45°C				
Cooling concept	Natural				
Altitude	<3000m				
CERTIFICATION & STANDARDS					

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SINGLE PHASE HYBRID INVERTER

PH1100 EU Series

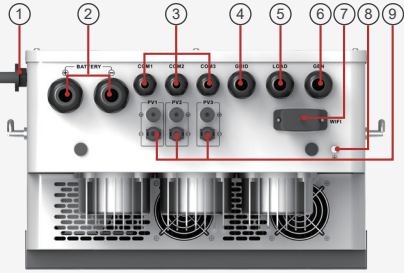
8~12KW | Single Phase | IP65

The PH1100 EU Series single-phase hybrid inverter is the ideal gateway to an all-round energy transition in the home. As a PV and battery inverter in one, it ensures a reliable and sustainable supply of energy. The power range is from 8kW to 12kW, compatible with low voltage (40-60V) batteries. Energy management is based on time-of-use and demand charge rate structures, which significantly reduce the amount of energy purchased from the public grid.



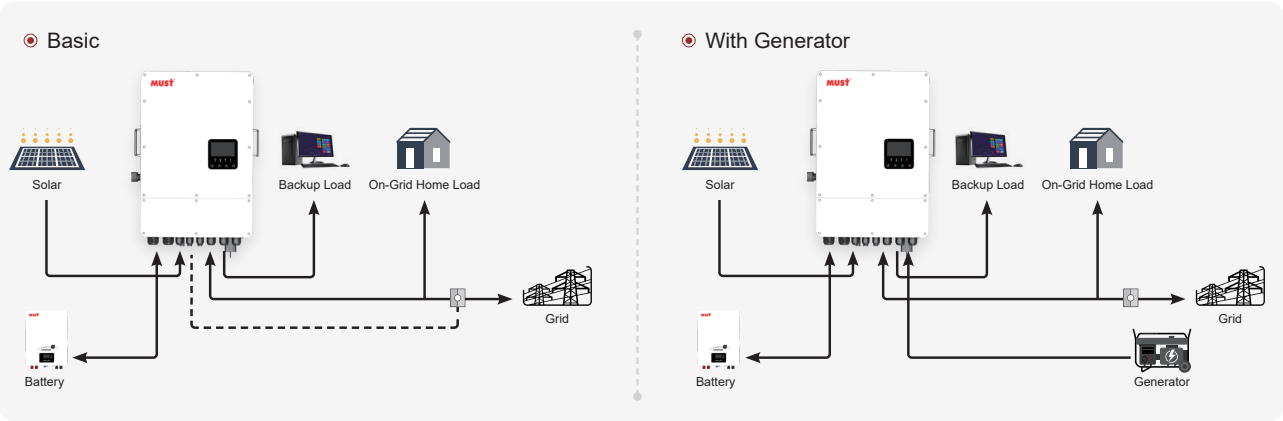
- Colorful touch LCD
- IP65 protection degree
- Max. charging/discharging current of 250A
- Ac coupling to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation
- Support multiple batteries parallel
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator
- Wifi monitoring

Back panel description



1. DC switch
2. Battery input connectors
3. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
4. Circuit breaker of Grid
5. Load
6. Generator input
7. WiFi Interface
8. Ground
9. PV input

