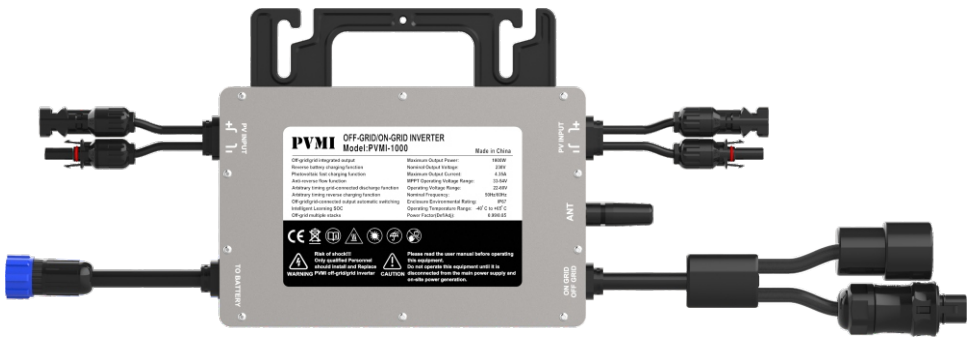
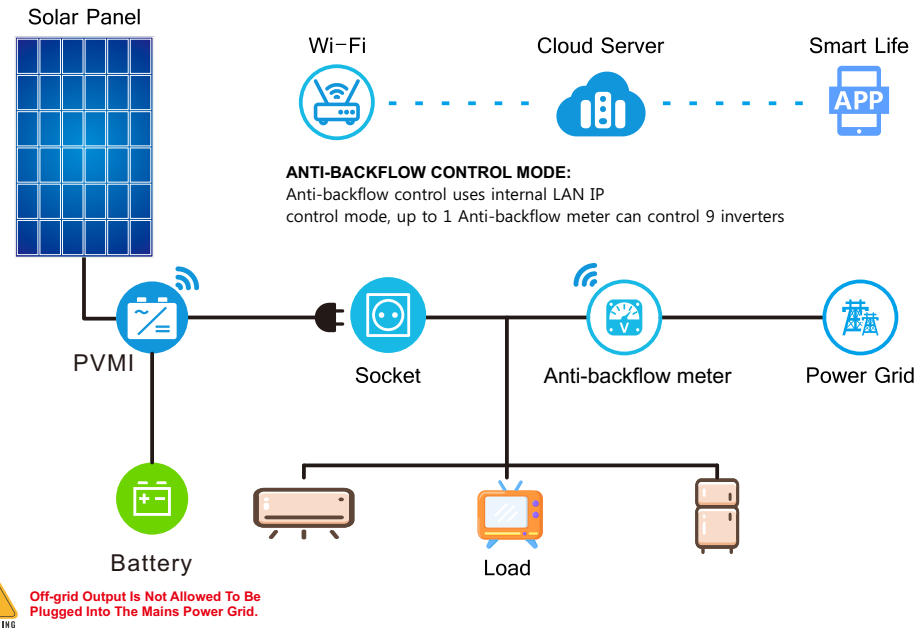


PVMI 700/800/1000
Off-grid/Grid-connected Inverter User Manual

SYSTEM STRUCTURE AND MONITORING MODE



ANTI-BACKFLOW CONTROL MODE:
Anti-backflow control uses internal LAN IP control mode, up to 1 Anti-backflow meter can control 9 inverters

Plug and play: users simply connect the inverter's input and output terminals to the corresponding connections and then plug it into a household outlet. The inverter will automatically enter operation after 30 seconds. When the inverter is installed within Wi-Fi coverage, customers can install the "Smart Life" app on their mobile phone to remotely monitor and control the device.

Technical Specifications

Model	PVMI-700	PVMI-800	PVMI-1000
On-Grid parameters			
Max solar panel input power	2×435W	2×500W	2×625W
Rated output power	700W	800W	1000W
Rated output current	3A	3.5A	4.35A
Starting Voltage	>22V d.c.		
MPPT operating voltage range	16-60V		
Nominal output voltage	230V a.c (184~264VAC)		
Maximum output efficiency	97.5%		
CEC peak efficiency	98.5%		
Nominal output frequency	50Hz/47.5~51.5Hz 60Hz/57.5~61.5Hz		
Total harmonic distortion	<3%		
Off-Grid parameters			
Max input power	700W	800W	1000W
Maximum DC input current	30.5A	35A	43.5A
Rated output power	700W	800W	1000W
Rated output current	3A	3.5A	4.35A
Operating voltage range	24-60V d.c		
Inverter starting voltage	>24V d.c.		
Nominal output voltage	230V a.c (184~264VAC)		
Maximum output efficiency	97.5%		
CEC peak efficiency	98.5%		
Nominal output frequency	50Hz/47.5~51.5Hz 60Hz/57.5~61.5Hz		
Total harmonic distortion	<5%		

