

LOW FREQUENCY SOLAR INVERTER

PV2900 LHP Series

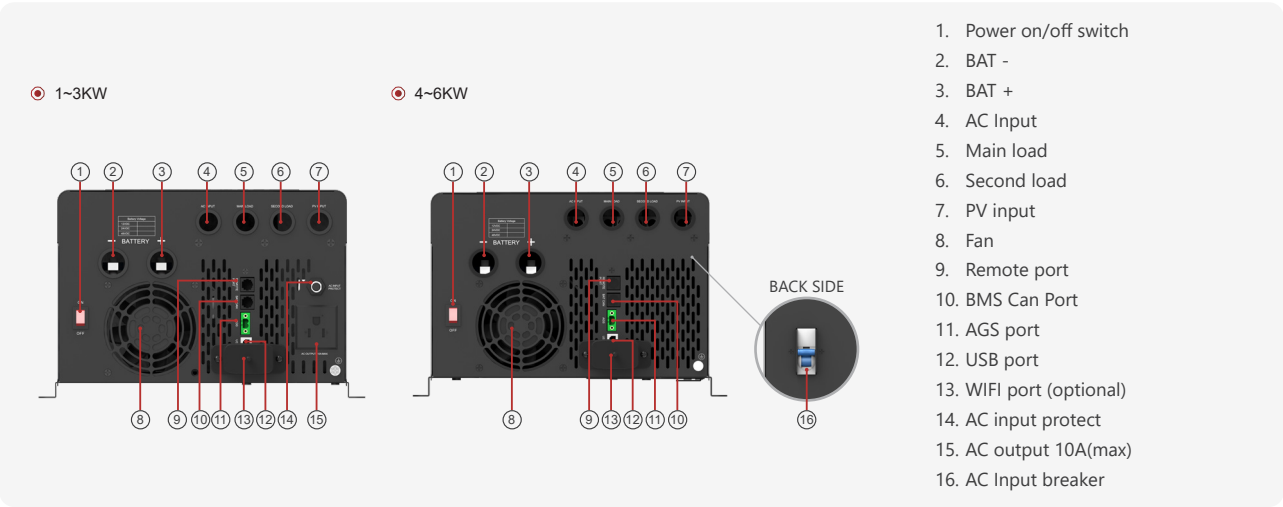
1~6KW | AC 120V | MPPT80A | WIFI | BMS | Dual output

PV2900 LHP series is very economical pure sine wave solar inverter, AC voltage 110V/120V, AC charger inbuilt, from 20A to 60A; MPPT solar charger 80A inbuilt; Solar/AC priority is configurable, when setting solar priority, solar will charge batteries as first priority, and AC can also charge batteries when solar charger current is not enough, it enables inverter to operate with all kinds of home appliances, widely selling to Latin America.

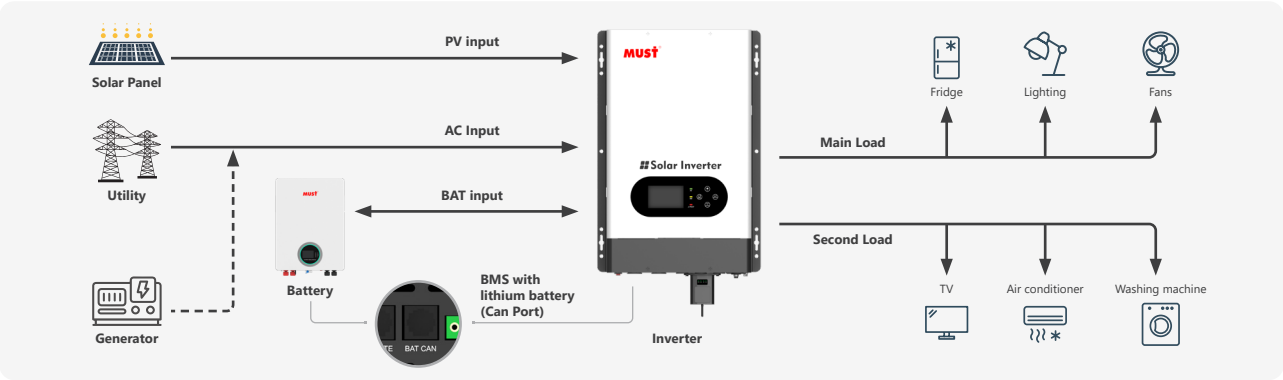


- Pure sine wave output
- 3 Steps charging
- Overload and short-circuit protection
- Set charging voltage/charging current.
- Battery low voltage shutdown point can be set to 10/10.5/11/11.5/12V
- Power-save mode
- Set utility priority/ Battery priority
- Set utility input wide/narrow range
- Inverter voltage can be set to 120V:110V/115V/120V
- Inverter frequency can be set to 50/60Hz
- Set utility charging on/off switch
- 80A MPPT charger
- Acid or Lithium Select
- WiFi port (optional)
- With BMS lithium battery communication function (CAN port)
- Dual output for smart load management

