MUST Solar Power System

## HIGH FREQUENCY SOLAR INVERTER

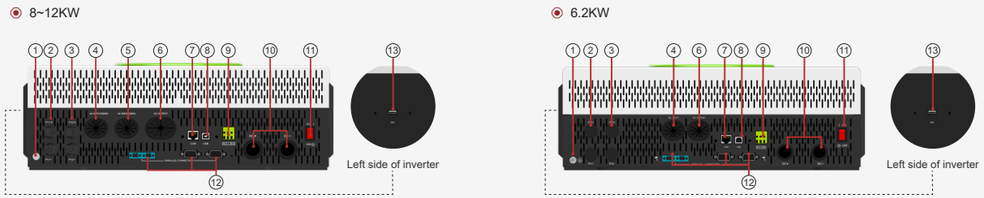
# PV1900M EXP Series

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

PV1900M 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. PV1900M 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.

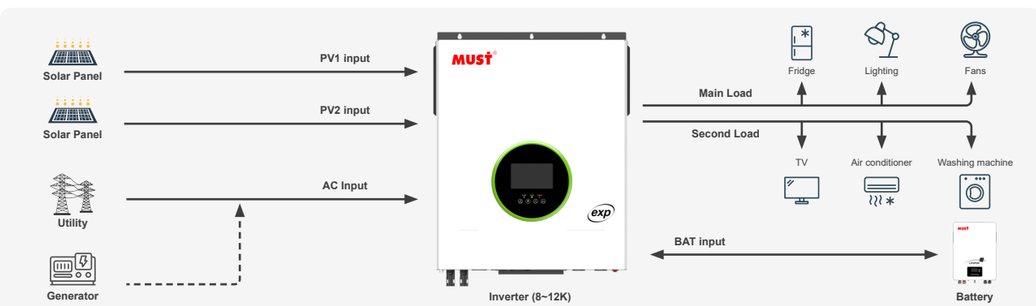
- Dual output for smart load management
- Smart color LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in Two MPPTs solar charge controller
- Wide MPPT voltage range is 90~450V, the maximum PV input voltage can reach 500V (450V for parallel)
- Can provide the power to the load 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 with up to 3 units (for 48V mode)
- WIFI remote monitoring (optional)

### Back panel description




1. Ground
2. PV1
3. PV2
4. AC input1
5. AC input2
6. AC output
7. RS-485/CAN Communication port
8. USB port
9. Dry Contact
10. Battery Input
11. Power On/Off Switch
12. Parallel communication port (only for parallel model)
13. Wifi port

### Solar system connection




| MODEL | PV19-6248 EXP | PV19-8048 EXP | PV19-10048 EXP | PV19-12048 EXP |
|---|---|---|---|---|
| Default Battery System Voltage | 48VDC | | | |
| **INVERTER OUTPUT** | | | | |
| Rated Power | 6200VA/6200W | 8000VA/8000W | 10000VA/10000W | 12000VA/12000W |
| Surge Power | 12400W | 16000W | 20000W | 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 (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 |
| Maximum PV Input Current | 18A*2 | 18A*2 | 27A*2(40A max) | 27A*2(40A max) |
| PV Array MPPT Voltage Range | 90~450VDC (90~430VDC for parallel) | | | |
| Maximum Solar Charge Current | 120A | 120A | 150A | 150A |
| Maximum AC Charge Current | 100A | 120A | 150A | 150A |
| Maximum Charge Current | 120A | 120A | 150A | 150A |
| **MECHANICAL SPECIFICATIONS** | | | | |
| Machine Dimension (W*H*D) | 425*473*145mm | 425*527*145mm | | |
| Package Dimension (W*H*D) | / | / | / | / |
| N.W (kg) | / | / | / | / |
| G.W (kg) | / | / | / | / |
| **OTHER** | | | | |
| Humidity | 5% to 95% Relativ Humidity (Non-condensing) | | | |
| Operating Temperature | 0°C~50°C | | | |
| Storage Temperature | -15°C -60°C | | | |
| **CERTIFICATION & STANDARDS** | | | | |

CE-EMC+LVD (EN6100-6-3:2007, EN6100-6-1:2017+EN IEC62109-1:2010, EN IEC62109-2:2011)
EN IEC62368-1:2020+A11:2020
CE-LVD (IEC62109-1:2010, EN IEC62109-2:2011)
EN IEC62368-1:2018, EN IEC62109-1:2010, EN IEC62109-2:2011

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