MUST®
Solar Power System



ON/OFF GRID HYBRID SOLAR INVERTER

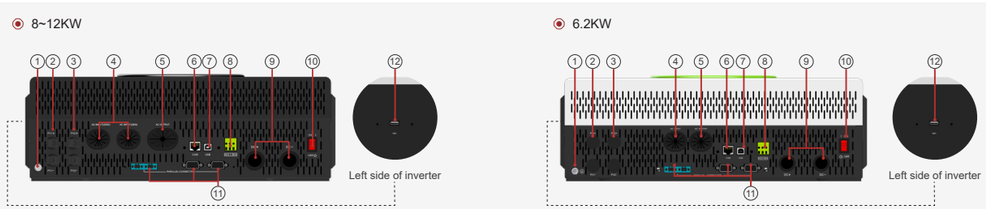
PH1900 EXP Series

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

PH1900 EXP is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. PH1900 EXP Series can run without battery.
The Maximum PV input voltage can reach 500V and MPPT voltage range is 90~450Vdc, built-in two MPPTs solar charge controller, which can help customers make full use of solar energy.

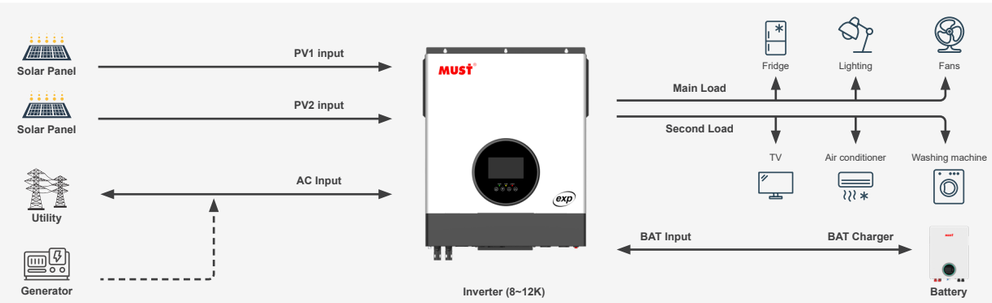
- Dual output for smart load management
- Smart color LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in Two MPPTs solar charge controller
- Wide MPPT voltage range is 90~450V, the maximum PV input voltage can reach 500V (450V for parallel)
- Can provide the power to the load 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
- WIFI remote monitoring

Back panel description



1. Ground
2. PV1
3. PV2
4. AC input (GRID/GEN optional)
5. AC output
6. RS-485/CAN Communication port
7. USB port
8. Dry Contact
9. Battery Input
10. Power On/Off Switch
11. Parallel communication port (only for parallel model)
12. Wifi port

Solar system connection



MODEL	PH19-6248 EXP	PH19-8048 EXP	PH19-10048 EXP	PH19-11048 EXP	PH19-12048 EXP
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				
Max AC Input Voltage	300VAC				
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 (450V for parallel)				
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	90~450VDC (90~430VDC for parallel)				
Min Battery Voltage For PV charge	34VDC				
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)	425*473*145mm	425*527*145mm			
Package Dimension (W*H*D)	/	/	/	/	/
N.W (kg)	/	17.4	17.4	/	17.6
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					
CE					

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