Solar system connection



MODEL	PH11-8KL1-EU	PH11-10KL1-EU	PH11-12KL1-EU
Rated power	8000W	10000W	12000W
BATTERY INPUT DATA			
Battery type	Lead-acid battery / Lithium battery		
Battery voltage range	40~60V		
Max. Charging Current	190A	220A	250A
Max. Discharging Current	190A	220A	250A
External Temperature Sensor	Yes		
Charging Curve	3 Stages / Equalization		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV STRING INPUT DATA			
Max. DC Input Power	10400W	13000W	15600W
PV Input Voltage(V)	370V (125V~500V)		
MPPT Range(V)	150~425V		
Full Load DC Voltage Range	200~425V		
Start-up Voltage(V)	125V		
PV Input Current(A)	20+20	26+26+26	26+26+26
No. of MPPT Trackers	2	3	3
No. of Strings Per MPPT Tracker	1+1	1+1+1	1+1+1
AC INPUT/OUTPUT DATA			
Rated AC Output Power	8000W	10000W	12000W
Max AC Output Power	8800W	11000W	13200W
AC Input/Output Rated Current	36.4/34.8A	45.5/43.5A	54.6/52.2A
Max.AC Input/Output Current	40/38.3A	50/47.9A	60/57.4A
Max Continuous AC Passthrough	50A	60A	60A
Peak Power (off grid)	2 times of rated power, 10 S		
Power Factor	0.8 leading - 0.8 lagging		
AC Output Frequency and Voltage	50/60Hz; 220/230Vac		
Grid Type	Single Phase		
Total Harmonic Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% (Rated Current)		
EFFICIENCY			
Max. Efficiency	97.6%		
Euro Efficiency	96.5%		
MPPT Efficiency	>99%		
PROTECTION			
Integrated	PV Arc Fault Detection, PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection,Over Voltage Category		
Surge Protection	DC Type II/ AC Type III	DC Type II/ AC Type II	DC Type II/ AC Type II
Overvoltage Category	DC Type II/ AC Type III	DC Type II/ AC Type III	DC Type II/ AC Type III
GENERAL DATA			
Operating Temperature Range	-40~60°C, >45°C Derating		
Cooling	Smart cooling		
Noise	≤55dB		
Communication with BMS	RS485/CAN		
Monitoring mode	WiFi/ APP		
Machine Dimension (W*H*D)(mm)	426*526*255 (Excluding connectors and brackets)	446*576*254 (Excluding connectors and brackets)	
Package Dimension (W*H*D)(mm)	/	/	
N.W(kg)	29	31	
G.W(kg)	/	/	
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 Year		
CERTIFICATION & STANDARDS			

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ON/OFF GRID HYBRID SOLAR INVERTER

PH1100 EU Series

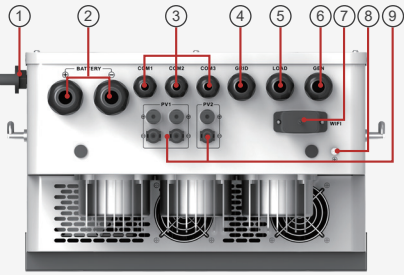
5~12KW | Three Phase | 380VAC

PH1100 EU is brand new three phase hybrid inverter with low battery voltage 48V, ensuring system safe and reliable. With compact design and high-power density, this series supports 1.3 DC/AC ratio, saving device investment. It supports three phase unbalanced output, extending the application scenarios. Equipped with CAN port (x2) BMS and parallel, x1 RS485 port for BMS, x1 RS232 port for remotely control, x1 DRM port, which makes the system smart and flexible.



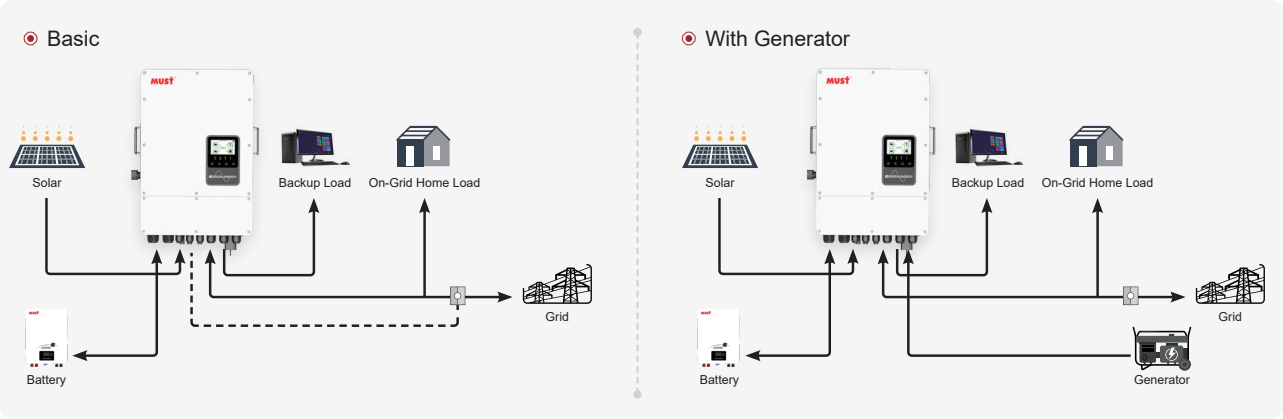
- 100% unbalanced output, each phase max. output up to 50% rated power
- Max. 6 pcs parallel for on-grid and off-grid operation
- AC couple to retrofit existing solar system
- Support multiple batteries parallel
- Max. charging/discharging current of 240A
- Support storing energy from diesel generator
- 48V low voltage battery, transformer isolation design
- IP66 water-proof and dust-proof
- "Time of use" function: a maximum of 6 time segments can be set
- Wifi monitoring

