



# WVC-Modem PV System Data Collector Wireless Connection Remote Monitoring User Manual

[Home](#) » [WVC-MODEM](#) » WVC-Modem PV System Data Collector Wireless Connection Remote Monitoring User Manual 

## Contents

- [1 WVC-Modem PV System Data Collector Wireless Connection Remote Monitoring](#)
- [2 IoT Monitoring Platform](#)
- [3 Parameter](#)
- [4 System communication transmission diagram](#)
- [5 Ali- Cloud System](#)
- [6 Features](#)
- [7 Documents / Resources](#)



**WVC-Modem PV System Data Collector Wireless Connection Remote Monitoring**



## IoT Monitoring Platform

### Smart mobile “core” life



- CO-2 induced environmental analysis
- Daily and total energy generation in kWh

- Actual DC input voltage, current and power
- Actual AC output voltage, current and power
- Inverter temperature
- Historical (daily, weekly, monthly) power curve
- Power losses due to weather induced effects
- Optional limitation of power output
- Online switch for the inverter start stop

#### Each modem can manage 60 pcs micro inverters

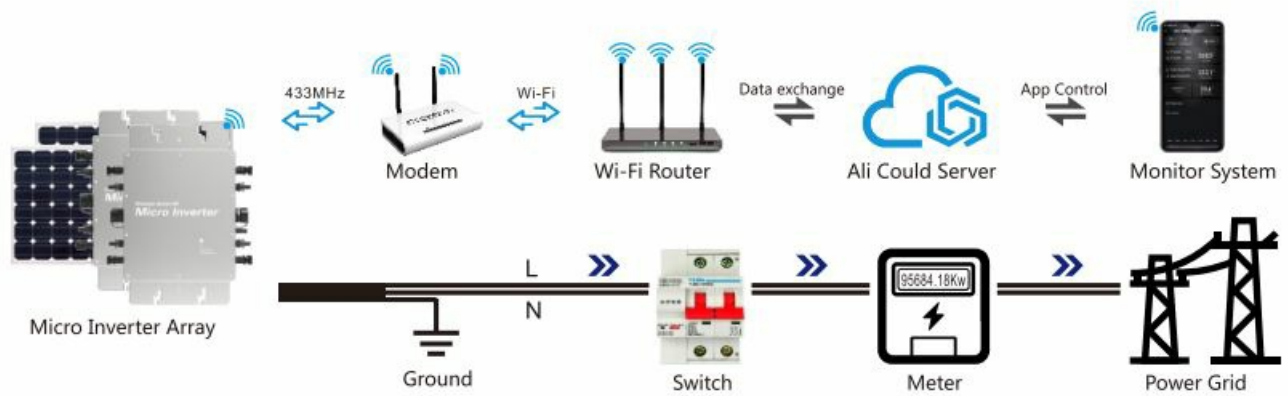
- ☑ • CO-2 induced environmental analysis
- ☹ • Daily and total energy generation in kWh
- Ⓐ • Actual DC input voltage, current and power
- ✓ • Actual AC output voltage, current and power
- 📶 • Inverter temperature
- 🔌 • Optional limitation of power output
- 🔌 • Online switch for the inverter start stop
- 📊 • Historical (daily, weekly, monthly) power curve

