EG4® WI-FI ETHERNET MONITORING ADAPTER

QUICK START GUIDE

VERSION 1.0 | INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE.

TECHNICAL SPECIFICATIONS

GENERAL		
DIMENSION		4.7 x 2.2 x 1.4 in. (120 x 55 x 34.5 mm)
WEIGHT		69 g
INSTALLATION METHOD		Externally Insert + Screw Fixing
CONFIGURATION METHOD		APP / Web
FIRMWARE UPDATE METHOD		Local Tool / Remote Upgrade
ELECTRICAL		
INPUT VOLTAGE		5V
ENVIRONMENT		
PROTECTION RATING		IP65
OPERATING TEMPERATURE		-13°F – 158°F (-25°C – 70°C)
COMMUNICATION DISTANCE	Wi-Fi: 328 ft. (100 m unobstructed) 148 ft. (45 m indoor)	Recommended Wired Distance: ≤65.6 ft. (≤20 m)
STORAGE TEMPERATURE		14°F – 140°F (-10°C – 60°C)
WIRELESS PARAMETERS		
WIRELESS MODE		Wi-Fi
ANTENNA		Built-in Antenna Design
NUMBER OF ANTENNAS		1
STANDARD		IEEE802.11 b/g/n
FREQUENCY RANGE		2.4Ghz – 2.48Ghz
MAXIMUM TRANSMIT POWER		20 dBm
STANDARD & CERTIFICATION		
RF CERTIFICATION, ROHS / REACH COMPLIANCE		

NOTE:

A customer code is required to register a monitor account. The installer code must be provided by the installation personnel or the distributor.

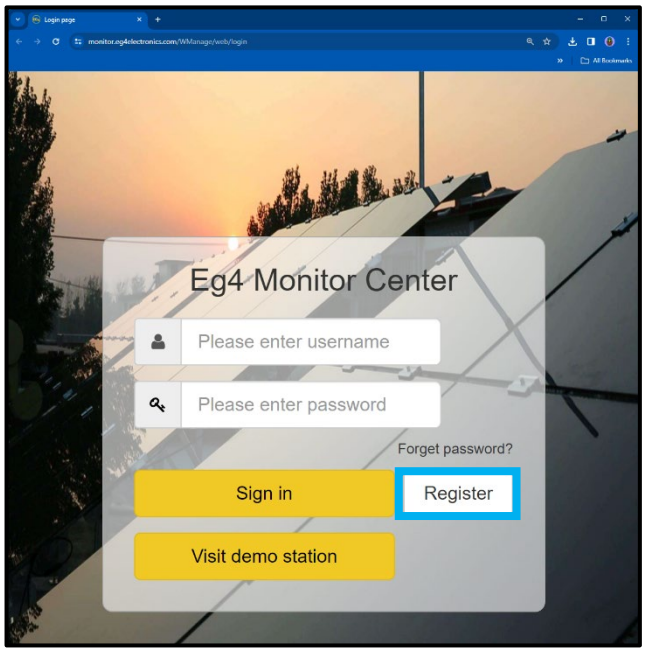
Step 1: Create a new user account by registering at https://monitor.eg4electronics.com/WManage/web/login, or by using the EG4 Monitor mobile application.

EG4 Monitor – iOS

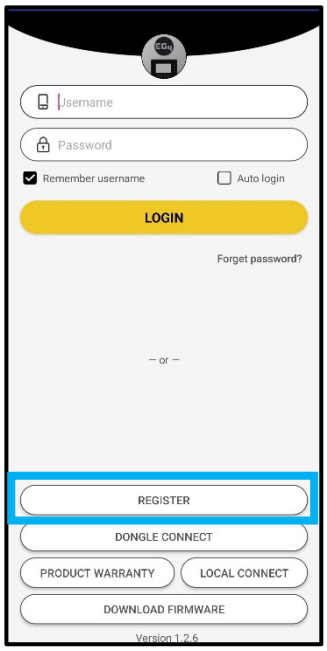
EG4 Monitor – Google

EG4 Monitor Center Overview

Website:



Mobile app:

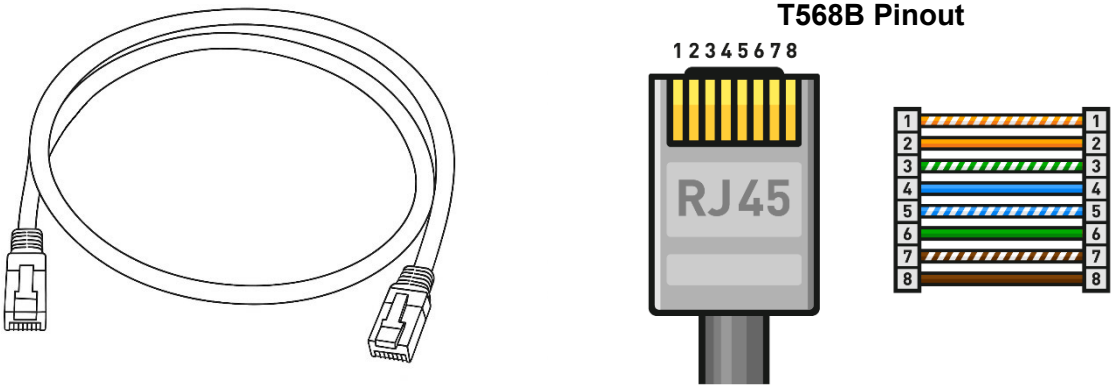


NOTE:

To create a distributor or installer account, please contact support@eg4electronics.com for assistance.

LAN CONNECTION

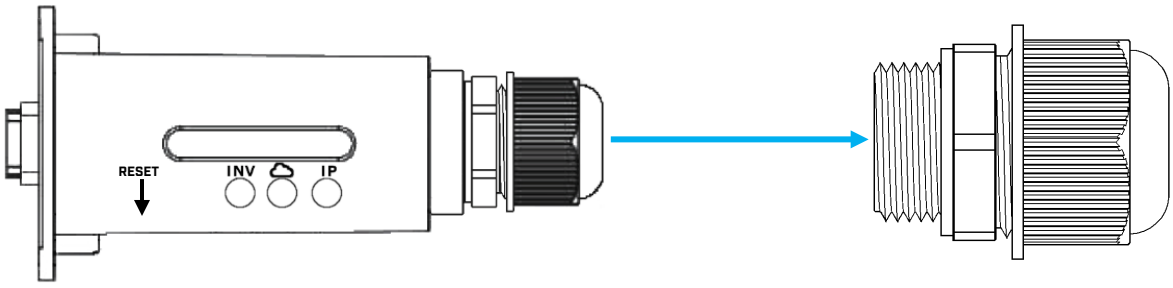
Step 1: Prepare a standard Ethernet cable with a T568B pinout (See image below for pinout).



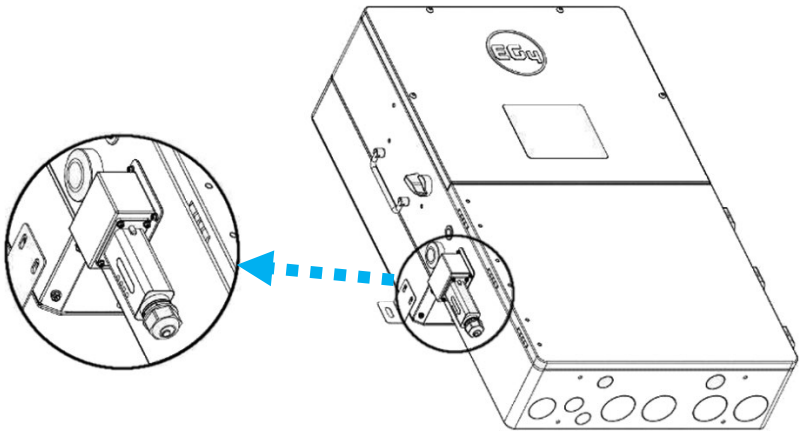
NOTE:

It is recommended to use a shielded CAT cable with a run length of no greater than 65 ft.

Step 2: The dongle will have a water-resistant connector that needs to be removed and set to the side prior to connecting the dongle.