Back panel description



1. DC switch
2. Battery input connectors
3. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
4. Circuit breaker of Grid
5. Load
6. Generator input
7. WiFi Interface
8. Ground
9. PV input with two MPPT

Solar system connection



MODEL	PH11-5KL3-EU	PH11-6.5KL3-EU	PH11-8KL3-EU	PH11-10KL3-EU	PH11-12KL3-EU
Rated power	5000W	6500W	8000W	10000W	12000W
BATTERY INPUT DATA					
Battery type	Lead-acid battery / Lithium battery				
Battery voltage	48V				
Battery voltage range	40~64V				
Charging curve	3-stage adaptive with maintenance/Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Over-current protection/ Over-temperature protection	Yes / Yes				
Maximum charging/discharging power	5000W	6500W	8000W	10000W	12000W
Maximum charging/discharging current	120A	150A	190A	210A	240A
PV STRING INPUT DATA					
Max. DC Input Power	6500W	8450W	10400W	13000W	15600W
Rated PV Input Voltage	550V				
Maximum DC voltage	800V				
Start-up Voltage	160V				
Minimum voltage for grid connection	310V				
Full Load DC Voltage Range	350-650V				
Enter high voltage error recovery point	800V				
MPPT voltage range	200~650V				
Maximum input current	15A/15A			30A/15A	
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1			2+1	
AC INPUT/OUTPUT DATA					
Rated AC Input/ Output Power	5000W	6500W	8000W	10000W	12000W
Max AC Input/ Output Power	5500W	7150W	8800W	11000W	13200W
AC Input/ Output Rated Current	7.6/7.2A	9.8/9.42A	12.1/11.6A	15.2/14.5A	18.2/17.4A
Max AC Input/ Output Current	8.4/8A	10.8/10.4A	13.4/12.8A	16.7/15.9A	20/19.1A
Max. Three-phase Unbalanced Output Current	11.4/10.9A	14.7/14.1A	18.2/17.4A	22.7/21.7A	27.3/26.1A
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage	220/380,230/400Vac				
Rated Input/Output Grid Frequency/Range	50/60;45~55/55-65				
Grid Type	Three Phase				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
EFFICIENCY					
Max. Efficiency	≥97.6%				
Euro Efficiency	97.0%				
PROTECTION					
Integrated	Islanding protection, PV input polarity reverse protection, insulationresistance detection, surge protection,leakage current monitoringprotection,output current protection, output short circuit protectionoutput overvoltage protection				
Surge Protection	DC Type III/AC Type III				
Overvoltage Category	DC Type II/AC Type III				
GENERAL DATA					
Operating Temperature Range (°C)	-25°C to +60°C, >45°C Derating				
Cooling	Fan cooling				
Noise (dB)	≤55dB				
Communication with BMS	RS485/CAN				
Machine Dimension (W*H*D)(mm)	446*692*260 (excluding connectors and racks)				
Package Dimension (W*H*D)(mm)	567*816*404				
N.W(kg)	38				
G.W(kg)	42				
Protection Degree	IP66				
Installation Style	Wall-mounted				
Warranty	5 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
CERTIFICATION & STANDARDS					

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

PORTABLE SOLAR POWER STATION

HBP1500 Series

1~1.2KW | 12V,24V | 230V

The HBP1500 series is a versatile portable power station suitable for powering various household appliances such as TVs, stereos, laptops, and desktop computers. It is equipped with a built-in LiFePO4 battery pack at home or office, it is a backup power provide uninterrupted power supply, at the same time, it a great choice for outdoor camping as well.