#### Modem intelligent distribution network description (lot Model)

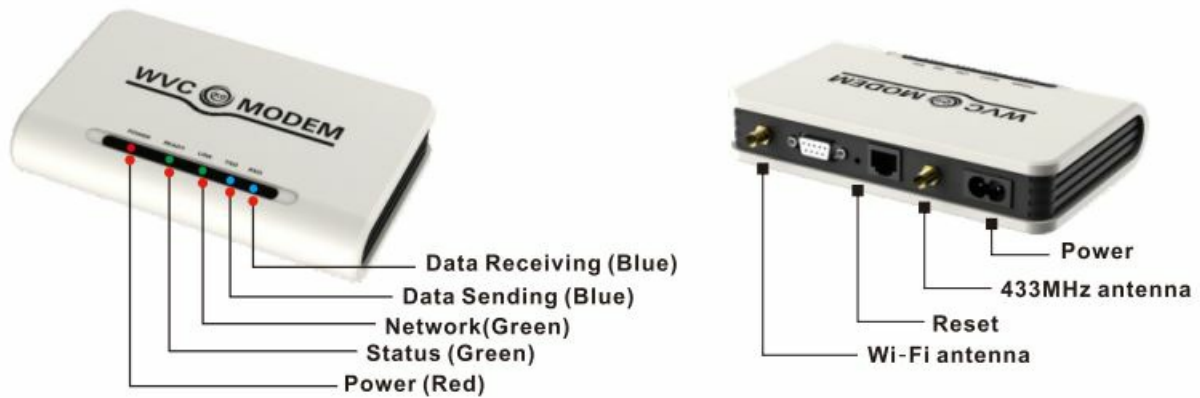


Parameter	
Input Voltage range	automatic shift 120/ 230V
Input frequency range	50 / 60Hz
Max Output Power	10Watt
G.W.	0.35KG
Size	160 x 100 x 32mm
Communication mode	433MHz+WIFI
Transmission distance	1000M(open range)
Waterproof	IP23