Back panel description



Solar system connection



| MODEL                                                                                | PV29-1012 LHP                                                                                                                                                                                         | PV29-1024 LHP | PV29-1512 LHP | PV29-1524 LHP | PV29-2012 LHP | PV29-2024 LHP | PV29-3024 LHP | PV29-3048 LHP | PV29-4024 LHP                    | PV29-4048 LHP | PV29-5048 LHP | PV29-6048 LHP |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------------------|---------------|---------------|---------------|
| Nominal Battery System Voltage                                                       | 12VDC                                                                                                                                                                                                 | 24VDC         | 12VDC         | 24VDC         | 12VDC         | 24VDC         | 24VDC         | 48VDC         | 24VDC                            | 48VDC         | 48VDC         | 48VDC         |
| INVERTER OUTPUT                                                                      |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Rated Power                                                                          | 1 KW                                                                                                                                                                                                  |               | 1.5 KW        |               | 2 KW          |               | 3 KW          |               | 4 KW                             |               | 5 KW          | 6 KW          |
| Surge Rating                                                                         | 3000VA                                                                                                                                                                                                |               | 4500VA        |               | 6000VA        |               | 9000VA        |               | 12000VA                          |               | 15000VA       | 18000VA       |
| Capable Of Starting Electric Motor                                                   | 1P                                                                                                                                                                                                    |               | 1P            |               | 1.5P          |               | 2P            |               |                                  |               | 3P            |               |
| Waveform                                                                             | Pure sine wave / same as input (bypass mode)                                                                                                                                                          |               |               |               |               |               |               |               |                                  |               |               |               |
| Nominal Output Voltage RMS                                                           | 110V / 115V / 120VAC(±10% RMS)                                                                                                                                                                        |               |               |               |               |               |               |               |                                  |               |               |               |
| Output Frequency                                                                     | 50Hz / 60Hz ±0.3Hz                                                                                                                                                                                    |               |               |               |               |               |               |               |                                  |               |               |               |
| Inverter Efficiency (Peak)                                                           | >88%                                                                                                                                                                                                  |               |               |               |               |               |               |               |                                  |               |               |               |
| Line Mode Efficiency                                                                 | >95%                                                                                                                                                                                                  |               |               |               |               |               |               |               |                                  |               |               |               |
| Power Factor                                                                         | 1.0                                                                                                                                                                                                   |               |               |               |               |               |               |               |                                  |               |               |               |
| Typical Transfer Time                                                                | 10ms(max)                                                                                                                                                                                             |               |               |               |               |               |               |               |                                  |               |               |               |
| Overload                                                                             | 100% < Load < 110% (alarm 5min then stop output and fault code 07)<br>110% < Load < 125% (alarm 60s then stop output and fault code 07)<br>Load > 125% (alarm 10s then stop output and fault code 07) |               |               |               |               |               |               |               |                                  |               |               |               |
| AC INPUT                                                                             |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Voltage                                                                              | 110/120VAC                                                                                                                                                                                            |               |               |               |               |               |               |               |                                  |               |               |               |
| Selectable Voltage Range                                                             | 75~135VAC (For personal computers)                                                                                                                                                                    |               |               |               |               |               |               |               |                                  |               |               |               |
| Frequency Range                                                                      | 50Hz / 60Hz(Auto sensing) 40~80Hz                                                                                                                                                                     |               |               |               |               |               |               |               |                                  |               |               |               |
| BATTERY                                                                              |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Minimum Start Voltage                                                                | (10V / 10.5V / 11V / 11.5V/ 12V )+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)                                                                                                                    |               |               |               |               |               |               |               |                                  |               |               |               |
| Low Battery Alarm                                                                    | (10V / 10.5V / 11V / 11.5V/ 12V )+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)                                                                                                                    |               |               |               |               |               |               |               |                                  |               |               |               |
| Low Battery Cut Off                                                                  | 10V / 10.5V / 11V / 11.5V/ 12V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)                                                                                                                            |               |               |               |               |               |               |               |                                  |               |               |               |
| High Voltage Alarm                                                                   | (12-14.5V)+1V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)                                                                                                                                             |               |               |               |               |               |               |               |                                  |               |               |               |
| High Battery Voltage Recover                                                         | (12-14.5V)+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC)                                                                                                                                           |               |               |               |               |               |               |               |                                  |               |               |               |
| Idle Consumption-Search Mode                                                         | Load ≤50±20W(120V)/100±20W(220V)                                                                                                                                                                      |               |               |               |               |               |               |               |                                  |               |               |               |
| CHARGER                                                                              |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Output Voltage                                                                       | Depends on battery type                                                                                                                                                                               |               |               |               |               |               |               |               |                                  |               |               |               |
