

Industrial Router IR315 Quick Installation Guide

What you need to do first: Unbox → Mount the device → Connect power and Ethernet → (If using cellular) **Power off** to install SIM and connect antennas → Power on → Set PC to same subnet → Open Web in browser.

Then: Scroll down to **Part 2** to check packing list, indicator meanings, mounting methods, antenna details, etc.

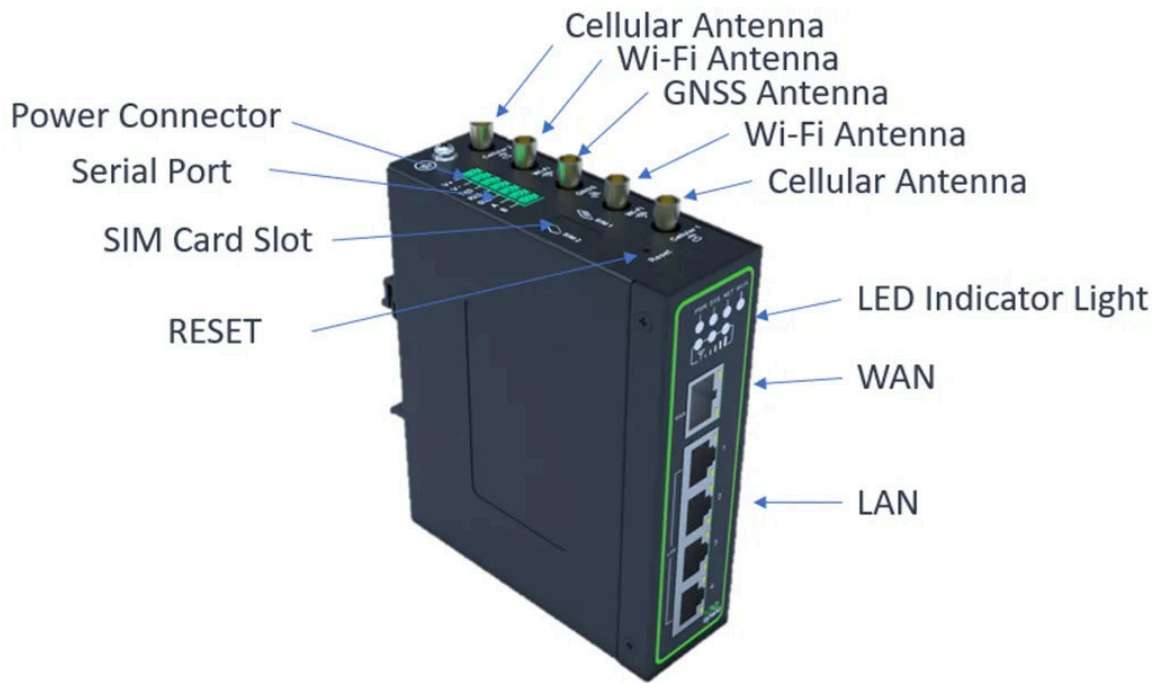
Part 1: Quick Installation (Visual Step-by-Step)

Must-Read Summary (Before Wiring and Powering On)

Item	Requirement
Power supply	12V DC using the included power adapter; PWR steady red indicates power on.
SIM card	Must power off before inserting or removing; no hot swapping .
Cellular / Wi-Fi antenna	Tighten clockwise by the metal connector according to the housing silkscreen; do not twist by the black stick.
Environment	Operating temperature -20°C ~ 70°C ; keep away from heat sources, strong electromagnetic interference, and direct sunlight.

Step 1: Check the Panel and Interface Areas Against the Actual Device

Look at the device panel to confirm the location of each interface. The IR315 provides a WAN/LAN1 port, a LAN port, cellular antenna connectors, Wi-Fi antenna connectors, SIM card slots, and a power connector.



For detailed port locations and labels, see §2.2.

Step 2: Mount the Device on a DIN Rail or Inside a Cabinet

Attach the included DIN-rail clip to the back of the device, then snap the device onto a standard 35mm DIN rail. For panel mounting, use the optional panel mount kit.

For detailed DIN rail installation and removal steps, see §2.4.

