

Industrial 4G LTE Cellular Gateway

ICG-2420-LTE/ICG-2420G-LTE

Quick Installation Guide


Table of Contents

1. Package Contents	3
2. Requirements	4
3. Starting Web Management	5
4. Terminal Setup	8
4.1. Logon to Console	9
4.2. Configuring IP Address	9
5. Recovering Back to Default Configuration	11
6. Customer Support	12

1. Package Contents

Thank you for purchasing PLANET Industrial 4G LTE Cellular Gateway. Please refer to the table list below for the models used in Europe and the U.S.:

Model Name	4G LTE		
	FDD	TDD	GPS
ICG-2420-LTE-EU	B1/B3/B5/B7/B8/B20	B38/B40/B41	-
ICG-2420G-LTE-EU			■
ICG-2420-LTE-US	B2/B4/B12		-
ICG-2420G-LTE-US			■









Note

Please contact your cellular carrier for more details about LTE band support.

“**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:

ICG-2420-LTE/ICG-2420G-LTE	Quick Installation Guide	Antenna Dust Caps
		 <p>ICG-2420-LTE x 2 ICG-2420G-LTE x 3</p>
GPS Antenna (ICG-24240G Series)	4G LTE Antennas (2dBi)	1.5m RJ45 Cable
		

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.
 - The above PC is installed with Web browser and JAVA runtime environment plug-in.

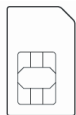


Note

It is recommended to use Internet Explorer 8.0 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.

- **Serial Port Connection (Terminal)**

- The above Workstations come with COM port (DB9) or USB-to-RS232 converter.
 - The above Workstations have been installed with **terminal emulator**, such as Hyper Terminal included in Windows XP/2003.
 - Serial cable -- one end is attached to the RS232 serial port, while the other end to the console port of the Cellular Gateway.
- A mini SIM card with LTE and WCDMA subscription



Mini SIM card



Micro SIM card



Nano SIM card

3. 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.

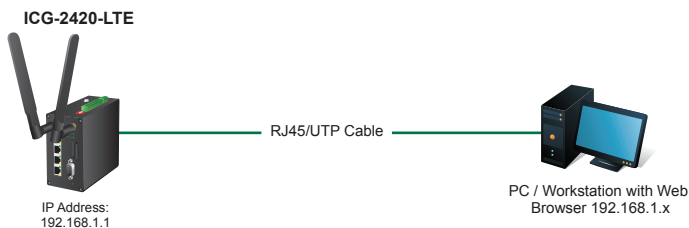


Figure 3-1: IP Management Diagram

Logging in to the Cellular Gateway

1. Use Internet Explorer 8.0 or above Web browser and enter IP address **<http://192.168.1.1>** (the factory default IP address or the one that you have just changed in console) to access the Web interface.

2. After entering the <http://192.168.1.1> the main screen appears as Figure 3-2 shows.

The screenshot displays the Planet Cellular Gateway web interface. At the top, the Planet logo is on the left, and system information (System Uptime: 6:19:56, WAN Priority: Auto) and language settings (English) are on the right. A sidebar on the left lists navigation options: Status, System, WAN, LAN, Service, and Management. The main content area is divided into three sections:

- WAN LTE:** A table with columns for Attribute, Current SIM, and Backup SIM.

Attr.	Current SIM	Backup SIM
SIM Card	SIM2	SIM1
Modem Status	Error	Error
Operator		
Modem Access	No Service	No Service
IMSI		
Phone Number		
Band		
Channel ID	0	0
IPv4 Address		
IPv4 Mask		
- WAN Ethernet:** A table with columns for Attribute and Value.

Attr.	Value
IPv4 Address	
IPv4 Mask	
- WAN DNS:** A table with columns for Attribute and Value.

Attr.	Value
IPv4 DNS Server #1	
IPv4 DNS Server #2	
IPv4 DNS Server #3	
IPv6 DNS Server #1	
IPv6 DNS Server #2	
IPv6 DNS Server #3	

Figure 3-2: Web-based Main Screen of Cellular Gateway

3. When any function item is pressed, the following dialog box will appear. Please enter the default user name and password **"admin"** (or the password you have changed via console).

Default IP Address: **192.168.1.1**
Default Username: **admin**
Default Password: **admin**

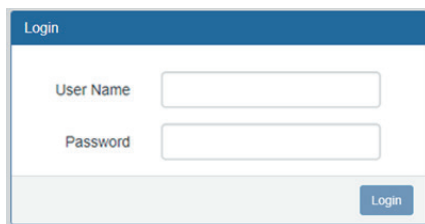
A screenshot of a login dialog box. The title bar is blue and contains the word "Login". Below the title bar, there are two input fields: "User Name" and "Password". To the right of the "Password" field is a blue button with the text "Login".

Figure 3-3: Login Screen

The Cellular Gateway Menu on the left of the Web page lets you access all the commands and statistics the Cellular Gateway provides.

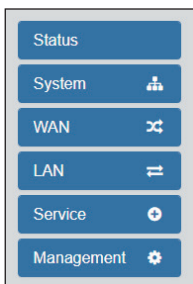


Figure 3-4: Cellular Gateway Menu

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.