PV charging parameters	
PV maximum charging current	30A
PV charging input voltage range	16~60V d.c
PV charging output voltage range	16~60V d.c
Maximum tracking efficiency	99.5%
CEC Peak Efficiency	99.0%
Solar Charging SOC	Learning intelligent algorithm

AC reverse charging parameters	
Maximum charging current	3A/3.5A/4.35A
Rated AC charging power	700W/800W/1000W
AC charging voltage	230V a.c
AC charging with maximum efficiency	97.5%
AC charging frequency/range	50/60Hz
AC charging SOC	Learning intelligent algorithm

Mechanical data	
Ambient temperature range	-40~+65℃
Enclosure protection grade	Ip67
Size	230*200*42mm
Communication Mode	Wi-Fi
Monitoring system	Smart Life
General function control	ON/OFF, output power adjustment 0~100%
Output power factor	>0.99 default/0.8 leading … 0.8 lagging
Isolation Type	Full isolation

About Inverter

The PVMI-700/PVMI-800/PVMI-1000 series off-grid/grid-connected inverters can connect to two photovoltaic (PV) modules. This series efficiently converts direct current (DC) to grid-compliant alternating current (AC) and delivers the power to the grid.
Each inverter in the PVMI-700/PVMI-800/PVMI-1000 series operates independently and monitors the power generation status of each PV module in real time to ensure maximum power output from each module, thereby improving system flexibility, availability, and reliability.

About the manual

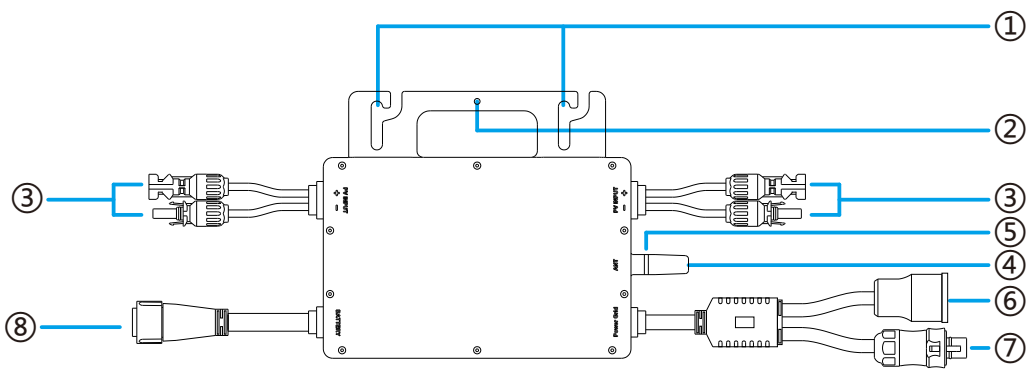
This manual contains important instructions regarding the PVMI-700/PVMI-800/PVMI-1000 off-grid/grid-connected inverters. Users should carefully read this manual before installing or commissioning the inverter. For safety reasons, the technicians responsible for the installation, operation, and maintenance of this inverter must be appropriately qualified, trained, and possess the necessary skills. They should strictly follow the instructions in this manual during installation, operation, and maintenance.

Other information

Product information is subject to change without prior notice. The user manual will be updated regularly. Please contact customer service for the latest version.

Interface Diagram

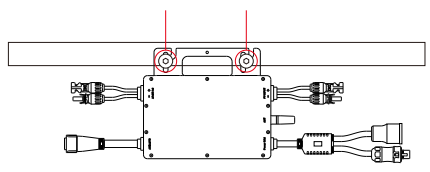
① Inverter screw fixing hole
② ground connection hole (* inverter shell must be connected to the ground)
③ Connect solar panel DC terminal input
④ Wi-Fi antenna
⑤ LED status indicator
⑥ Off-grid AC terminal output
⑦ AC terminal output in grid-connected state
⑧ Connect the battery



