Industrial 5G NR Cellular Gateway

ICG-2515 Series

Quick Installation Guide

Table of Contents

1.	Pack	age Contents	. 3			
2.	Requ	uirements	4			
3.	Harc	dware Installation	5			
	3.1	SIM Card Installation	5			
	3.2	5G NR Antenna Installation	6			
	3.3	Wi-Fi Antenna Installation (Wi-Fi model)	7			
	3.4	Wiring the Power Inputs	8			
	3.5	Grounding the Device	9			
	3.6	Wiring the Fault Alarm Contact	9			
4.	ting Web Management1	.0				
	4.1	Logging in to the Cellular Gateway	.0			
5.	Recovering Back to Default Configuration14					
6.	Customer Support15					

1. Package Contents

Thank you for purchasing PLANET Industrial 5G NR Cellular Gateway, ICG-2515 series. The hardware specifications of these models are as follows:

Model Name	RJ45	Fiber	Wi-Fi
ICG-2515-NR	5	-	-
ICG-2515W-NR	5	-	11ax
ICG-2515F-NR	4	1	-
ICG-2515FW-NR	4	1	11ax

[&]quot;Cellular Gateway" is used as an alternative name in this Quick Installation Guide.

Open the box of the **Cellular Gateway** and carefully unpack it. The box should contain the following items:

- Industrial 5G NR cellular gateway x 1
- Quick installation guide (QR code) x 1
- PLANET CloudViewer QIG x 1
- Wall-mount plate w/screw x 1 set
- 5G NR antenna x 4
- 5G NR antenna extender with magnetic base x 4
- Other components shown below:

Model Name	RJ45 dust cap	SFP dust cap	Dual band Wi-Fi antenna	Antenna dust cap
ICG-2515-NR	6	-	-	4
ICG-2515W-NR	6	-	2	6
ICG-2515F-NR	5	1	-	4
ICG-2515FW-NR	5	1	2	6

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

2. Requirements

- Workstations running Windows 7/8/10/11, macOS 10.12 or later, Linux Kernel 2.6.18 or later, or other modern operating system 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.



It is recommended to use Google Chrome, Microsoft Edge, or Mozilla Firefox to access the Cellular Gateway. If the Web interface of the Cellular Gateway is not accessible, please turn off the anti-virus software or firewall and then try it again.

3. Hardware Installation

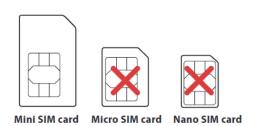
Refer to the illustration and follow the simple steps below to quickly install your **Cellular Gateway**.

3.1 SIM Card Installation

A. Insert an ejector pin into the yellow button next to the tray to loosen the tray.

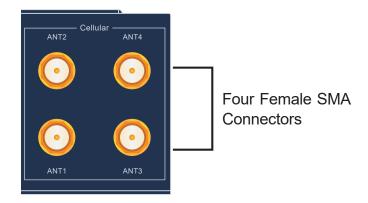


- B. Pull out the tray gently from the tray slot. Place the SIM card on the tray with the gold-colored contacts facing upwards.
- C. Insert the tray back into the tray slot.
- A mini SIM card with 5G NR and 4G LTE subscription



3.2 5G NR Antenna Installation

Step 1: Connect 5G NR antennas to the 5G NR antenna extender.

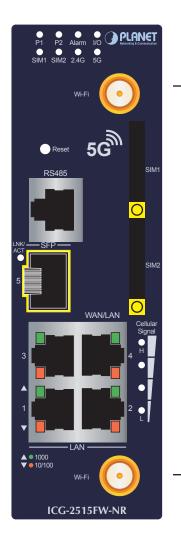


Step 2: Fasten the 5G NR antenna extenders to the connectors.



3.3 Wi-Fi Antenna Installation (Wi-Fi model)

- **Step 1:** Fasten the two dual-band antennas to the antenna connectors on the front panel of the Cellular Gateway.
- **Step 2:** You can bend the antennas to fit your actual needs.



Two Wi-Fi RP-SMA Connectors



Please use PLANET dual-band Wi-Fi antenna for high efficiency to avoid low efficacy.

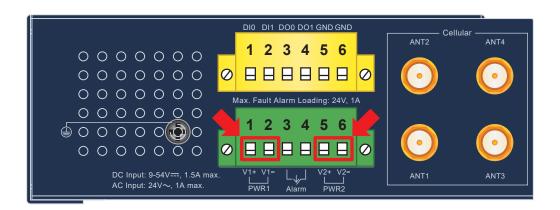
3.4 Wiring the Power Inputs

The 6-contact terminal block connector on the top panel of Cellular Gateway is used for two redundant power inputs. Please follow the steps below to insert the power wire.



When performing any of the procedures like inserting the wires or tightening the wire-clamp screws, make sure the power is OFF to prevent from getting an electric shock.

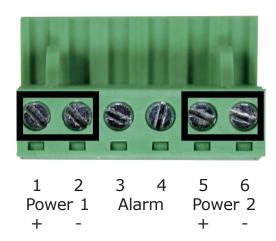
1. Insert positive and negative DC power wires into contacts 1 and 2 for POWER 1, or 5 and 6 for POWER 2.





Please make sure the input voltage is under the specifications of the Cellular Gateway.

