

# PV1800 LHM SERIES (1-3KW)

High Frequency Off Grid Solar Inverter

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# INTRODUCTION

PV1800 LHM Series is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

## **FEATURES**

- Pure sine wave output
- Smart LCD setting(Working modes, Charge Current, Charge Voltage, etc.)
- Built-in MPPT 60A/80A solar charge controller
- New SUB working mode(Solar-Unitily-Battery working mode) for 3kw series
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and deep discharge protection
- Parallel operation with up to 3 units (Available for 3KW only)
- Cold start function
- Support USB, RS485 monitoring function with free CD
- Compatible to generator
- Available for Lead-acid /Lithium Battery
- WIFI remote monitoring(optional)



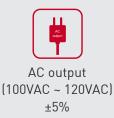
WIFI remote monitoring



Battery Voltage 24DC/48VDC



USB, RS485 monitoring function





Battery optional



Parallel function for 3KW



High Frequency above 93% high efficiency



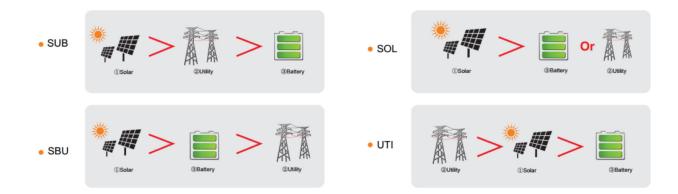
#### WIFI COMMUNICATION

You can download this app on your cellphone and monitor the whole system, you will know know how much electricity the system generate and sell to utility.

#### **DIFFERENT WORKING MODES**

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The New SUB working mode:Solar-Utility-Battery working mode,which simplify setup problems, and enable end users even without any technical knowledge can operate it easily.



62

## INVERTER SYSTEM CONNECTION

PV1800 LHM inverter system, it can work with battery as back up power for normal home power demands.which take use of sunshine freely and save lots electricity bill for you.

#### Solar Inverter System Connection:

Power Inverter + Battery + Solar Panels + Grid + Applicaiton Loads



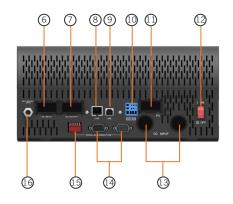
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High Frequency Off Grid Solar Inverter



- 1. LCD Display
- 2. Status Indicator
- 3. Charging Indicator
- 4. Fault Indicator
- 5. Funtion Buttons

- 6. AC Input
- 7. AC Output
- 8. RS-485 Communication port
- 9. USB
- 10. Dry Contact
- 11. PV Input



- 12. Power On/Off Switch
- 13. Battery Input
- 14. Parallel communication port (only for parallel model)
- 15. Parallel switch
- 16. Circuit breaker

MODEL		PV18-1024 LHM	PV18-1524 LHM	PV18-2024 LHM	PV18-2524 LHM	PV18-3024 LHM	PV18-3048 LHM
Nominal Battery System Voltage		24VDC				48VDC	
INVERTER OUTPUT	Rated Power	1000W	1500W	2000W	2500W	3000W	3000W
	Surge Power	2000W	3000W	4000W	5000W	6000W	6000W
	Waveform	Pure sine wave					
	AC Voltage Regulation (Batt.Mode)	(100VAC ~ 120VAC)±5%					
	Inverter Efficiency(Peak)	93%					
	Transfer Time	10ms(For Personal Computers), 20ms(For Home Appliances)					
AC INPUT	Voltage	120VAC					
	Selectable Voltage Range	90~145VAC(For Personal Computers), 60~145VAC(For Home Appliances), 107~132VAC(VDE4105)					
	Frequency Range	50Hz/60Hz (Auto sensing)					
BATTERY	Normal voltage	24VDC					48VDC
	Floating Charge Voltage	27VDC					54VDC
	Overcharge Protection	31VDC					60VDC
SOLAR CHARGER & AC CHARGER	Maximum PV Array Open Circuit Voltage	145VDC					
	PV Array MPPT Voltage Range	30~130VDC					$64 \sim 130 \text{VDC}$
	Standby Power Consumption	2W					
	PV Input Power	1440W/1920W					2880W/3840W
	Maximum Solar Charge Current	60A/80A					
	Maximum Efficiency	98%					
	Maximum AC Charge Current	60A					
	Maximum Charge Current	120A/140A					
MECHANICAL SPECIFICATIONS	Machine Dimensions (W*H*D)(mm)	272*355*100					297.5*468*125
	Package Dimensions (W*H*D)(mm)	465*373*231					618*415*261
	Net Weight(kg)	13.3					
	Gross Weight(kg)	16.4					
OTHER	Humidity	5% to 95% Relativ Humidity (Non-condensing)					
	Operating Temperature	0°C -55°C					
	Storage Temperature	-15°C -60°C					