Installation Steps

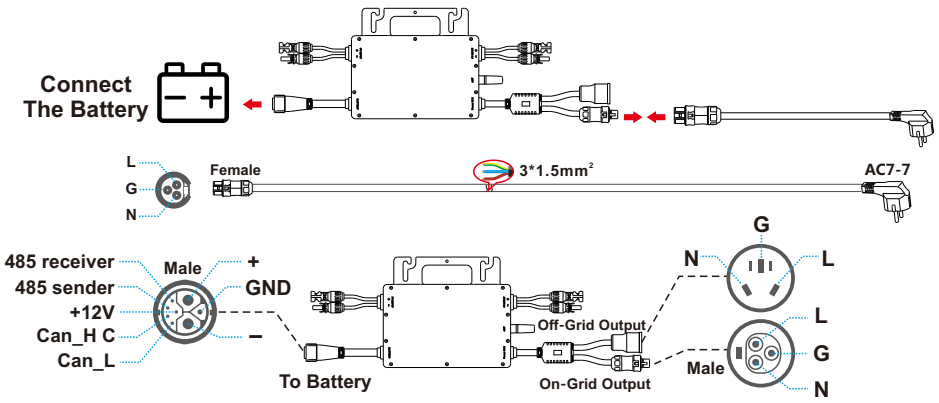
Step 1. Mount The Inverter On The Rail

A) Mark the approximate center of each panel on the frame.
B) Secure the screws to the rails.
C) Hang the inverter on the screws (as shown in the image to the right) and tighten the screws.

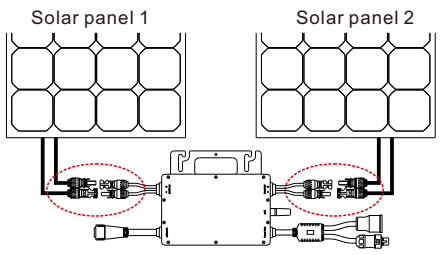


Step 2. Install cables

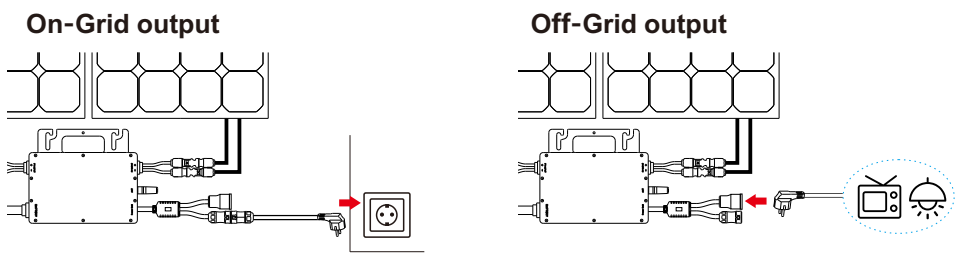
Insert the AC output line terminal (female) into the inverter output terminal (male), and then connect the battery



b)Connecting the DC Cable

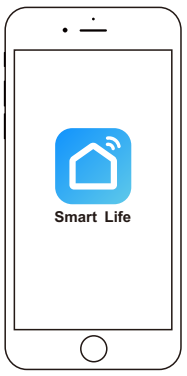


Step 3. On/Off Grid Output



Monitoring System

APP Download



You can search for "Smart Life" in Apple Store or Google StoreAPP or scan the QR code below to download and install the application.

China Ver

International Ver

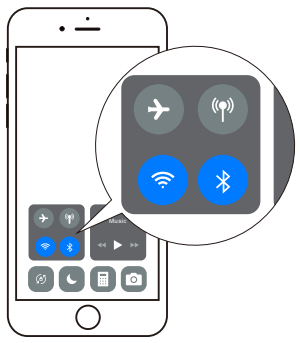
Download on the App Store

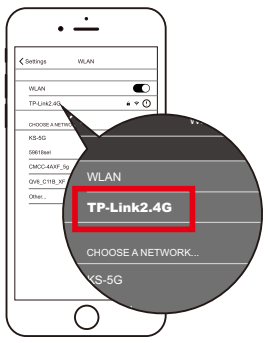
ANDROID APP ON Google Play

Scan the QR code and select the country
Download the "Smart Life" APP

Mobile Phone Function Enabled

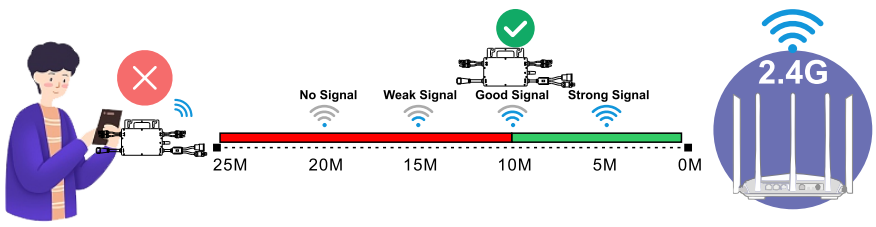
1. Please turn on the Bluetooth function. (Android system needs to turn on the positioning function);
2. Please use 2.4G Wi-Fi signal source;



