Industrial 5G NR Outdoor Unit (ODU)

FWA-2100-NR

Quick Installation Guide

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1. Package Contents

Thank you for purchasing PLANET Industrial 5G NR Cellular Outdoor Unit, FWA-2100-NR. The description of this model is as follows:

| Model Name | Description |
|-------------|---|
| FWA-2100-NR | Industrial 5G NR Outdoor Unit (ODU) with 1-port Gigabit PoE PD |

"5G ODU" is used as an alternative name in this Quick Installation Guide.

Open the box of the ${\bf 5G}~{\bf ODU}$ and carefully unpack it. The box should contain the following items:



If any item is found missing or damaged, please contact your local reseller for replacement.

2. Requirement

- Workstations running Windows 10/11, MAC OS X or later, Linux, UNIX, or other platforms are compatible with TCP/IP protocols.
- Workstations are installed with Ethernet NIC (Network Interface Card)
- Ethernet Port Connection
 - > Network cables -- Use standard network (UTP) cables with RJ45 connectors.
 - > The above PC is installed with Web browser and JAVA runtime environment plug-in.



It is recommended to use Chrome 98.0.xx to access the Cellular Gateway. If the Web interface of the 5G ODU is not accessible, please turn off the anti-virus software or firewall and then try it again.



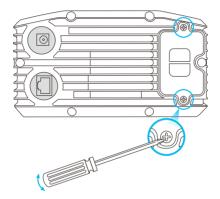
Using either a PoE injector, a PoE switch, or a DC adapter (12V, 1.5A) for power supply ensures the device functions properly. Please note that these power supplies are not included in the package.

3. Hardware Installation

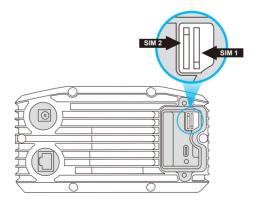
Refer to the illustration and follow the simple steps below to quickly install your **5G ODU**.

3.1 SIM Card Installation

A. Unscrew the two screws on the device's cover to remove the cover.

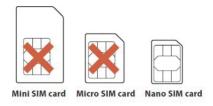


B. Insert the SIM card as directed by the SIM card interface.



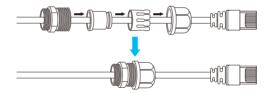
C. Put back the device's cover and tighten the screws.

A Nano SIM card with 5G NR and 4G LTE subscription



3.2 Wiring the Ethernet Cable Installation

By following the steps in the picture from left to right, put the network cable into the waterproof connector, and tighten the connector. Plug the cable into the device's LAN port, and tighten the waterproof connector with the device.



Plug the other end of the network cable into the PoE port of the PoE switch to finish the installation.



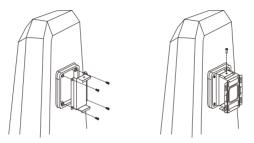
Please make sure that the waterproof connector is securely fastened with 5G ODU to prevent internal water seepage.

3.3 Wall Hanging and Pole Mounting Installation

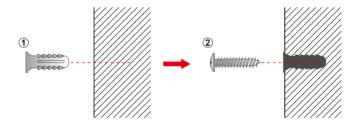
Wall hanging

Step 1: Lock the base to the device.

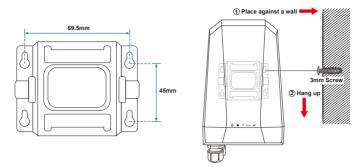
Step 2: Connect the wall bracket to the base and fasten the screws.



- Step 3: Drill 4 holes with a 3mm diameter on the wall. The horizontal and vertical distances between the 2 holes are 69.5mm and 45mm, respectively.
- **Step 4:** Place four anchors inside the hole by hammering them. Then screw the four screws leaving a space of 2mm apart as shown in the circled diagram below.



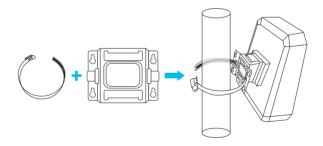
Step 5: The switch, shown in the picture below, can now be hung on the wall.



Pole mounting

To install the base and wall bracket, refer to **Step 1** and **Step 2** in Device Installation (Wall Hanging).

Step 6: The pole clamp goes through the hole of the wall bracket, and is wrapped around the pole. To finish the installation, fasten the clamp.



4. Starting Web Management

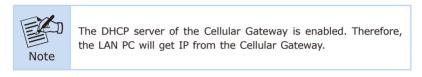
The following shows how to start up the **Web Management** of the **5G ODU**. Note the **5G ODU** is configured through an Ethernet connection. Please make sure the manager PC must be set to the same **IP subnet address**.