Step 3: Connect Power and Ethernet

1. Connect the power adapter to the device's power connector.
2. Connect the WAN/LAN1 port to the upstream network (e.g., modem or switch).
3. Connect your PC to the device's LAN port with an Ethernet cable.

For Ethernet port details, see §2.5.1; for power supply details, see §2.5.2.

Step 4: (If Using Cellular) Power Off to Install SIM and Connect Antennas

1. **Make sure the device is powered off.**
2. Insert the eject pin into the small hole on the left side of the SIM slot to eject the tray, place a nano SIM card in it, and push the tray back in.

3. Tighten the cellular antenna clockwise by the metal connector until it cannot turn further.
Connect the Wi-Fi antennas in the same way.

Warning: Always power off the device before inserting or removing a SIM card to prevent data loss or damage.

For antenna and SIM details, see §2.5.6.

Step 5: Power On and Confirm the Device Is Ready

After powering on, check the LEDs: - **PWR steady red** — Power is normal. - **SYS steady green** — The system is running normally.

For a complete list of indicator meanings, see §2.3.

Step 6: Log In via PC and Browser

1. Set your PC network adapter to **DHCP automatic IP** (recommended), or manually configure an IP in the **192.168.2.2 ~ 192.168.2.254** range, subnet mask **255.255.255.0**, gateway **192.168.2.1**.
2. Open a browser and go to **192.168.2.1**.
3. Enter the username and password in the pop-up window (see the nameplate on the bottom of the device).
4. If the browser warns that the connection is not private, click **Advanced** → **Proceed**.

Port Role	Default IP
WAN/LAN1	192.168.2.1

For complete first-login and factory-reset instructions, see §2.7.

Post-Installation Checklist

- ☐ The device is securely mounted (DIN rail or panel).
- ☐ Power and Ethernet cables are connected; if using cellular, the SIM and antennas are in place.
- ☐ **PWR is steady red** and **SYS is steady green**.
- ☐ The browser can open the Web login page and log in successfully.

If you cannot log in, check your PC subnet settings. If you need to restore factory settings, refer to the hardware reset procedure in §2.7.

Part 2: Detailed Information

2.1 Packing List

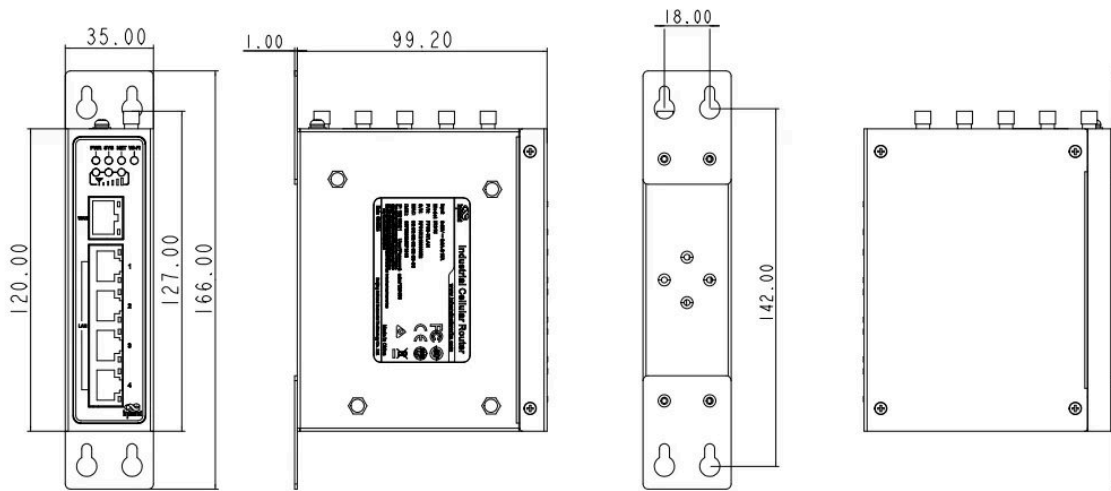
Standard Accessories

No.	Name	Qty	Unit	Remarks
1	IR315 Router	1	pcs	—
2	DIN-rail Clip	1	pcs	For DIN rail mounting
3	Cellular Antenna	1/2	pcs	Suction cup antenna (2m cable): 1pc for LQ20 series, 2pcs for other series
4	Wi-Fi Antenna	2	pcs	Suction cup antenna (2m cable)
5	Ethernet Cable	1	pcs	1.5m
6	Power Adaptor	1	pcs	12V DC