- Portable and easy carry
- Multiple Charging Ways Available: AC Charging, Solar Charging
- HD Screen: the power status is clear at a glance
- Multiple outputs can supply power for various electrical appliances.
- Intuitive battery endurance indicate

Back panel description

1. LCD screen

2. DC 12V output(5521) *1pcs

3. DC 9V output(5521) *1pcs

4. USB-A (5V 2.1A*4pcs)

5. USB TypeC (5V 1A*1pcs)

6. Indicator light

7. Exit button

8. DC power button

9. Setting button

10. AC power button

11. Power switch

12. Ground

13. AC input

14. PV input

15. Main switch

16. AC output ×2pcs



Model	HBP15-0612	HBP15-1012	HBP15-1224
Nominal Battery System Voltage	12VDC		24VDC
INVERTER OUTPUT			
Rated Power	600VA / 600W	1000VA / 1000W	1200VA / 1200W
Waveform	Pure Sine Wave		
Nominal Output Voltage RMS	230V		
Output Voltage Regulation	+10/-18%		
Output Frequency	50Hz / 60Hz ±1Hz		
Inverter Efficiency (Peak)	>90%		
Line Mode Efficiency	>95%		
Typical Transfer Time	Typical < 10ms , 20ms max		
AC INPUT			
Voltage Nominal	230VAC		
Voltage Range	176 ~ 278VAC ± 3%		
Frequency Range	45 ~ 65Hz ± 2Hz		
Frequency Nominal	50Hz / 60Hz (Auto Detection)		
SOLAR CHARGER & AC CHARGER			
Maximum AC Charge Current	20A	15A	
Maximum PV Charge Current	40A (max)		
Maximum Charge Current AC+PV	40A (max)		
Maximum PV Array Power	600W	1200W	
MPPT Operating Voltage Range	15 ~ 75VDC	30 ~ 75VDC	
Maximum PV Array Open Voltage	105VDC		
Maximum Efficiency	> 95%		
DC OUTPUT			
USB Type A	5V 2.1A * 4ch		
USB Type C	5V 1A * 1ch		
DC output	9V 1A + 12V 1A		
PROTECTION			
Battery Input Protection	FUSE		
Load Output Protection	FUSE		
Bypass Fuse Rating	6.3A	10A	10A
LITHIUM BATTERY			
Battery Energy	538Wh/ 640Wh	1280Wh	1076Wh/ 1280Wh
Nominal Input Voltage	12.8VDC (4 Series LiFePO4)		25.6VDC (8 Series LiFePO4)
Low Battery Cutoff	11.5VDC		23.0VDC
Low Battery Alarm	12.0VDC		24.0VDC
Low Battery Voltage Recover	12.8VDC		25.6VDC
High Battery Voltage Recover	14.5VDC		29.0VDC
High Battery Voltage Cutoff	15.0VDC		30.0VDC
MECHANICAL SPECIFICATIONS			
Machine Dimension (W*H*D)(mm)	225* 304*335		
Package Dimension (W*H*D)(mm)	307* 375 *417		
N.W(kg)	12	17	17
G.W(kg)	14	19	19
OTHER			
Operation Temperature Range	0°C ~ 45°C		
Display	LED+LCD		
CERTIFICATION & STANDARDS			

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LITHIUM IRON PHOSPHATE (LIFEPO4) BATTERY