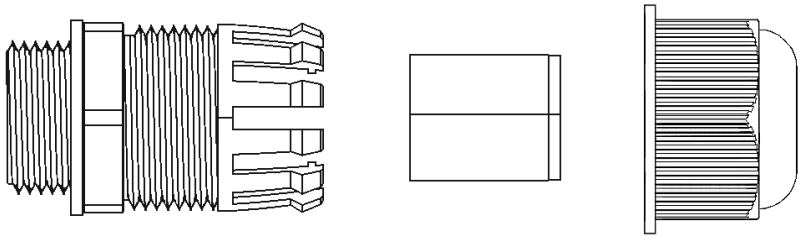
Step 3: After removing the water-resistant connector, install the ethernet dongle to the inverter by removing the four screws, connecting the dongle to the port, and reinstall the four screws.



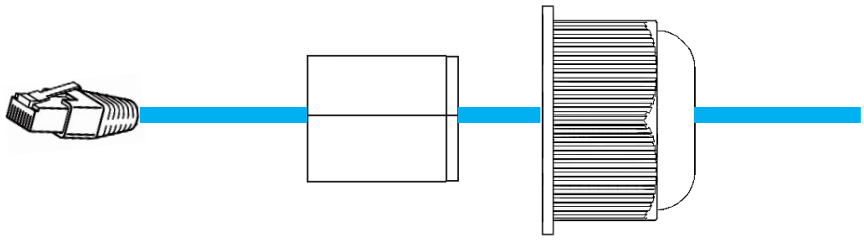
Step 4: Once the dongle is in place, pull the ethernet cable through the water-resistant connector. Locate the water-resistant connector and remove the end cap and rubber plug from the connector.

NOTE:

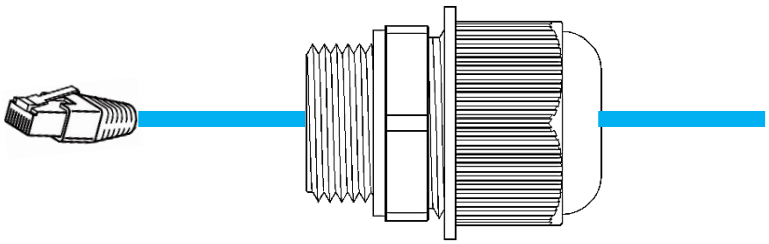
The rubber plug is on the inside of the water-resistant connector and will have to be removed by pushing from the inside of the connector.



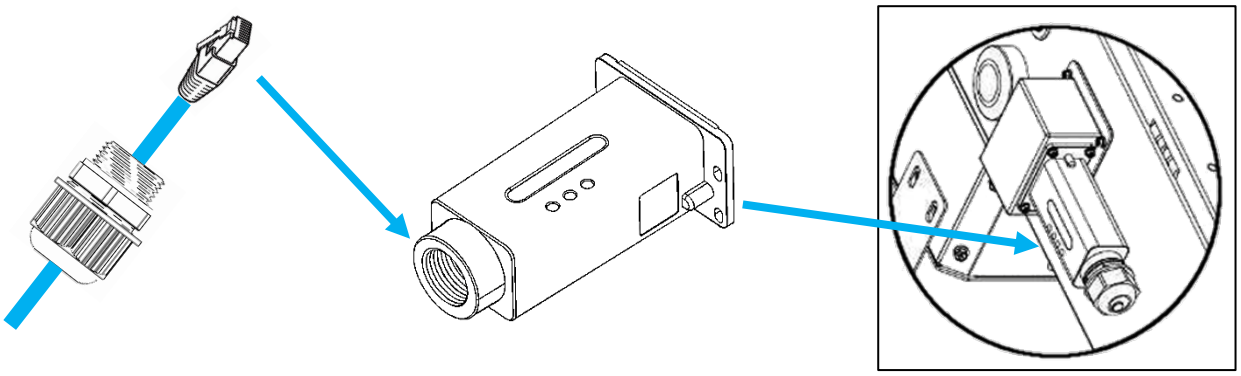
Step 5: Locate the end cap and pull the cable through. Take the rubber plug and find the split. Then take the ethernet cord and place it in the center of the rubber plug and let the rubber plug seal itself around the cord.