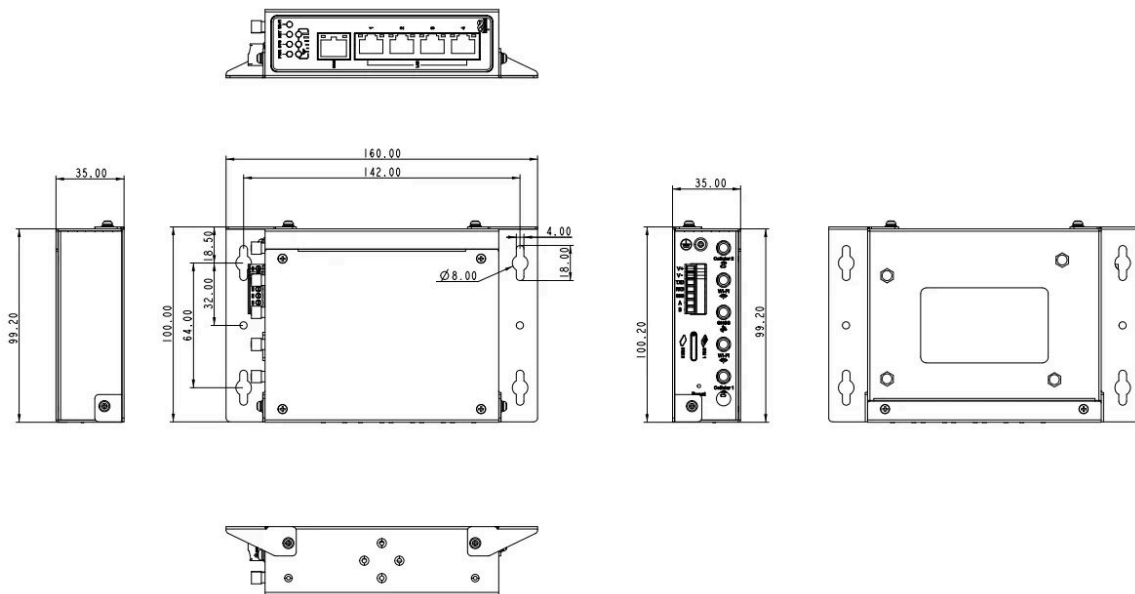
Optional Accessories

No.	Name	Qty	Unit	Remarks
1	Panel Mount Kit Option 1	1	set	—
2	Panel Mount Kit Option 2	1	set	—

Panel mount kit option 1:



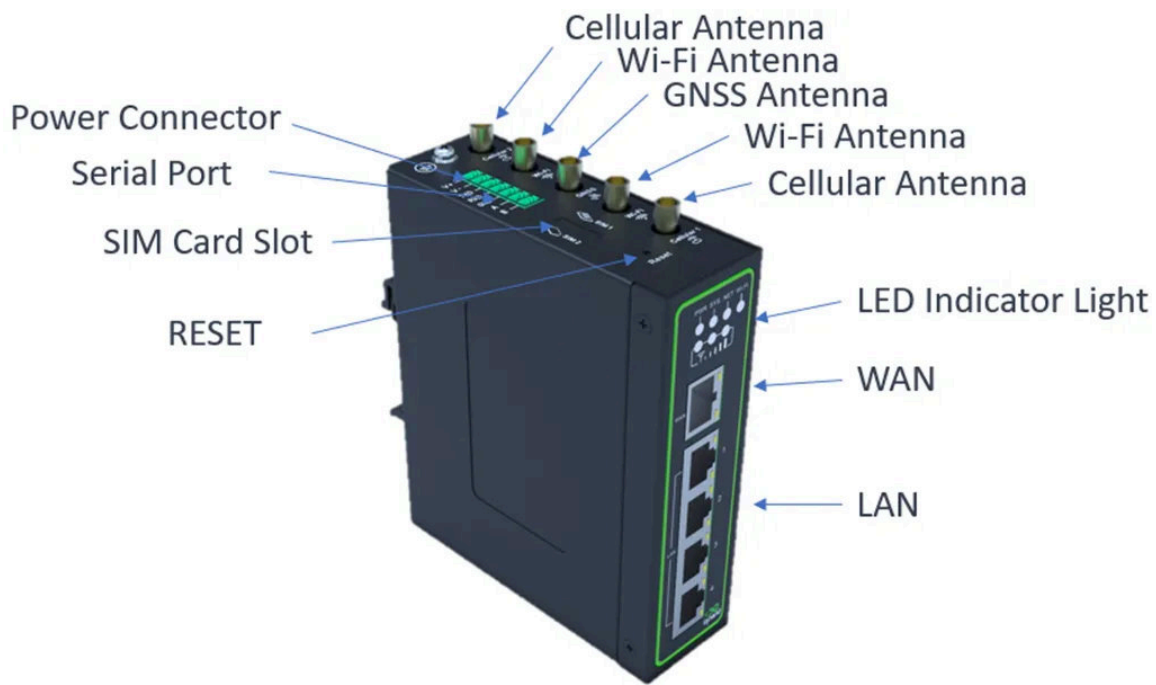
Panel mount kit option 2:



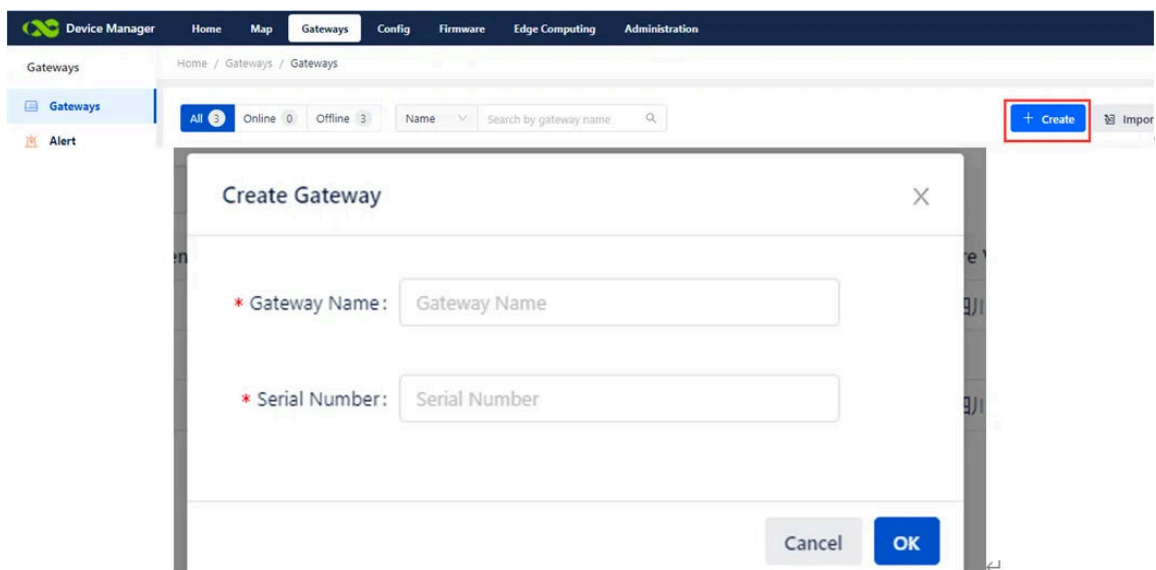
2.2 Product Structure and Identification

The IR315 is an industrial router that supports three ways of accessing the Internet: wired, cellular, and Wi-Fi. Please confirm the product model and packaging accessories before use, and purchase SIM cards from local network operators.

Panel introduction:



You can find the serial number in "Status >> System" on the Web management page, or on the nameplate at the back of the device.



2.3 Indicators and Reset Button

2.3.1 Status LEDs

LED	Status	Meaning
PWR	Red off	Power off

LED	Status	Meaning
	Steady red	Power on
SYS	Green off	System error
	Flashing green	System upgrading
	Steady green	System working
Wi-Fi	Green off	Wi-Fi disabled
	Flashing green	Wi-Fi connecting
	Steady green	Wi-Fi working
NET	Green off	Network disconnected
	Flashing green	Network connecting
	Steady green	Network connected
Signal	3 green lights steady on	Dial-up successful, signal strength ≥ 20
	2 green lights steady on	Dial-up successful, $10 \leq \text{signal strength} \leq 19$
	1 green light steady on	Dial-up successful, signal strength ≤ 9

2.3.2 Reset Button

The RESET button is located on the front panel (see the diagram in §2.2). Press and hold the RESET button to restore the device to factory settings. For detailed steps, see §2.7.