LP1600 Series

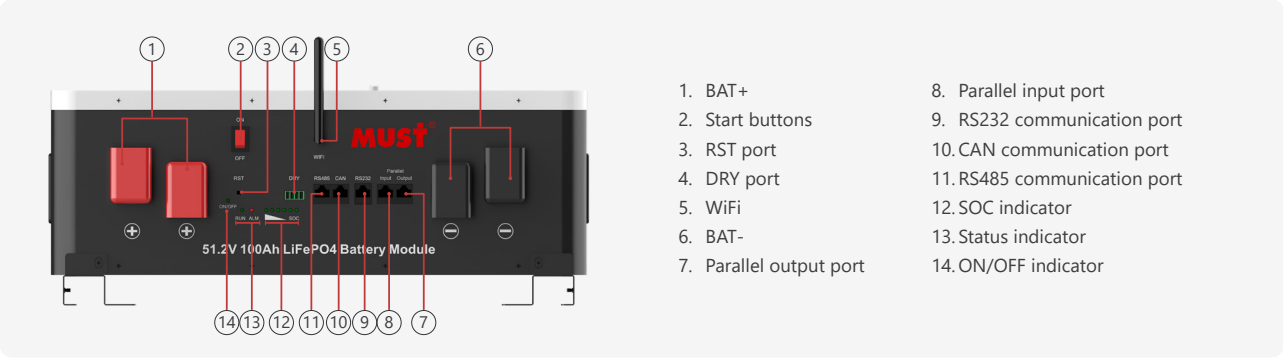
2.56~10.24KWH | WIFI

The LP1600 Series offers a versatile and reliable power solution. Combine up to 15 units for energy capacities ranging from 2560Wh to 10240Wh. With WiFi Remote Monitoring, stay connected and in control. Whether it's wall-mounted convenience, stacked-mounting (up to 5 units) for space efficiency, or rack-mounted for industrial power management, this series offers seamless adaptability.



- 3-in-1: Wall-mounted, Stacked-mounted, Rack-mounted(optional)
- Large capacity, high power output
- Safest lithium iron phosphate battery cell with high energy density
- Modular design: supports up to 15 units in parallel
- IP21 protection for both indoor use
- Support CAN & RS485 communication with mainstream inverters
- Local monitoring via LCD monitor
- Built-in WiFi Smart BMS Module

Back panel description



Installation method



Technical Data		LP16-24100	LP16-24200	LP16-48100	LP16-48200
Nominal Voltage		25.6V		51.2V	
Nominal Capacity		100Ah	200Ah	100Ah	200Ah
Nominal energy		2560Wh	5120Wh	5120Wh	10240Wh
Life Cycles		6000 cycles @ 80% DOD, 25°C			
Recommended Charge Voltage		29.2V		58.4V	
Recommended Charge Current		20A	40A	20A	40A
End Of Discharge Voltage		22V		44V	
Standard Method	Charge	20A	40A	20A	40A
	Discharge	50A	100A	50A	100A
Maximum Continuous Current	Charge	100A	150A	100A	150A
	Discharge	100A	150A	100A	150A
BMS Cut-Off Voltage	Charge	29.2 V (3.65V/Cell)		58.4 V (3.65V/Cell)	
	Discharge	22.0V (2s) (2.75V/Cell)		44.0V (2.75V/Cell)	
Temperature	Charge	0 ~ 45°C			
	Discharge	-10 ~ 55°C			
Storage Temperature		-5~35°C			
Shipment voltage		≥25.6V		≥51.2V	
Module Parallel		Up to 15 units			
Communication		CAN2.0/RS232/RS485			
Case Material		SPPC			
Machine Dimension (H*W*D) (mm)		485.5*442*177	486.5*442*250	625.5*442*177	686.5*442*250
Package Dimension (W*H*D) (mm)	carton box	557*547*227	557*547*300	688*557*227	non
	wooden box	555*565*340	555*565*410	696*565*335	759*569*391
N.W (kg)		27	44	45	80
G.W (kg)	carton box	30	48	48	non
	wooden box	40	57	58	97
* Variations in dimensions and weights may occur due to production batches.					
Charge Retention And Capacity Recovery Capability		Standard charge the battery, and then put aside at room temperature for 28d or 55°C for 7d, Charge retention rate≥90%, Recovery rate of charge≥90			
Certification & Standards		CE-EMC (EN 61000-6-3: 2007+A1: 2011+AC: 2012 EN IEC 61000-6-1: 2019) IEC62619-1:2018; IEC62619:2022; IEC62619:2017; UN38.3/ MSDS			