4. Terminal Setup

It is optional for you to configure the system by connecting a serial cable (not included in the package) to a **COM port** on a PC or notebook computer and to the serial port of the Cellular Gateway.

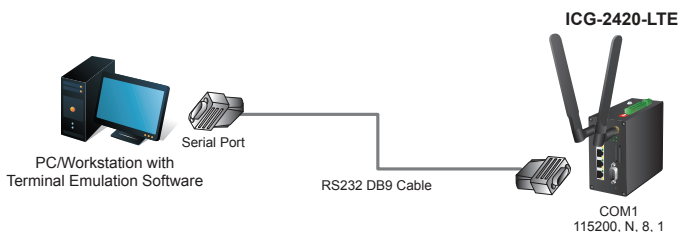


Figure 4-1: Cellular Gateway Console Connectivity

A terminal program is required to make the software connection to the Cellular Gateway.

1. Run terminal program on the OS.
2. When the following screen appears, make sure that the COM port should be configured as:

- ◆ Baud: 115200
- ◆ Data bits: 8
- ◆ Parity: None
- ◆ Stop bits: 1
- ◆ Flow control: None

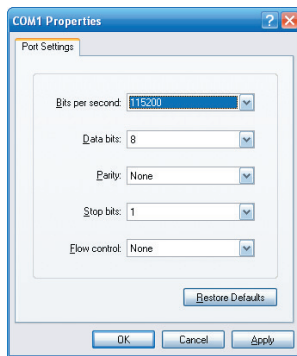
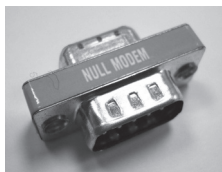


Figure 4-2: COM Port Configuration



Important

Users must use the Null-Modem cable directly connected to the Cellular Gateway. The Null-Modem DB9 connector shown in the picture must be used.



4.1. Logon to Console

Once the terminal is connected to the device, power on the Cellular Gateway, and the terminal will display “running testing procedures”. Then, the following message asks to log-in user name and password. The factory default user name and password are shown as follows and the login screen in Figure 4-3 appears.

```
Username: admin
Password: admin
```

```
Freescale i.MX Release Distro 4.1.15-1.2.0 Cellular Gateway
Cellular Gateway login: admin
Password:
Cellular Gateway#
```

Figure 4-3: Cellular Gateway Console Login Screen

The user can now enter commands to manage the Cellular Gateway. For a detailed description of the commands, please refer to the following chapters.



Note

1. For security reason, please change and memorize the new password after this first setup.
2. Only accept command in lowercase letter under console interface.

4.2. Configuring IP Address

The Cellular Gateway is shipped with default IP address shown below.

IP Address: **192.168.1.1**
Subnet Mask: **255.255.255.0**

To check the current IP address or modify a new IP address for the Cellular Gateway, please use the procedures as follows:

■ Show the current IP Address

1. At the “#” prompt, enter “lan ipv4 ip list”.
2. The screen displays the current IP address as shown in Figure 4-4.

```
Cellular Gateway# lan ipv4 ip list
  addr = 192.168.1.1
  mask = 255.255.255.0
Cellular Gateway#
```

Figure 4-4: IP Information Screen

■ Configuring IP Address

3. At the “#” prompt, enter the following command and press **<Enter>** as shown in Figure 4-5.

```
Cellular Gateway# lan ipv4 ip addr 192.168.1.3
Cellular Gateway# lan ipv4 ip apply
```

The previous command would apply the following settings for the Cellular Gateway.

IP Address: **192.168.1.3**
Subnet Mask: **255.255.255.0**

```
Cellular Gateway# lan ipv4 ip addr 192.168.1.3
Cellular Gateway# lan ipv4 ip apply
Cellular Gateway#
```

Figure 4-5: Configuring IP Address Screen

4. Repeat Step 1 to check if the IP address has changed.

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 **10 seconds**. After the device is rebooted, you can login the management Web interface within the same subnet of 192.168.1.xx.

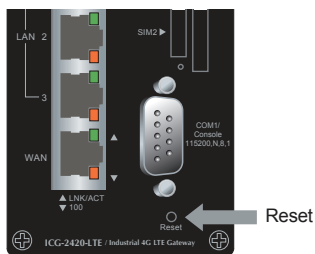


Figure 5-1: ICG-2420-LTE Reset Button

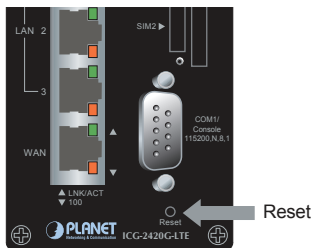


Figure 5-2: ICG-2420G-LTE Reset Button

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 switch support team.

PLANET online FAQ:

<http://www.planet.com.tw/en/support/faq.php?type=1>

Switch support team mail address:

support@planet.com.tw

ICG-2420-LTE and ICG-2420G-LTE User's Manual:

<http://www.planet.com.tw/en/support/download.php?type1=22153&model=&type=3>



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

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