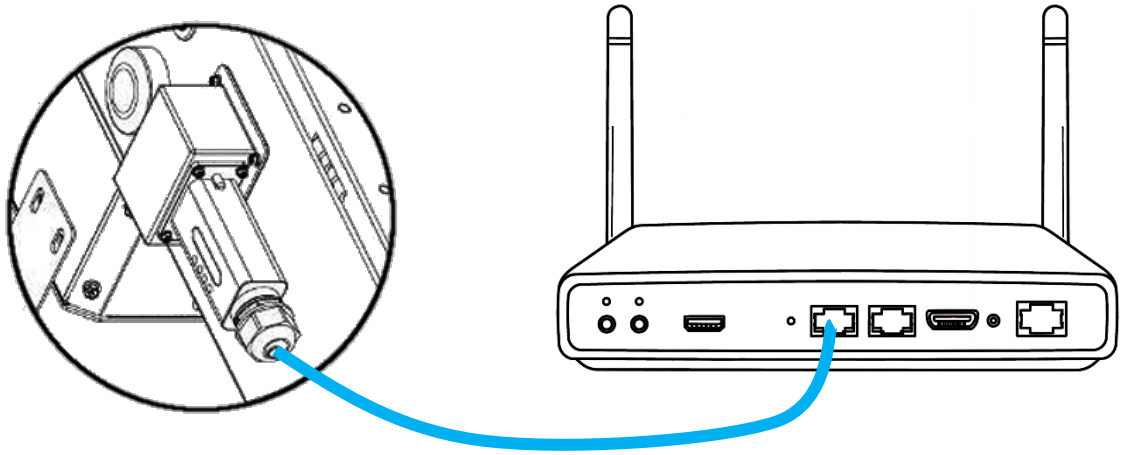
Step 6: Now take the end cap, ethernet cable, and rubber plug and push it back through the water-resistant connector until the rubber piece is back inside the water-resistant connector and then screw back on the end cap.



Step 7: Now take the water-resistant connector and ethernet cable and connect it to the RJ45 port on the bottom of the dongle that is connected to the inverter. Connect the ethernet end into the dongle until it clicks. Screw on the water-resistant connector to finish assembly of the dongle.

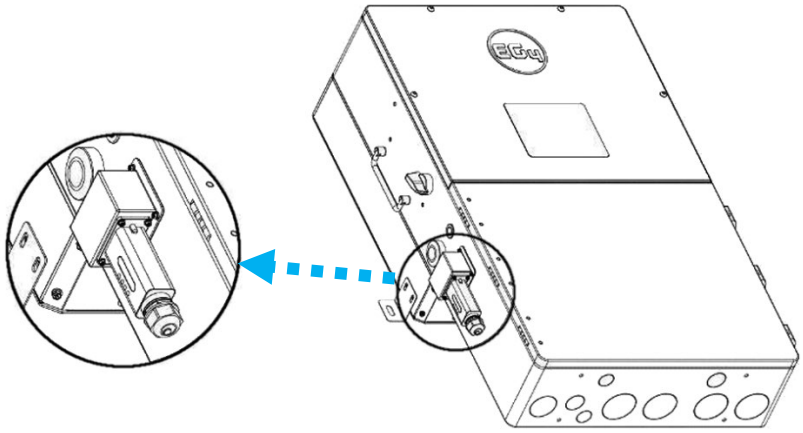


Step 8: Connect the other end of the ethernet cable to the home router to complete LAN connection.



WI-FI CONNECTION

Step 1: Insert the Wi-Fi Ethernet Monitoring Adapter into the inverter's dongle port.

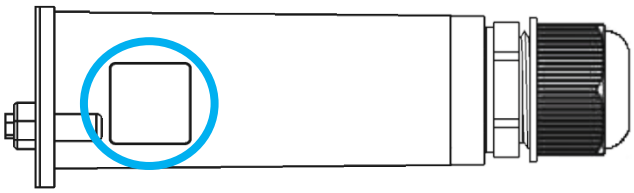


NOTE:

The IP LED flashes slowly, once per second.