LITHIUM IRON PHOSPHATE (LIFEPO4) BATTERY

LP2100 Series

14.3~15.3KWH | WiFi

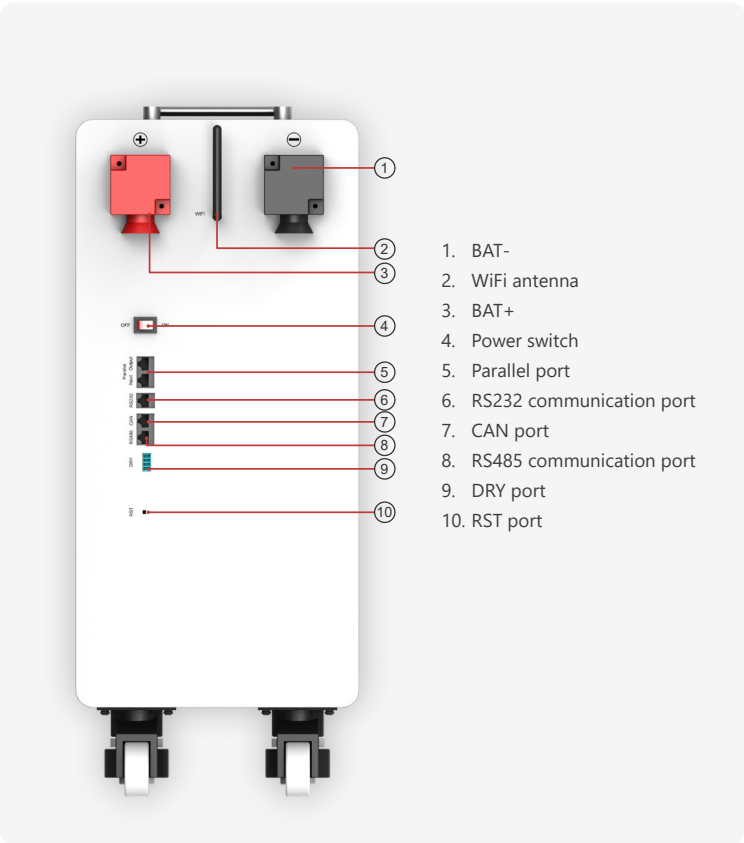
LP2100 Series is a lithium battery specially designed for residential applications with superior performance. Compatible with MUST PV/ EP/PH inverters series, one-stop-shop solution can be designed with LP2100 series, save you precious time and money, ideal solution for large home and small commercial with strong capacity 14.3kWh/15.3kWh.



- Remote diagnosis & update
- Auto reboot after undervoltage
- Built-in WiFi Smart Module
- 15 Units in parallel maxium
- 8KW continous/module, 10KW @10s peak/module
- Longer cycle life 6000 cycles @ 80% DOD, 25 °C
- Support CAN & RS485 communication with mainstream inverters



Back panel description



Technical Data		LP21-48280	LP21-48300
Nominal Voltage		51.2V	
Nominal Capacity		280Ah	300Ah
Nominal energy		14336Wh	15360Wh
Life Cycles		6000 cycles @ 80% DOD, 25°C	
Recommended Charge Voltage		57.6V	
Recommended Charge Current		56A	60A
End Of Discharge Voltage		44V	
Standard Charge Current		56A	60A
Standard Discharge Current		140A	150A
Maximum Continuous Charge Current		200A	200A
Maximum Continuous Discharge Currentt		200A	200A
BMS Cut-Off Voltage Charge		58.4 V (3.65V/Cell)	
BMS Cut-Off Voltage Discharge		22.0V (2s) (2.75V/Cell)	
Temperature Charge		0 ~ 45°C	
Temperature Discharge		-10 ~ 55°C	
Storage Temperature		-5~35°C	
Shipment voltage		≥25.6V	
Module Parallel		Up to 15 units	
Communication		CAN2.0/RS232/RS485	
Case Material		SPPC	
Machine Dimension (H*W*D) (mm)		733*260*633	
Package Dimension (W*H*D) (mm)	wooden box	440*720*870	/
N.W (kg)		118	/
G.W (kg)	wooden box	138	/
* Variations in dimensions and weights may occur due to production batches.			
Charge Retention And Capacity Recovery Capability		Standard charge the battery, and then put aside at room temperature for 28d or 55°C for 7d, Charge retention rate≥90%, Recovery rate of charge≥90	
Certification & Standards		CE-EMC(EN 61000-6-3: 2007+A1: 2011+AC: 2012 EN IEC 61000-6-1: 2019) UN38.3/ MSDS / IEC62619:2017	

