# Industrial 5G NR Cellular Gateway

# **ICG-2515 Series**

Quick Installation Guide

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# 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

"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 component, as 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 10/XP/2003/Vista/7/8/2008, 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.
- $\succ$  The above PC is installed with Web browser.



It is recommended to use Chrome 98.0.xxx or above 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.

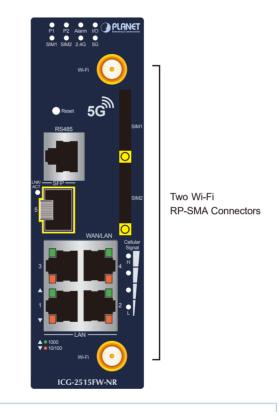


Step 2: Fasten the 5G NR antenna extenders to the connectors.



## 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.





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

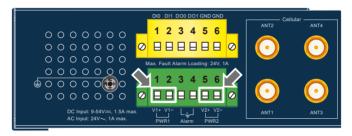
## 3.4 Wiring the Power Inputs

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.



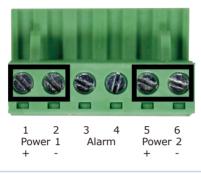
When performing any of the procedures like inserting the wires or tightening the wire-clamp screws, make sure the power is OFF to prevent from getting an electric shock.

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.



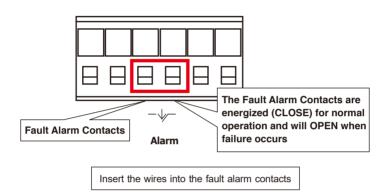
PWR1 and PWR2 must provide the **same DC voltage** while operating with dual power input.

## 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 CONVERED 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



- 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.

Note

# 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.

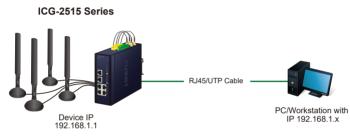


Figure 4-1: IP Management Diagram



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>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.
- 2. 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: a	dmin
Default	SSID (2.4G)	: PLANET_2.4G (for Wi-Fi model)
Default	SSID (5G): I	PLANET_5G (for Wi-Fi model)

Sign in					
http://192.1	68.1.1				
Your conne	ction to th	nis site is not	private		
Username					22
Password					
				Sign in	Cancel

Figure 4-2: Login Screen

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

	5 LONNON A 2 WWN 3 1		
ICB-2515-NR	🥸 System 😵 Network 🕅 Cellular 😲 Secu	rity 🔑 VPN 🤮 AP Control 🏓 Maintenance	Auto Logout 🛩 C 🕼
Wizard	11		
Dashboard	+ ≋∏.		
System Status			
System Service			
Statistics			
Connection Status			
High Availability			
RADIUS	Port Status	System Information	
Captive Portal			
SNMP			
NMS			
Fault Alarm	L ⊿ L ⊿ <mark>L</mark>	0% 18.2%	
Digital Input/Output	WAN1LAN	CPU Memory	
Remote Syslog	LTE/NR Status	GPS Status	
Event Log			
		Attribute Value Lattude 24.982542	
	SIM1 Download Hops Upload Hops Total Hops	Longtude 24.302542	
		Horizontal 1.0	
	Sec. 33 19.62 545.94	Atitude 75.7	
	_	Date 2021/08/17	
	SIM 2 Download Mbps Upload Mbps Total Mbps	Time 07:27:30	
	53¥ 0 0 0	Satelite 3	
		Location: (24.982542,121.537831) Q Google Maps	

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.

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: <a href="mailto:support@planet.com.tw">support@planet.com.tw</a>

ICG-2515 Series User's Manual: https://www.planet.com.tw/en/support/downloads?&method=keyword& keyword=ICG-2515&view=3#list



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