## Running Mode



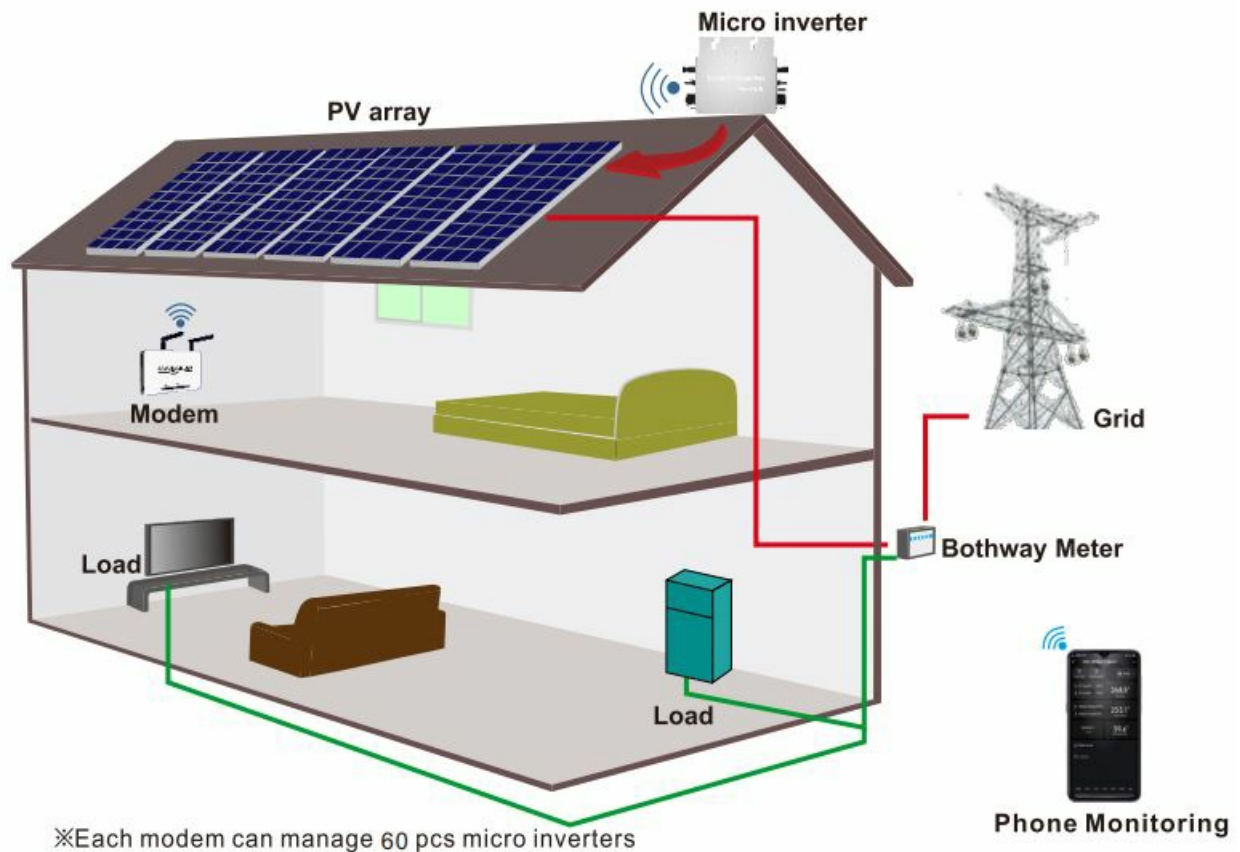
## Modem indicator & button



## Ready to work:

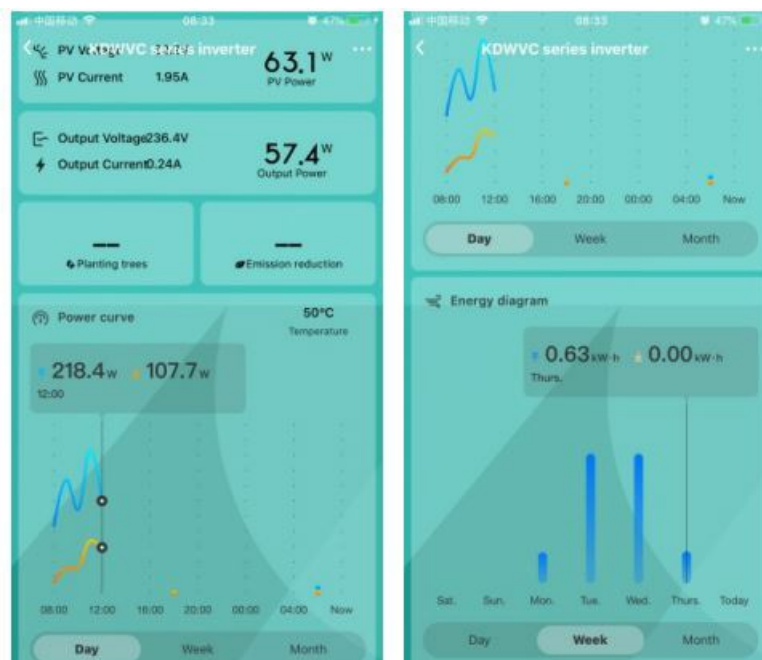
1. Install the "Cloud Smart" mobile application on your smartphone
2. A wireless router that can log in to the Internet normally

## System communication transmission diagram



## Ali- Cloud System

### Intelligent Monitoring platform



- The KDM photovoltaic monitoring system supports a full range of WVC micro-inverters.
- Through the access of the Alibaba Cloud IOT platform, users can establish different application scenarios. Its high-speed, safe and stable communication mode makes the KDM remote monitoring system, users The remote power station management can be easily realized by just using the APP application on the mobile phone.
- At the same time, the smart cloud APP has a built-in view table function, which allows users to simplify

statistics according to query methods such as day, month, and year. Provides a powerful way for users to analyze data.



#### Note

- **a)** Connect the two communication antennas on the collector (Modem) as required;
- **b)** Place the collector in an appropriate location to ensure that the wifi signal source can be received normally and Form a good communication distance with the inverter;
- **c)** The connected Wi-Fi network needs to be in 2.4G communication mode;
- **d)** Please reset the collector for the first use;

#### Reset operation

- Press and hold the reset button for more than 5 seconds, and Reday will go out and light up again after 5 seconds.
- Release the button at this time, and the device will complete the reset.