MPPT SOLAR CHARGE CONTROLLER
PC1800F Series



60~100A | 12V,24V,36V,48V | 145V

MPPT (Maximum Power Point Tracking)Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.



- LCD display , easy to operate on LCD screen
- Multi stage charging (3-stage charging , parallel charging and equalized charging function)
- Maximum Solar Input Voltage: 145V
- BTS – Battery remote temperature sensor terminal
- Enable to charge Li-thium, Gel , lead-acid battery
- With RS485 & USB communication port
- Protection: PV array short circuit, PV reverse polarity, Battery reverse polarity, Over charging, Output short circuit

Back panel description

80A

1

2

3

4

5

6

7

100A

1

2

3

4

5

6

1. The load positive terminal

2. Battery connectors

3. The load negative terminal

4. PV connectors

5. Communication port

6. Battery temperature sensor terminal

7. USB port

Solar system connection

MODEL	PC18-6015F	PC18-8015F	PC18-10015F				
Nominal Battery System Voltage	12V / 24V / 48VDC (Auto detection); 36V (Setting)						
CONTROLLER INPUT							
Battery Voltage		12V / 24V / 36V / 48V					
Maximum Solar Input Voltage	12V (VBAT)	100V					
	24V (VBAT)	145V					
	36V (VBAT)	145V					
	48V (VBAT)	145V					
PV Array MPPT Voltage Range	12V (VBAT)	15-95V					
	24V (VBAT)	30~130V					
	36V (VBAT)	45~130V					
	48V (VBAT)	60~130V					
Maximum Input Power	12V (VBAT)	940W	1250W	1560W			
	24V (VBAT)	1880W	2500W	3120W			
	36V (VBAT)	2820W	3750W	4680W			
	48V (VBAT)	3760W	5000W	6250W			
BATTERY							
Charging Set Points	Flooded Battery	Absorption Stage	14.2V / 28.4V / 42.6V / 56.8V				
		Float Stage	13.7V / 27.4V / 41.1V / 54.8V				
	AGM (Default)	Absorption Stage	14.4V / 28.8V / 43.2V / 57.6V				
		Float Stage	13.7V / 27.4V / 41.1V / 54.8V				
Over-charging Voltage		15.5V / 30.0V / 45.0V / 60.0V					
Over-charging Comeback Voltage		14.5V / 29.5V / 44.5V / 59.0V					
Battery Defect Voltage		10.0V / 17.0V / 25.5V / 34.0V					
Temperature Compensation Conefficient		-5mv / °C /cell (25°Cvef)					
Peak Conversion Efficiency		98% (MPPT Efficiency 99%)					
Maximum Battery Current		60A	80A	100A			
Maximum DC load current		/	/	100A			
Max Charging Current		60amps continuous @ 40°C ambient	80amps continuous @ 40°C ambient	100amps continuous @ 40°C ambient			
DISPLAY & PROTECTION							
Protections		Solar high voltage disconnect/ Solar high voltage reconnect/ Battery high voltage disconnect Battery high voltage reconnect/ High temperature disconnect/ High temperature reconnect					
MECHANICAL SPECIFICATIONS							
Machine Dimension (W*H*D)(mm)		163.6*306.6*94.9					
Package Dimension (W*H*D)(mm)		/					
N.W(kg)		3					
G.W(kg)		/					
OTHER							
Mounting		Wall mount					
Environmental Rating		Indoor					
Enclosure		IP20					
Radiating Mode		Fan cooling					
Operating Temperature Range		-10~55°C					
Ambient Humidity		0~90% relative humidity (non-condensing)					
Altiude		≤3000m					
CERTIFICATION & STANDARDS							
UKCA (BS IEC62109-1:2010)+CE-LVD(EN IEC62109-1:2010) CE-EMC+LVD (EN6100-6-3:2007+A1:2011,EN6100-6-1:2019+ EN IEC62109-1:2010)							