2.4 Mechanical Installation

2.4.1 DIN Rail: Installation

Attach the DIN-rail clip to the back of the device, then snap the device onto a standard 35mm DIN rail from above. A "click" sound indicates it is locked in place.

2.4.2 DIN Rail: Removal

Use a screwdriver to push down the bottom of the clip to release the device from the rail, then pull the device outward.

2.4.3 Panel Mounting

First attach the panel mount kit to the device with screws, then secure the device to a wall or cabinet with screws. To remove, reverse the order: loosen the wall screws first, then remove the kit.

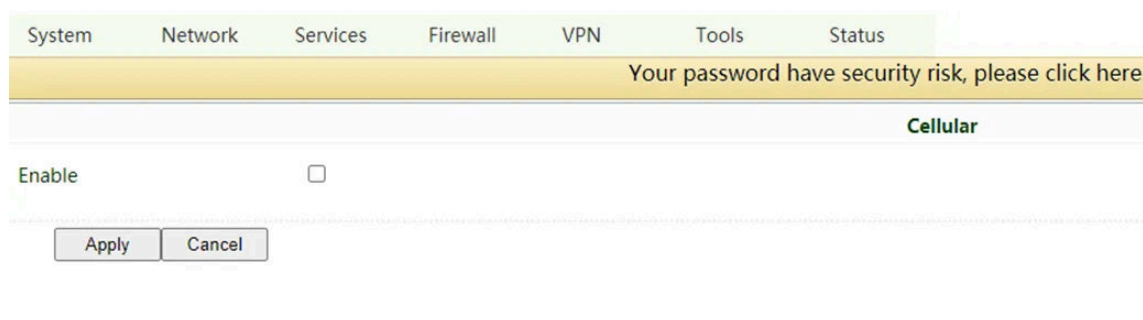
See §2.1 for illustrations of Option 1 and Option 2.

2.5 Connections and Cabling

2.5.1 Ethernet

The IR315 provides one WAN/LAN1 port and one LAN port, both supporting 10/100Mbps auto-negotiation.

Note: When the IR315 does not access the Internet via cellular, please disable Cellular in "Network > Cellular", otherwise the device will restart after trying to dial up and fail several times.



2.5.2 Power Supply

The IR315 uses **12V DC** power. Please use the included power adapter. Pay attention to the voltage level to avoid over-voltage or under-voltage conditions.

2.5.6 Cellular SIM and Antennas

SIM Card

The IR315 supports dual nano SIM cards. Stick the eject pin into the hole on the left of the SIM card slot to eject it, then insert a SIM card.

Warning: When inserting or plugging out the SIM card, please unplug the power cable to prevent data loss or damage to the router.

Antenna Installation

Rotate the metal interface clockwise until the movable part cannot be rotated. Do not hold the black glue stick to twist the antenna.

