# Micro Inverter

**Wireless Series-R3**
**Micro Inverter**

Red Protection
Green Search/Lock

## WVC-2000(Life)

### USER MANUAL

**Green Energy**
**Smart Inverter Expert**

## 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
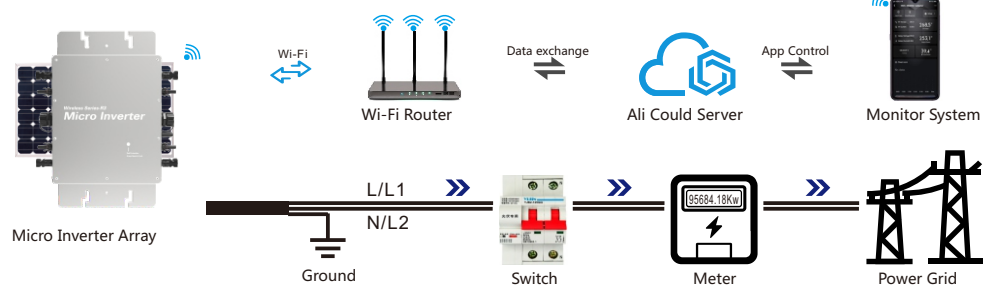- Online switch for the inverter start stop

Download on the **App Store**
ANDROID APP ON **Google Play**

**Communication mode**

Router — Ali Could Server

Wi-Fi  Wi-Fi  Wi-Fi  Wi-Fi  Wi-Fi

APP

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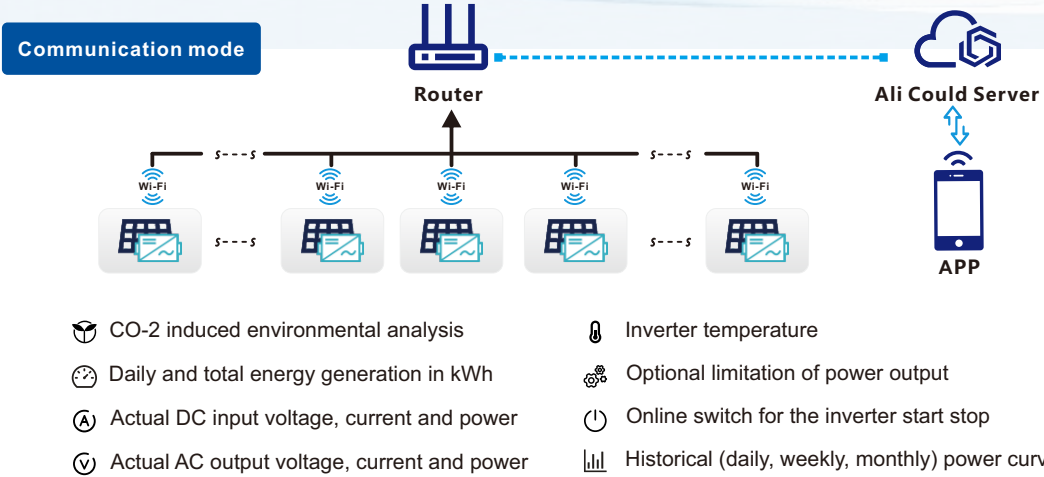
| model | WVC-2000 | |
|---|---|---|
| Recommend use panels | 4*625Watt | |
| Output voltage mode | 120/230V Auto switch | |
| PV Open circuit voltage | 30-60VDC | |
| Operating voltage range | 22-60V | |
| Starting voltage range | 22-60V | |
| short-circuit current | 4*23A | |
| Maximum working current | 4*20A | |
| **Output parameters** | **@120V** | **@230V** |
| Output peak power | 2200Watt | 2200Watt |
| Rated output power | 2000Watt | 2000Watt |
| Output current | 16.6A | 8.7A |
| AC voltage range | 80-160VAC | 180-280VAC |
| AC frequency range | 48-51Hz/58-61Hz | 48-51Hz/58-61Hz |
| Power factor | >95% | >95% |
| Number of branch connections. | 3PCS ( Single ) | 6PCS ( Single ) |
| **Output efficiency** | **@120V** | **@230V** |
| Static MPPT efficiency | 99.5% | 99.5% |
| Max output efficiency | 95% | 95% |
| Loss of power at night | <0.5W | <0.5W |
| Total current harmonics | <5% | <5% |