For example, the default IP address of the **5G ODU** is **192.168.1.1**, then the manager PC should be set to **192.168.1.x** (where x is a number between 2 and 254), and the default subnet mask is 255.255.255.0.



PC/Workstation with Web Browser 192.168.1.x

Figure 4-1: IP Management Diagram



Logging in to the Cellular Gateway

- Use Chrome 98.0.xx or above Web browser and enter IP address <u>http://192.168.1.1</u> (the factory default IP address or the one that you have just changed in console) to access the Web interface.
- When the following dialog box appears, please enter the default user name "admin" and password "admin" (or the password you have changed before) as shown in Figure 4-2.

Default IP Address: **192.168.1.1** Default User Name: **admin** Default Password: **admin** Default SSID (2.4G): **PLANET_2.4G**



Figure 4-2: Login Screen

3. After entering the password, the main screen appears as shown in Figure 4-3.

| PLANET Vitoretty & Commercial | | | | | - Cal | |
|----------------------------------|---------------------------------|--|---------------|------------------|-------------------|-------------------|
| FWA-2100-NR | 🔅 System 🐯 Network 📳 Cellular | Security PVPN | AP Control | 🛜 Wireless 🎤 Mai | intenance | Auto Logout 🕶 😋 🕞 |
| Wizard | | | | | | |
| Dashboard | | | | | | |
| System Status | | | | | | |
| System Service | | | | G. | | |
| Statistics | | / / / I | | ≥ <u> </u> | $\langle \rangle$ | |
| Connection Status | | | | | | |
| High Availability | | Contraction of the local division of the loc | | | | |
| RADIUS | Port Status | Syste | m Information | | | |
| Captive Portal | 1 OIL DIALOS | | in monitation | | | |
| SNMP | | | | | | |
| NMS | | | | | | |
| Remote Syslog | LAN | | 5% | 11.3% | | |
| Event Log | | | CPU | Memory | | |
| | LTE/NR Status | GPS 5 | Status | | | |
| | LTE/MR Status | | | | | |
| | | Attribu | | Value | | |
| | SIM 1 Download Kbps Upload Kbps | Total Kbps Longit | | - | | |
| | | | | | | |
| | | Altitud | ie | | | |
| 1 | SIM2 Download Moss Unload Moss | Date | | | | |
| 1 | Continued maps oprove maps | | | | | |
| | 5G 🛱 🛛 🛛 🔾 | 0 Satelli | ite | 0 | | |
| | | Locat | tion: (-,-) | 💡 Google Ma | DS | |

Figure 4-3: Web-based Main Screen of Cellular Gateway

Now, you can use the Web management interface to continue the Cellular Gateway management or manage the Cellular Gateway by console interface. Please refer to the user's manual for more.

5. Recovering Back to Default Configuration

■ IP address has been changed or admin password has been forgotten -

To reset the IP address to the default IP address **"192.168.1.1"** or reset the login password to default value, press the hardware **reset button** on the rear panel for about **15 seconds**. After the device is rebooted, you can log in the management Web interface within the same subnet of 192.168.1.xx.

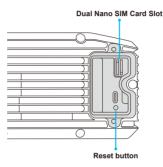


Figure 5-1: FWA-2100-NR Reset Button

6. Discovery through PLANET NMS Controller (NMS-500/NMS-1000V)

The FWA-2100-NR is the IP-based switched power manager, which can be centrally monitored by PLANET NMS Controller.

Follow the steps below to discover the managed FWA-2100-NR through PLANET NMS controller (NMS-500/NMS-1000V). Please ensure each managed FWA-2100-NR uses a different static IP in the same subnet before physically connecting to the managed network.



Please regularly check PLANET website for the latest compatible list of the controller FWA-2100-NR in each firmware version.

- Step 1. Launch the Web browser (Google Chrome is recommended.) and enter the default IP address <u>https://192.168.1.100:8888</u> of the NMS controller. Then, enter the default username and password "admin" to log on to the system.
- * The secure login with SSL (HTTPS) prefix is required.



Step 2. Go to the "Domain" page to discover and add the managed FWA-2100-NR to the device list. Then, you can search and add them and go to the "Device List" and "Topology View" page to monitor the FWA-2100-NR.

7. Customer Support

You can browse our online FAQ resource and User's Manual on PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET support team.

PLANET online FAQs: https://www.planet.com.tw/en/support/faq. php?method=keyword&keyword=FWA-2100-NR

Support team mail address: support@planet.com.tw

FWA-2100-NR User's Manual: https://www.planet.com.tw/en/support/downloads?&method=keyword&keyword =FWA-2100-NR&view=3#list



(Please select your model name from the drop-down menu of Product Models.)

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