2.6 Power Supply and Environment

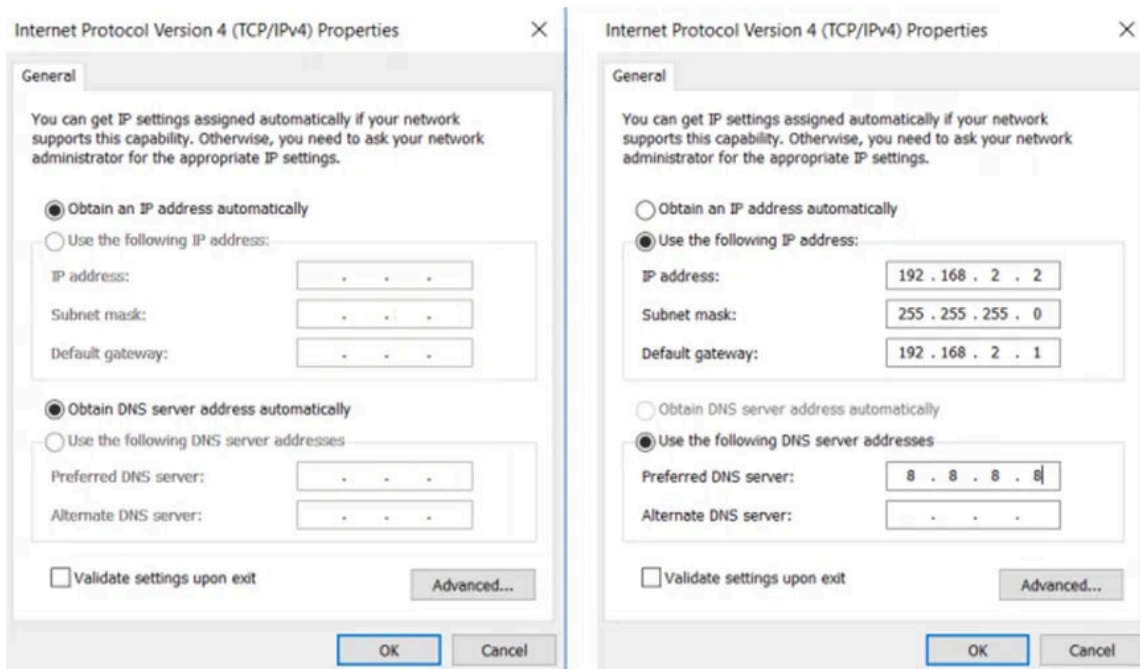
Item	Specification
Input Voltage	12V DC
Operating Temperature	-20°C ~ 70°C
Storage Temperature	-40°C ~ 85°C
Relative Humidity	5%~95% (no frosting)

2.7 First Login and Factory Reset

Web Login

The steps are identical to "Step 6" in Part 1:

1. Enable the PC to obtain an IP address from DHCP automatically (recommended), or configure a fixed IP address in the same network segment as the router (192.168.2.2 ~ 192.168.2.254), subnet mask 255.255.255.0, default gateway 192.168.2.1. The DNS server should be 8.8.8.8 or the address of the ISP's DNS server.
2. Open a browser and access the default IP address 192.168.2.1.
3. Enter the username and password (see the nameplate at the bottom of the device).
4. If the browser alarms the connection is not private, click Advanced, and proceed to access the address.



Router Login

Username

Password

Creating a WAN Port

After logging in, create a WAN port in "Network >> WAN" in the left menu and configure the Internet access method:

- **Dynamic DHCP (recommended):** Obtain IP address automatically.

WAN

Type Dynamic Address (DHCP) ▼

Shared Connection(NAT) ☒

Default Route ☒

MAC Address 00:18:05:30:50:01 Default Clone

MTU Default ▼ 1500

Apply Cancel

- **Static IP:** Configure manually, then click Apply & Save.

WAN

Type Static IP ▼

Shared Connection(NAT) ☒

Default Route ☒

MAC Address 00:18:05:30:50:01 Default Clone

IP Address 192.168.1.29

Netmask 255.255.255.0

Gateway 192.168.1.1

MTU Default ▼ 1500

Multi-IP Settings

IP Address	Netmask	Description

Apply Cancel

- **ADSL Dialup:** Configure manually, then click Apply & Save.

WAN

Type ADSL Dialup (PPPoE) ▼

Shared Connection(NAT) ☒

Default Route ☒

MAC Address 00:18:05:30:50:01 Default Clone

MTU Default ▼ 1492

ADSL Dialup (PPPoE) Settings

Username

Password

Static IP ☐

Connection Mode Always Online ▼

Show Advanced Options ☐

Apply Cancel

After configuration, check connectivity in "Tools > PING".