| Overcharge Protection S.D.                                                           | 15.5VDC for 12VDC mode (*2 for 24VDC mode, *4 for 48VDC mode)                                                                                                                                         |               |               |               |               |               |               |               |                                  |               |               |               |
| Maximum Charge Current                                                               | 30A                                                                                                                                                                                                   | 20A           | 45A           | 25A           | 60A           | 30A           | 40A           | 20A           | 60A                              | 30A           | 35A           | 40A           |
| PAYPASS & PROTECTION                                                                 |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Input Voltage Waveform                                                               | Sine wave (grid or generator)                                                                                                                                                                         |               |               |               |               |               |               |               |                                  |               |               |               |
| Nominal Input Frequency                                                              | 50Hz or 60Hz                                                                                                                                                                                          |               |               |               |               |               |               |               |                                  |               |               |               |
| Overload Protection (SMPS Load)                                                      | Circuit breaker                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Output Short Circuit Protection                                                      | Circuit breaker                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| AC Input Breaker                                                                     | 1-3K/40A                                                                                                                                                                                              |               |               |               |               |               |               |               | 4-6K/63A                         |               |               |               |
| SOLAR CHARGER                                                                        |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Maximum PV Array Power                                                               | 1250W                                                                                                                                                                                                 | 2500W         | 1250W         | 2500W         | 1250W         | 2500W         | 2500W         | 5000W         | 2500W                            | 5000W         | 5000W         | 5000W         |
| Maximum PV Charge Current                                                            | 80A±4A                                                                                                                                                                                                |               |               |               |               |               |               |               |                                  |               |               |               |
| DC Voltage                                                                           | 12V/ 24V auto work                                                                                                                                                                                    |               |               |               |               |               |               |               | 24V/ 48V auto work               |               |               |               |
| MPPT Range @ Operating Voltage                                                       | 15~95VDC @ 12V/ 30~230VDC @ 24V                                                                                                                                                                       |               |               |               |               |               |               |               | 30~230VDC @ 24V/ 60~230VDC @ 48V |               |               |               |
| Maximum PV Array Open Circuit Voltage                                                | 245VDC                                                                                                                                                                                                |               |               |               |               |               |               |               |                                  |               |               |               |
| Standby Power Consumption                                                            | <2W                                                                                                                                                                                                   |               |               |               |               |               |               |               |                                  |               |               |               |
| MECHANICAL SPECIFICATIONS                                                            |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Mounting                                                                             | Wall Mount                                                                                                                                                                                            |               |               |               |               |               |               |               |                                  |               |               |               |
| Machine Dimension (W*H*D) (mm)                                                       | 309*460*196                                                                                                                                                                                           |               |               |               |               |               |               |               | 309*545*200                      |               |               |               |
| Package Dimension (W*H*D) (mm)                                                       | 610*310*400                                                                                                                                                                                           |               |               |               |               |               |               |               | 695*400*310                      |               |               |               |
| N.W(kg)                                                                              | /                                                                                                                                                                                                     |               |               |               |               |               |               |               | /                                |               |               |               |
| G.W(kg)                                                                              | /                                                                                                                                                                                                     |               |               |               |               |               |               |               | /                                |               |               |               |
| OTHER                                                                                |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| Operating Temperature Range                                                          | 0°C to 40°C                                                                                                                                                                                           |               |               |               |               |               |               |               |                                  |               |               |               |
| Storage Temperature                                                                  | -15°C to 60°C                                                                                                                                                                                         |               |               |               |               |               |               |               |                                  |               |               |               |
| Audible Noise                                                                        | 60dB MAX                                                                                                                                                                                              |               |               |               |               |               |               |               |                                  |               |               |               |
| Display                                                                              | LED+LCD                                                                                                                                                                                               |               |               |               |               |               |               |               |                                  |               |               |               |
| Standard Warranty                                                                    | 2 years                                                                                                                                                                                               |               |               |               |               |               |               |               |                                  |               |               |               |
| CERTIFICATION & STANDARDS                                                            |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |
| CE-EMC+LVD (EN6100-6-3:2007, EN6100-6-1:2017+EN IEC62109-1:2010, EN IEC62109-2:2011) |                                                                                                                                                                                                       |               |               |               |               |               |               |               |                                  |               |               |               |

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