LOW FREQUENCY SOLAR INVERTER

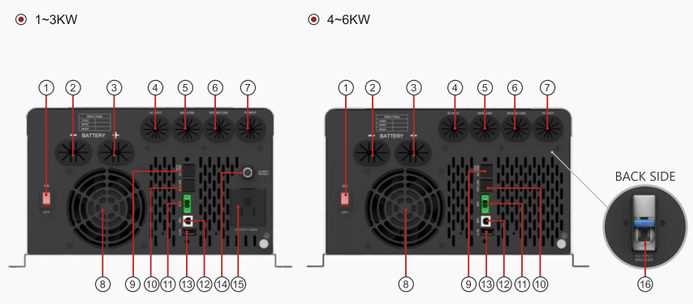
PV2900 LHP Series

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.

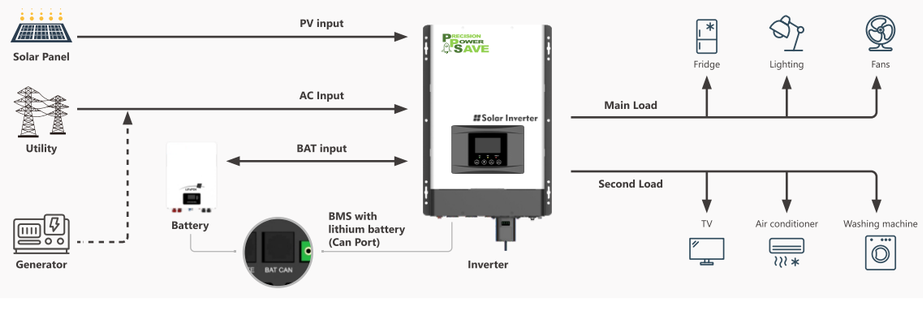
- Pure sine wave output
- 3 Steps charging
- Overload and short-circuit protection
- Set charging voltage/charging current.
- Battery low voltage shutdown point can be set to 10/10.5/11/11.5/12V
- Power-save mode
- Set utility priority/ Battery priority
- Set utility input wide/narrow range
- Inverter 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



1. Power on/off switch
2. BAT -
3. BAT +
4. AC Input
5. Main load
6. Second load
7. PV input
8. Fan
9. Remote port
10. BMS Can Port
11. AGS port
12. USB port
13. WIFI port (optional)
14. AC input protect
15. AC output 10A(max)
16. AC Input breaker

Solar system connection



MODEL	PV29-1KW-LHP		PV29-1.5KW-LHP		PV29-2KW-LHP		PV29-3KW-LHP		PV29-4KW-LHP		PV29-5KW-LHP	PV29-6KW-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) 110% < Load < 125% (alarm 60s then stop output and fault code 07) 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)											
Idie 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)	274*484*174								274*568.5*174			
Package Dimension (W*H*D)(mm)	583.5*255*376								668.5*255*376			
N.W(kg)	/								/			
G.W(kg)	/								/			
OTHER												
Operation 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)												