PING

Host Ping

Ping Count

Packet Size Bytes

Expert Options

```

PING 8.8.8.8 (8.8.8.8): 32 data bytes
40 bytes from 8.8.8.8: seq=0 ttl=108 time=63.139 ms
40 bytes from 8.8.8.8: seq=1 ttl=108 time=61.144 ms
40 bytes from 8.8.8.8: seq=2 ttl=108 time=61.688 ms
40 bytes from 8.8.8.8: seq=3 ttl=108 time=62.431 ms

--- 8.8.8.8 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 61.144/62.100/63.139 ms
  
```

SIM Card Dial-up

If accessing the Internet via cellular:

1. **Power off** to insert the SIM card. Connect the 4G antenna to the router, and connect the PC to the router. Then power on.
2. Open a browser and access the router's WEB management page.
3. Click "Network >> Cellular", and set your profile. The device enables cellular by default; it will connect to the Internet within a few minutes. If the device cannot connect, please disable and restart dial-up. (If you use a private network SIM card, you also need to configure the APN parameter.)

Cellular

Enable ☒

Time schedule ALL Schedule Management

PPPoE Bridge ☐

Shared Connection(NAT) ☒

Default Route ☒

SIM1 Network Provider Profiles 1 Manage

Network Select Type Auto

Static IP ☐

Connection Mode Always Online

Redial Interval Seconds

Show Advanced Options ☐

Profiles

Index	APN	Access Number	Authentication Type	Username	Password
1		*99#	Auto		

Add

Apply
Cancel

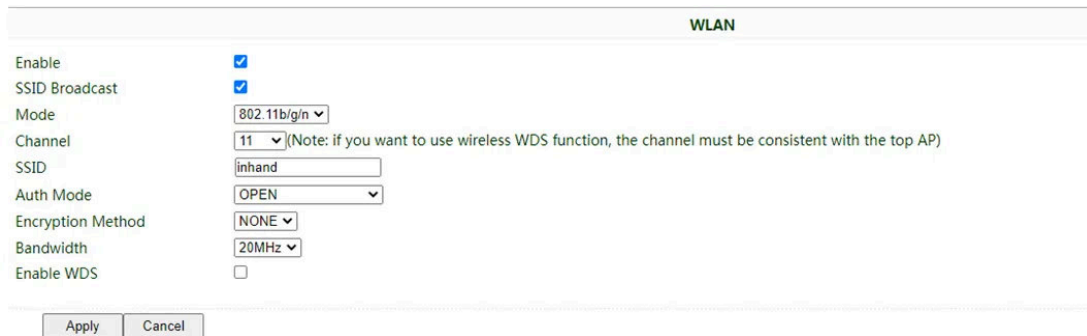
1. Check the dial-up status in the "Status" section. If it displays "Connected" and shows an IP address along with other dial-up parameters, the router has successfully connected to the Internet via the SIM card.

Wi-Fi Internet Access

1. Connect the Wi-Fi antenna, and connect the PC to the device. Access the router's WEB management page.

2. Set Wi-Fi mode: AP or STA.

3. **AP mode (default):** The IR315 acts as an access point to radiate wireless signals, and other terminal devices can connect to this device to access the Internet. Ensure that the IR315 itself has already been connected to the Internet through wired or cellular. AP mode supports setting the SSID name and encryption authentication mode; terminal devices will need to input a password when connecting.



The image shows the 'WLAN' configuration page. It has a title bar 'WLAN'. Below it, there are several settings: 'Enable' with a checked checkbox, 'SSID Broadcast' with a checked checkbox, 'Mode' with a dropdown menu showing '802.11b/g/n', 'Channel' with a dropdown menu showing '11' and a note '(Note: if you want to use wireless WDS function, the channel must be consistent with the top AP)', 'SSID' with a text input field containing 'inhand', 'Auth Mode' with a dropdown menu showing 'OPEN', 'Encryption Method' with a dropdown menu showing 'NONE', 'Bandwidth' with a dropdown menu showing '20MHz', and 'Enable WDS' with an unchecked checkbox. At the bottom, there are 'Apply' and 'Cancel' buttons.

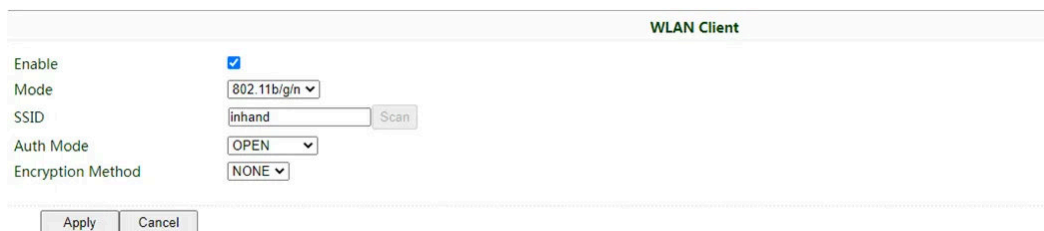
4. **STA mode:** The IR315 connects to other AP Wi-Fi devices to access the Internet.

a. Select WLAN Type to STA in "Network>>Switch WLAN Mode" and save. Then reboot the router.