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ALL-IN-ONE ESS
HBP1800 Series

1.2~4KW | 12V, 24V | 1280Wh~7168Wh

MUST HBP1800 series all-in-one energy storage solution, support 1.2~3KW output for different load appliances. It's based on the original cabinet design, stacked with solar energy storage lithium battery 1280wh~7168wh, and built in battery protection system, fully retain the use of load power in applications of residential, school, commercial and public utility area.



- 1.2~4KW Pure sine wave inverter
- Energy storage 1280wh~7168wh Optional
- 4000+ Charge cycle @ 80% DOD,25°C
- 24/7 Plug & play
- 11 Output ports for DC load
- Built in Multi safety protection

- Features higher capacities for greater compatibility with more power-hungry devices, and the latest in USB-C Power Delivery capable of charging larger USB devices like laptops.
- Includes pre-installed solar charging optimization module that functions as a maximum power point tracker (MPPT), resulting in up to 40% faster charge times.
- With LiFePO4 lithium cells, known for stability and safety, monitored by a state-of-the-art battery management system that prevents over-charge, over-current, and short circuiting.
- Built in Multi safety protection that include short circuit, overload and over-temperature and error code reporting.



Camping



Office



Shop



Home

MODEL		HBP18-1212	HBP18-2024	HBP18-3024	HBP18-4024
INVERTER					
Rated power		1200W	2000W	3000W	4000W
Surge power		2400W	4000W	6000W	8000W
Output voltage waveform		Pure sine wave			
Output voltage regulation		220~240Vac(setting)			
Output frequency		50Hz / 60Hz (±0.2Hz)			
Peak efficiency		90~93%			
Nominal DC input voltage		12Vdc (±0.3)	24Vdc (±0.3)	24Vdc (±0.3)	24Vdc (±0.3)
Standby Consumption		< 25W			
PV INPUT					
Max solar power input		900W	1800W	1800W	1800W
PV max charging current		60A (±3A)	60A (±3A)	60A (±3A)	60A (±3A)
Combined charging current		70A (±4A)	80A (±4A)	80A (±4A)	80A (±4A)
Max efficiency		98.0% max			
PV array open circuit voltage		105VDC	160VDC	160VDC	160VDC
PV Array MPPT Voltage Range		15~105V	30~128VDC	30~128VDC	30~128VDC
AC INPUT					
AC input voltage		230Vac ±5%			
Acceptable input voltage range		90-280VAC			
Nominal input frequency		50Hz / 60Hz (Auto detection)			
Transfer time		10ms typical (UPS, VDE); 20ms typical (APL)			
AC CHARGE					
Charging current @ Nominal input voltage		20A (±4A)	40A/(±4A)	60A (±4A)	60A (±4A)
Charging Algorithm		4-step (Li)			
OUTPUT					
AC output		230Vac (Socket *4pcs)			
Type-C		DC output*1pcs			
USB (5V 2.4A)		DC output*4pcs			
USB (12V 1A)		DC output*2pcs			
LITHIUM BATTERY					
Energy		1280Wh	2560Wh	3072Wh	7168Wh
Nominal voltage		12.8V	25.6V	25.6V	25.6V
Battery capacity		100Ah	100Ah	120Ah	280Ah
Protection board		100A	100A	150A	150A
Standard charging & discharge current		50A	50A	50A	50A
Operating temperature	Charge	0~45°C			
	Discharge	-10~60°C			
DIMENSION					
Machine Dimension (W*H*D)(mm)		359*499*234		420*497*280	460*539*411
Package Dimension (W*H*D)(mm)		460*560*335		522*655*382	570*702*521
N.W(kg)		21	30	36	66
G.W(kg)		26	41	45	80
Standard Warranty		Inverter: 2 years ; Lithium battery: 3 years			
CERTIFICATION & STANDARDS					

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