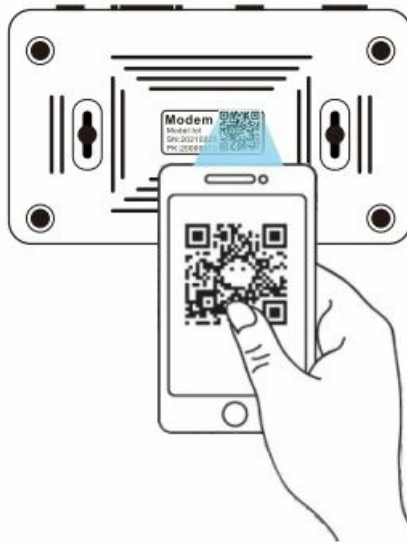
#### 1. Add device

- Open the intelligent monitoring software “Cloud Intelligence” APP to log in Account, click the “+” icon in the upper right corner to start adding.
- If a device has been created under the current account, (You can click on the device icon below to enter the details page for query or operation)



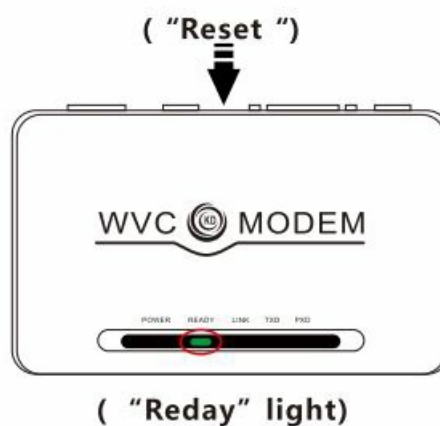
## 2. Entry equipment

- When the smart APP changes to the QR code scanning state, scan the QR code label at the bottom of the Modem. At this time, the APP will automatically collect the body code of the Modem, and automatically jump to the Wi-Fi connection page, and enter the current Wi-Fi Click Next after the password;



## 3. Start distribution network

- Connect the Modem to the power supply as required, and quickly press the "Reset" button.
- When the "Reday" indicator turns from a long on state to a fast flashing state, the Modem will enter the network distribution state;

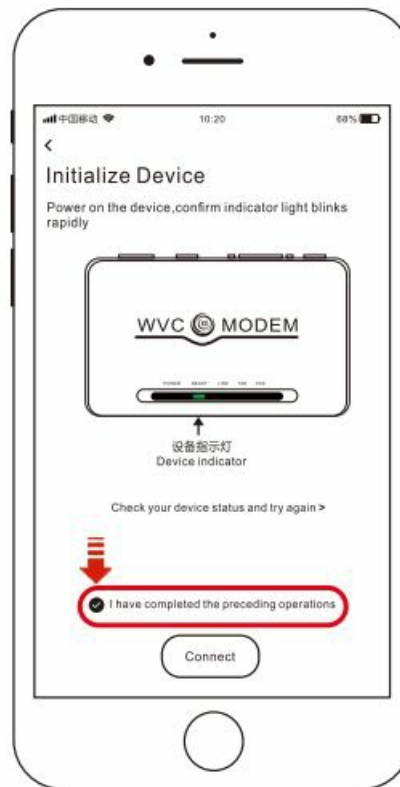


## 4. Initialize the device

- After completing the network configuration of the modem, return to the phone initialization device operation page, check the "I have completed the above operations" below and click the start connection" button, then the page will jump to the signal search page and the Link on the modem The indicator light

will become a fast flashing state.

- When a WiFi signal is found, the indicator light will flash slowly until the network configuration is completed, and the indicator light will return to a steady state.
- The page jumps to the completion page, please click “Finish”



## 5. Add inverter

- When the initialization is completed, please click the “Settings” menu in the upper right corner, find the inverter list item on the setting page, click the “Edit” button, and fill in the 8-digit code on the inverter to complete the inverter Add to.