The image shows the 'Switch WLAN Mode' page. It has a title bar 'Switch WLAN Mode'. Below it, there is a 'WLAN Type' label and a dropdown menu showing 'STA' with a note '(*Reboot to take effect)'. At the bottom, there are 'Apply' and 'Cancel' buttons.

b. Click "Scan" to scan available APs in "Network>>WLAN Client", and click Connect to choose one of the APs.



The image shows the 'WLAN Client' configuration page. It has a title bar 'WLAN Client'. Below it, there are several settings: 'Enable' with a checked checkbox, 'Mode' with a dropdown menu showing '802.11b/g/n', 'SSID' with a text input field containing 'inhand' and a 'Scan' button, 'Auth Mode' with a dropdown menu showing 'OPEN', and 'Encryption Method' with a dropdown menu showing 'NONE'. At the bottom, there are 'Apply' and 'Cancel' buttons.

c. Configure Wi-Fi parameters and save. Then check the connection status in "Status".

d. Configure WAN mode in "Network>>WAN(STA)", and set WAN parameters for Wi-Fi.

Restore to Factory Settings

Web Method

Log in to the WEB management page, and click on the "System>> Config Management" menu in the navigation tree. Click the "Restore default configuration" button; the router will restore to default settings after reboot.

The screenshot shows the 'Config Management' interface. It has two main sections: 'Router Configuration' and 'Network Provider'. Each section has a 'No file selected.' label, a 'Browse...' button, and 'Import' and 'Backup' buttons. The 'Router Configuration' section also includes a 'Restore default configuration' button and a checkbox labeled 'Disable the hardware reset button'.

Hardware Method

To restore the device to default settings using the reset button, follow these steps:

1. Power on the device and immediately press and hold the **RESET** button until the **SYS LED** turns **solid**.
2. Release the **RESET** button and wait for the **SYS LED** to turn off.
3. Press and hold the **RESET** button again until the **SYS LED** starts **flashing**, then release the button. The device will now be restored to its default settings and will restart normally.

Connect to InHand Device Manager

Make sure that the router is already connected to the Internet. Click "Service>>Device Manager" to set the router to connect to DM. iot.inhand.com.cn is the server for China, and iot.inhandnetworks.com is the server for global.

Fill in your DM account in Registered Account, then click "Apply" to save the configuration.

If you don't have a DM account, please click "Sign up/Sign in" after selecting the server; you will be directed to the InHand Device Manager website to register an account.

Log in to your account in Device Manager, and add your device in "Gateways". Name your device and fill in the serial number from the device, then you can manage your router in DM.

The screenshot shows the 'Device Manager' configuration interface. It includes the following fields and controls:

- Enable:** A checkbox that is checked.
- Service Type:** A dropdown menu showing 'Device Manager'.
- Server:** A dropdown menu showing 'iot.inhandnetworks.com'.
- Secure Channel:** A checkbox that is checked.
- Registered Account:** A text input field with a green border and a 'Sign up/Sign in' link to its right.
- LBS Info Upload Interval:** A text input field with the value '1' and a unit dropdown set to 'Hours'.
- Series Info Upload Interval:** A text input field with the value '1' and a unit dropdown set to 'Hours'.
- Channel Keepalive:** A text input field with the value '30' and a unit dropdown set to 'Seconds'.
- Buttons:** 'Apply' and 'Cancel' buttons at the bottom.

2.8 Related Documents

Need	Where to Go
Product introduction, detailed configuration and troubleshooting	<i>IR315 User Manual</i>
Ordering and antenna models	<i>IR315 Product Datasheet</i>
Software and announcements	InHand Networks Official Website

2.9 Legal Information

All statements, information and recommendations in this manual do not constitute any expressed or implied warranty.

 October 12, 2026  October 12, 2026