

LOW FREQUENCY SOLAR INVERTER

PV2900 LHP Series

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



Dual Output for Smart Load Management

Dual outputs enable intelligent load management and improve system efficiency.

High-Efficiency MPPT Solar Charging

Built-in 80A MPPT controller for fast and efficient solar charging.

Full Protection

Provides overload, short-circuit, and other protections to ensure system safety.

Remote Monitoring & Battery Communication

Optional WiFi functionality, supporting LiFePO₄ battery BMS communication (CAN port).

Battery Compatibility

Supports both lead-acid and lithium batteries for versatile applications.

Flexible Settings & Utility Management

Adjustable charging voltage/current and low-voltage shutdown, supports power-save mode, utility/battery priority, voltage/frequency adjustment, and utility charging switch.

MAIN PARAMETER

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	
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)											
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/48V auto work											
MPPT Range @ Operating Voltage	15~95VDC@12V/ 30~230VDC@24V/ 60~230VDC@48V											
Maximum PV Array Open Circuit Voltage	245VDC											
Standby Power Consumption	<2W											

OTHER PARAMETER

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MECHANICAL SPECIFICATIONS												
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