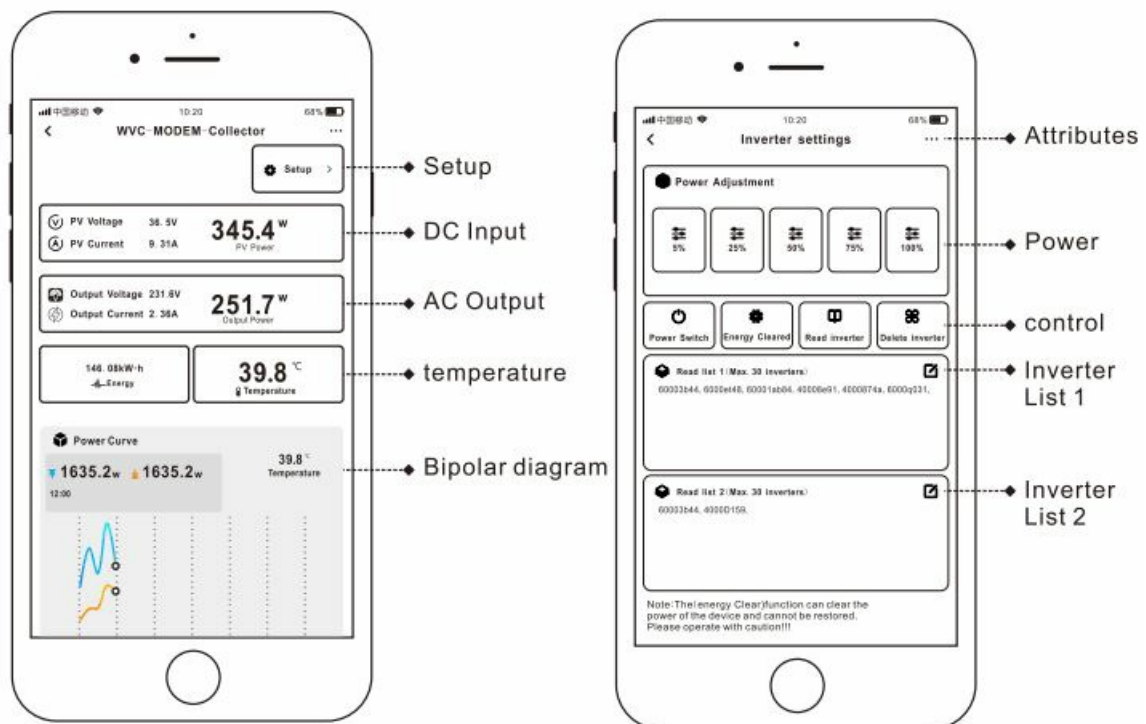
### Rmark:

1. When multiple inverters need to be added, then the English state, “,” comma separated and ended. Such as: 60001234, 6000312,
2. Each Modem can monitor 60 inverters at the same time;3. A total of 2 lists, each list can be filled with 30 inverter codes;

## Features

- Smart APP can realize real-time data transmission with the cooperation of Alibaba Cloud IoT Through graphs and graphic displays in time, users can understand the operation of the power station.
- The user can monitor the operation and adjust the output power function of the system.

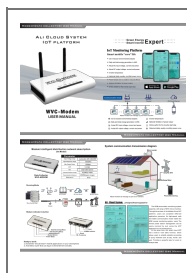




## INTELLIGENT IoT MONITORING MODEM

- Number of data collectors per Modem Built-in WiFi IoT data terminal
- Can be used on any smart device (Android/iOS)
- CO-2 induced environmental analysis
- Daily and total energy generation in kWh
- Actual DC input voltage, current and power
- Actual AC output voltage, current and power
- Inverter temperature
- Historical (daily, weekly, monthly) power curve
- Power losses due to weather induced effects
- Optional limitation of power output
- Online switch for the inverter start stop

## Documents / Resources



### [WVC-MODEM WVC-Modem PV System Data Collector Wireless Connection Remote Monitoring \[pdf\] User Manual](#)

WVC-Modem Pv System Data Collector Wireless Connection Remote Monitoring, WVC-Modem , Pv System Data Collector Wireless Connection Remote Monitoring, Collector Wireless Connection Remote Monitoring, Wireless Connection Remote Monitoring, Connection Remote Monitoring, Remote Monitoring, Monitoring