2. Tighten the wire-clamp screws for preventing the wires from loosening.





The wire gauge for the terminal block should be in the range between 12 and 24 AWG.



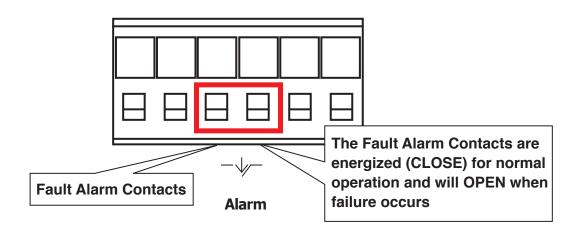
PWR1 and PWR2 must provide the **same DC voltage** while operating with dual power input.

3.5 Grounding the Device

User MUST complete grounding wired with the device; otherwise, a sudden lightning could cause fatal damage to the device. EMD (Lightning) DAMAGE IS NOT COVERED UNDER WARRANTY.

3.6 Wiring the Fault Alarm Contact

The fault alarm contacts are in the middle of the terminal block connector as the picture shows below. Inserting the wires, the Cellular Gateway will detect the fault status of the power failure or port failure, and then will form an open circuit. The following illustration shows an application example for wiring the fault alarm contacts.



Insert the wires into the fault alarm contacts



- 1. The wire gauge for the terminal block should be in the range between 12 and 24 AWG.
- 2. Alarm relay circuit accepts up to 24V (max.) and 1A current.

4. Starting Web Management

The following shows how to start up the **Web Management** of the Cellular Gateway. Note the Cellular Gateway 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 Cellular Gateway 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.

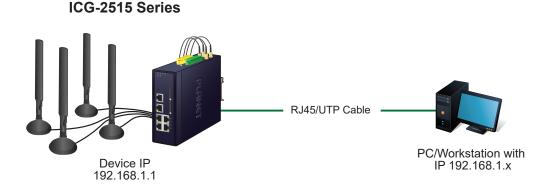


Figure 4-1: IP Management Diagram



The DHCP server of the Cellular Gateway is enabled. Therefore, the LAN PC will get IP from the Cellular Gateway.

4.1 Logging in to the Cellular Gateway

- Use Web browser and enter IP address <u>https://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.
- 2a. 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 (for Wi-Fi model)**Default SSID (5G): **PLANET_5G (for Wi-Fi model)**

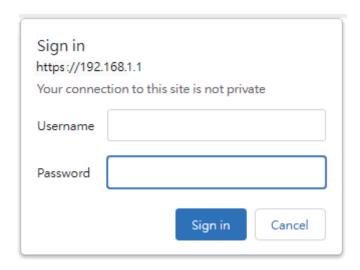


Figure 4-2: Login Screen



The following step is based on the firmware version before **October of 2024**.

2b. When the following web page appears, please enter the default user name and password. Refer to **Figure 4-4** to determine your initial login password.

Default IP Address: 192.168.1.1

Default Username: admin

Default Password: cg + the last 6 characters of the MAC ID in lowercase

Default SSID (2.4G): PLANET_2.4G (for Wi-Fi model)

Default SSID (5G): PLANET_5G (for Wi-Fi model)



Figure 4-3: Login Screen

Find the MAC ID on your device label. The default password is "cg" followed by the last six lowercase characters of the MAC ID.



MAC ID: A8F7E0XXXXXX

Default Password: cgxxxxxx

("x" means the last 6 digits of the MAC address.

All characters should be in lowercase.)

Figure 4-4: MAC ID Label



The following step is based on the firmware version of **October of 2024** or after.



If you have already changed the password via web login, please use this new password to log in.

3. After entering the password, the main screen appears as shown in Figure 4-5.

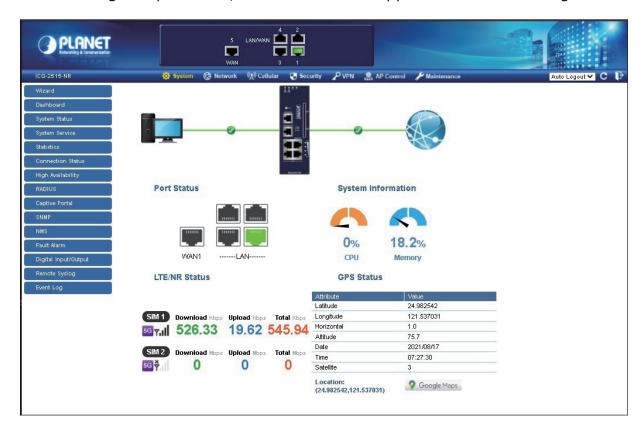


Figure 4-5: Web-based Main Screen of Cellular Gateway

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.

Administrators are strongly suggested to change the default password and Wi-Fi SSID on the first login to safeguard system security.

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 front 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: ICG-2515 Series Reset Button

6. 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

Support team mail address:

support@planet.com.tw

ICG-2515 Series User's Manual:

https://www.planet.com.tw/en/support/downloads?&method=keyword&keywor=ICG-2515&view=3#list



Copyright © PLANET Technology Corp. 2024.

Contents are subject to revision without prior notice.

PLANET is a registered trademark of PLANET Technology Corp.A

Il other trademarks belong to their respective owners.