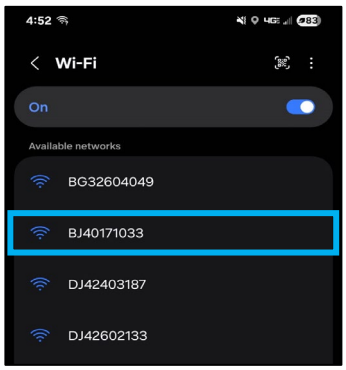
WI-FI SETUP VIA DONGLE CONNECT METHOD

Step 1: Press and hold the RESET button on the dongle for about 5 seconds until the dongle enters Wi-Fi mode (LED indicators will change. See table on page 9 for more information).

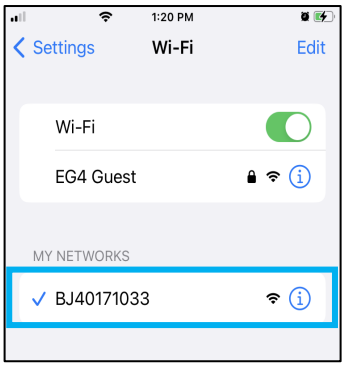


Step 2: Open the phone's Wi-Fi settings and connect to the dongle's network (it will include the dongle's serial number).

Android

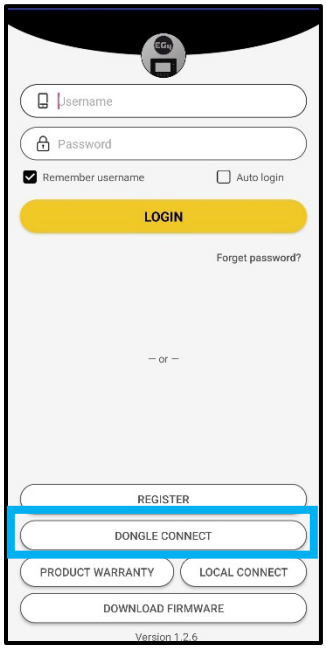


iOS

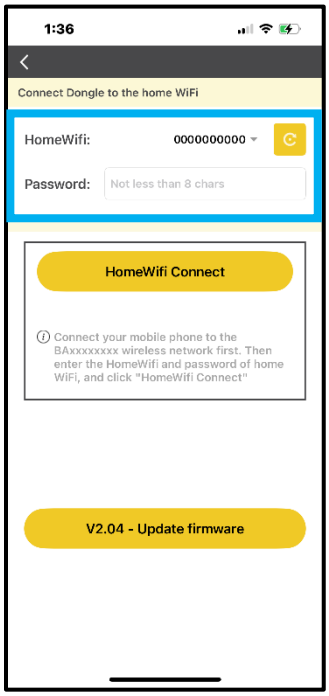


Step 3: Open EG4's Mobile App and select Dongle Connect.

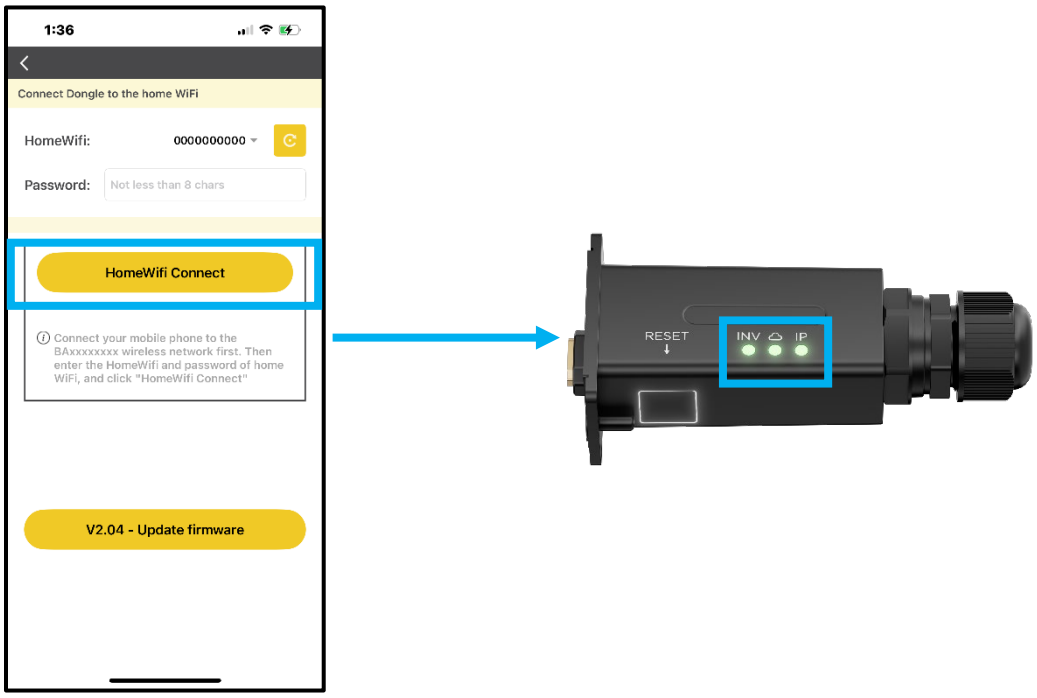
Mobile app:



Step 4: Under Home Wi-Fi, select the home router's Wi-Fi name and enter the password.



Step 5: Select Home Wi-Fi Connect. The Wi-Fi Ethernet Monitoring Adapter will automatically connect. Once connected, the three LED indicators on the dongle will light up.



NOTE:

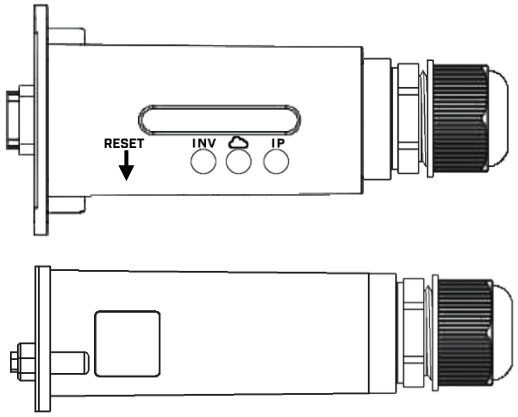
For stable communications, ensure the home Wi-Fi operates on 2.4GHz and supports WPAZ protocol. 5GHz is not supported.

If there are multiple inverters in the system, the dongle must be connected to each unit individually. Refer to the steps above to bind the SN and PIN of one inverter first. After logging into the monitoring account, go to the “Configurations” tab and use the “Add Dongle” function to add the remaining dongles to the inverter one by one.

NOTE:

When using Wi-Fi mode, the dongle only supports 2.4GHz Wi-Fi. Wi-Fi 6 is not currently supported.

LED INDICATOR DESCRIPTIONS AND STATUS



Identifier	Description
RESET	Multi-function button (reset, mode switch, pairing)
INV LED	Communication between dongle and inverter
Cloud LED	Communication between dongle and internet
IP LED	IP address indicator

LED Status	Status
All LEDs are “ON”	Communication normal
INV LED flashing	Communication failure between dongle and inverter
Cloud LED flashing	Internet connection failure
IP LED flashing	Router has not enabled dynamic IP address allocation

TROUBLESHOOTING

1. **How can the end-user determine the current communication mode of the dongle (Ethernet or Wi-Fi)?**
    - Check the IP LED flashing frequency. Ethernet mode: IP LED flashed slowly (once per second). Wi-Fi mode: IP LED flashes rapidly (three times per second).
2. **Why is the IP LED continuously flashing?**
    - The router’s automatic IP allocation feature has not been enabled.
    - The router is properly connected to the network.
    - The ethernet cable length exceeds the maximum communication distance (65 ft.) between the inverter and dongle.
    - A 568B pinned ethernet cable is not being used.
3. **Why is the Cloud LED continuously flashing?**
    - The router is properly connected to the network.
    - The ethernet cable length exceeds the maximum communication distance (65 ft.) between the inverter and dongle.
    - Confirm the ethernet dongle has access to the internet.
4. **Why is the INV LED continuously flashing?**
    - Check the connection between the dongle and inverter and ensure the connectors are fully inserted.
5. **Why does my device show offline in the Monitor center, but the dongle LEDs are normal?**
    - Check the connection between the dongle and inverter and ensure the connectors are fully inserted.
    - If the connections are secure, unplug the dongle and plug it back in. The system should appear online within ~3 minutes.

NOTES

EG4

ELECTRONICS

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