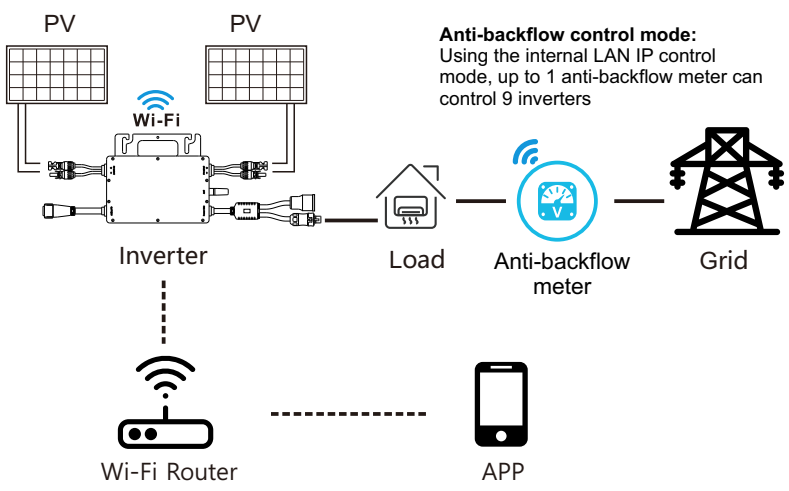


Wireless Network Environment Requirements

Please use your mobile phone next to the inverter to check whether the 2.4G Wi-Fi signal source is good. If the Wi-Fi signal is poor, please adjust the location of the wireless router or add a WiFi signal booster to ensure that the inverter can operate in a good WiFi coverage environment.



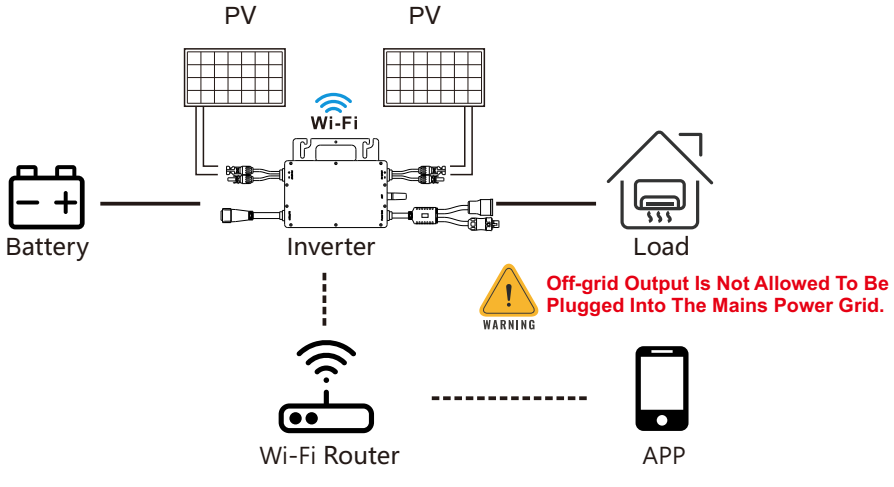
On-Grid Mode



Anti-backflow control mode:
Using the internal LAN IP control mode, up to 1 anti-backflow meter can control 9 inverters

Function introduction:
1. Normal grid-connected mode (without battery)
2. AC energy storage mode (peak discharge and low-peak storage)
3. Photovoltaic energy storage mode (pure photovoltaic energy storage for nighttime electricity use)

Off-Grid Mode



Function introduction:
1. No need for grid support, intelligent voltage output.
2. Supports multiple stacking.

Add the inverter to the "Smart Life" app (Bluetooth Mode)

Step 1. Open the Smart Life, click "+" in the upper right corner and then click Add Device.
Step 2. When the device appears on the search page, click "Add", as shown in Figure 2
*If the device cannot be searched, please check whether the inverter is too far away from the mobile phone,

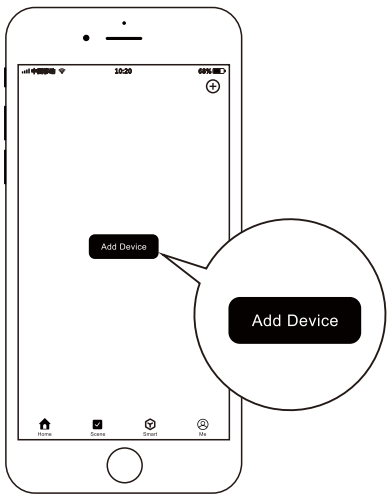


Figure 1

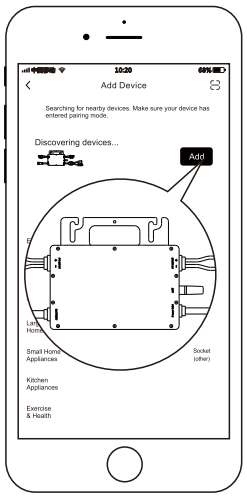


Figure 2

Step 3. When Figure 3 appears, please select the 2.4G wireless network and enter the correct password and click Next.