### Appearance and technical features

| | |
|---|---|
| Temperature range | -40°C to +65°C |
| Size ( L×W×H ) | 370mm×300mm×41.6mm |
| Net amount | 3.0kg |
| Waterproof grade | Ip65 NEMA3R |
| Heat dissipation mode | Self-cooling |
| Communication mode | Wi-Fi |
| Power transmission mode | Reverse transmission,Load priority |
| monitoring system | APP |
| Electromagnetic Detection | EN61000-6-1:2007 EN6100-6-3:2007+A1:2011+AC:2012 |
| Power Grid standard | EN50549-1、EN 50549-2、NBR 16149:2013、UL1741 |
| Power grid detection | IEC/EN 62109-1、IEC/EN 62109-2、IEC 62116、IEEE 1547 |
| Certificate | CE , Patented technology |

### Packing weight

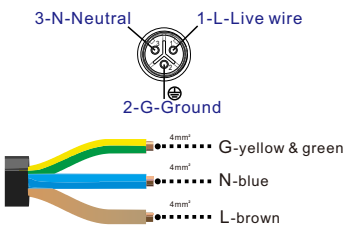| Specifications | Each ( Packing ) | Box ( 4PCS ) |
|---|---|---|
| weight | 4.36KG | 18.38KG |
| Size | 430×375×140mm | 430×405×380mm |

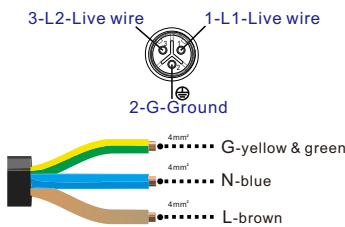**Detailed**

Exterior

ANTENNA | SCREW KIT | USER MANUAL | AC PLUG
**Micro Inverter**

Accessories

**System diagram**

Wi-Fi  Data exchange  App Control
Micro Inverter
Wi-Fi Router  Ali Could Server  Monitor System

Micro Inverter Array

L/L1
N/L2

Ground  Switch  Meter  Power Grid

**With N wire connection (Single phase 120/230V)**

3-N-Neutral  1-L-Live wire
2-G-Ground

G-yellow & green
N-blue
L-brown

**No N wire connection(Single phase 120V)**

3-L2-Live wire  1-L1-Live wire
2-G-Ground

G-yellow & green
N-blue
L-brown

**Note:** You can purchase a professionally customized AC bus with a T-type connector. Use this AC bus as the AC bus for each branch. Connect it hand in hand to form a modular micro-inverter branch wiring system.

### LED indicator function of micro inverter

1. Red light keeps on --------------------------------The equipment enters the preparatory working state;
2. Red light flashes ----------------------------------- The device enters the delayed start-up state;
3. Blue light flashes quickly -------------------------MPPT maximum power point search status;
4. Blue light keeps on--------------------------------MPPT maximum power point locked state;
5. Blue light turns to red light for a long time----a) Island protection;  b)Frequency protection; c)Fault; d) Software shutdown;
   e) AC voltage over-voltage protection;  f)DC voltage over-voltage protection;

### Normal working indicator flashing process

Connect the micro-inverter correctly to the AC and DC terminals and then power on:
  The red light keeps on for 3 seconds → the red light flashes for 30 seconds → the blue light flashes quickly (MPPT maximum power point search) → the blue light keeps on, (MPPT lock).
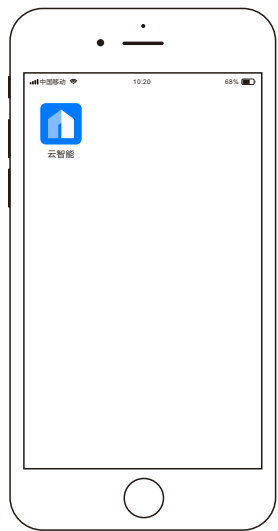
# DOWNLOAD
## Cloud Intelligence APP

Please use the QR code to scan and install the "Cloud Intelligence" client application,System version: Android 5.0, IOS 9 and above

Available on the **App Store**

GET IT ON **Google Play**

## 📒 Note

Please strictly observe the following installation conditions

    a) Connect the communication antenna on the inverter;

    b) Put the inverter in a place with good Wifi signal;

    c) The connected Wi-Fi network needs to be in 2.4G mode;

    d) Please reset the inverter for the first use;

## Reset

Long press the reset button, when the LED indicator lights up again and turns into a "blue light"Release the reset button after the status is displayed for a long time, and the inverter will automatically complete the reset.

**1 Add Device**

Open the intelligent monitoring software "Cloud Intelligence" APP to log inAccount, click the "+" icon in the upper right corner to start addingEquipment program;*If there is a device under the current account, click on the deviceIcon to enter the details page)
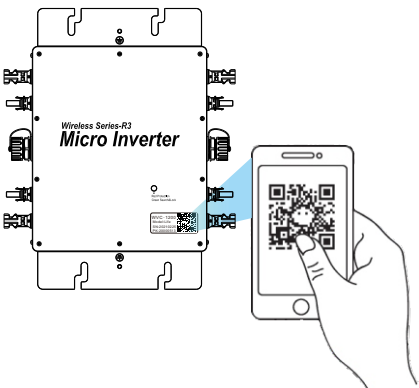
**2 Entry equipment**

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

**3 Disribution network**

Connect the inverter to the power supply as required, and quickly press the "Reset" button. At this time, the "LED" indicator will change to flashing blue and red alternately. At this time, the inverter enters the standby state of the distribution network;

*Wireless Series-R3* **Micro Inverter**

LED
Reset

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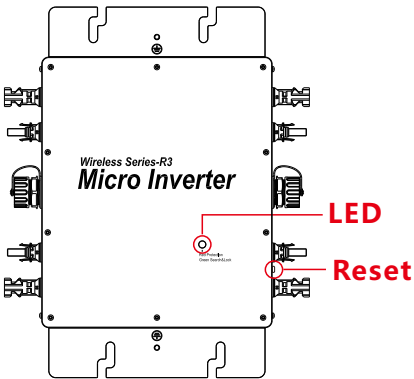
**4 Initialization**

When the inverter is in standby mode, return to the mobile phone APP to initialize the device operation page, check the "I have completed the above operations" below and click the "Start Connection" button. At this time, the page will jump to the signal search page. The LED indicator on the converter changes from red and blue alternately flashing state to "blue" long-bright display state when the network distribution is completed. The page will automatically jump to the system completion confirmation page, please click "Finish".
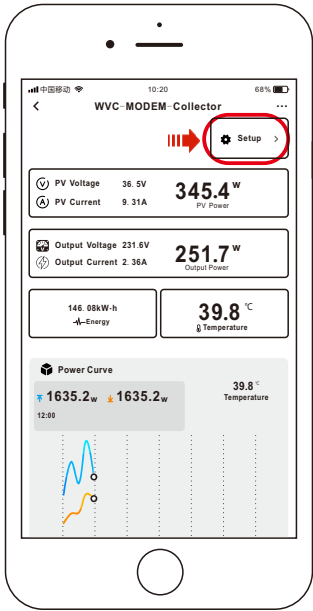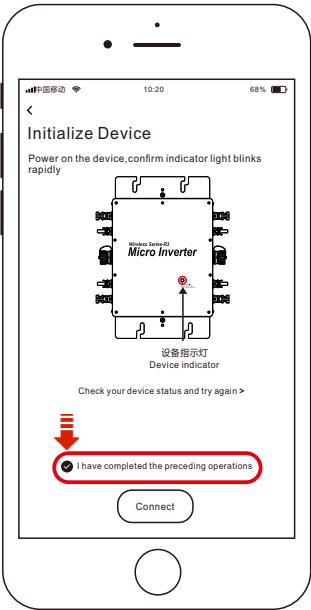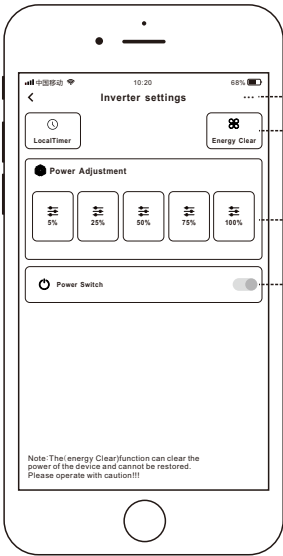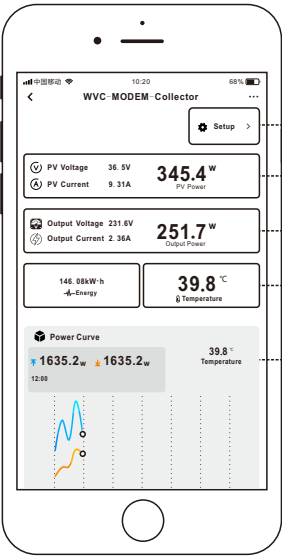
**5 Inverter Control**

Click the "Settings" button in the upper right corner of the system details page. In the settings page, you can adjust the inverter's output power, timing, remote start and stop, etc. according to actual needs.

**Remarks**

1. When multiple inverters need to be added, theIn the English state, "," comma separated and ended. Such as: 60001234, 6000E312,

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;

**HELP Features**

Smart APP can realize real-time data transmission with the cooperation of Alibaba Cloud IoTThrough 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.

Setup → PV Input → AC Output → Temperature → Data query

Attributes → Energy Clear → Power Output → Remote switch

## Cloud Intelligence APP

**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)**

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