Step 4. When the inverter completes network distribution and displays the interface as shown in Figure 4, click “Done”.

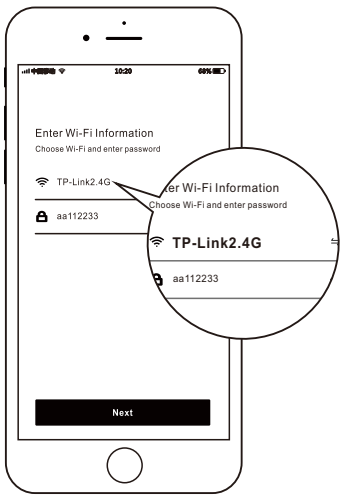


Figure 3

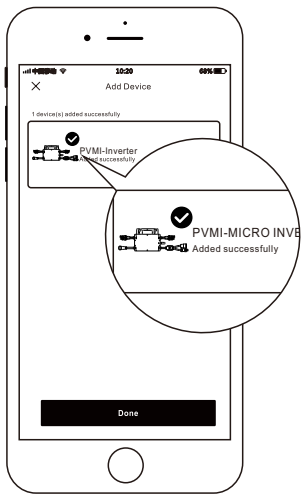
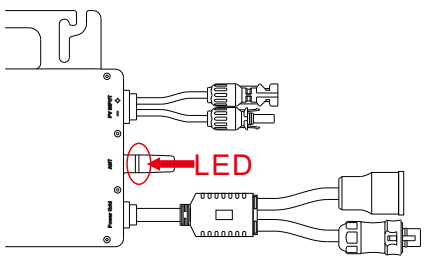


Figure 4

Status LED

a)For Antenna

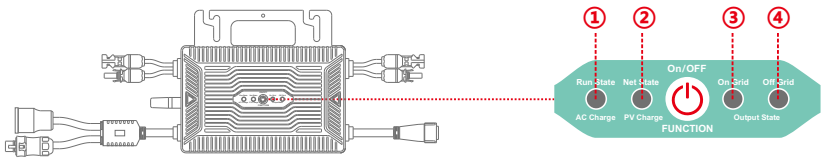
The LED indicator lights are blue and red. When the DC voltage and AC voltage meet the inverter's startup voltage and AC frequency respectively, the inverter enters the delayed start automatic detection state. At this time, the LED indicator lights flash red, and the delayed start begins (red flashing for 30 seconds). After the automatic detection is completed, the inverter resumes normal output, and the LED indicator lights flash blue rapidly.



1. **Solid blue:** Acoustic charging mode standby mode
2. **Fast blue flashing:** Grid-connected mode in operation / Off-grid mode in operation
3. **Slow blue flashing:** Acoustic charging mode in operation
4. **Solid red:** Photovoltaic charging mode standby (grid connected)
5. **Reverse red flashing:** PV not connected to the grid standby mode (turns off every 5's)
6. **Forward red flashing:** AC charging mode not connected to the grid / Grid-connected mode not connected to the grid / Off-grid mode not connected to the grid (lights up every 5's)
7. **Slow red flashing:** PV charging mode in operation (once every 2's)

b)For Button

● **Led Indicator In Normal Mode**



①-------- a) Charging: Slow flash once every 2's
b) Inverter: Fast flash once every 0.5's
②-------- a) Standby: flashes once every 5's(without APP)
b) PV charging mode: slow flashes once every 2's
③-------- Function selected (always on)
④-------- Function selected (always on)

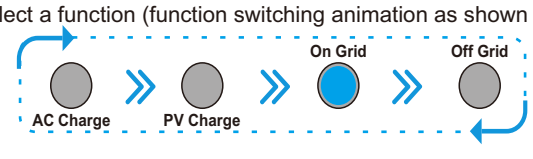
● **Settings Mode (Function Settings)**

Entering or Exiting Settings Mode

1. Press and hold for 3's to enter settings mode
2. Press and hold for 3's to exit settings mode
3. Wait 10's for automatic exit from settings mode

● **Select Function**

Short press to select a function (function switching animation as shown in the image).



WARNING **Off-grid Output Is Not Allowed To Be Plugged Into The Mains Power Grid.**