Yeacomm YET-R100-L

Yeacomm Industrial 4G LTE Router YET-R100-L Instruction Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, configuration, operation, and maintenance of the Yeacomm Industrial 4G LTE Router, model YET-R100-L. This device is designed for reliable cellular connectivity in demanding industrial environments, supporting various M2M and IoT applications.

2. PRODUCT OVERVIEW

The Yeacomm YET-R100-L is a robust industrial-grade 4G LTE cellular router featuring Cat 4 LTE, Wi-Fi, multiple Ethernet ports, and serial interfaces (RS232/RS485). It offers advanced features such as VPN, WAN failover, and remote management, ensuring stable and secure network operations.

Figure 2.1: Yeacomm Industrial 4G LTE Router YET-R100-L with included antennas.

Key Features:

- **4G LTE Cellular Connectivity with WAN Failover:** Ensures 99.9% uptime with automatic switching between cellular and wired WAN connections. Supports US Full Band (B2/4/5/12/13/14/66/71) with band-locking.

- **Ruggedized Design:** Operates in temperatures from -40°C to 75°C, resistant to shocks and vibrations.

- **Multiple Interfaces:** Includes 4 Ethernet ports, dual SIM card slots, RS232/RS485 ports, and WDT watchdog technology.

- **Secure Networking:** Features VPN tunneling (IPSec/OpenVPN) and WPA3 authentication for data encryption.

- **Remote Management:** Monitor network health and manage devices via Yeacomm Cloud Dashboard.
- **Multi-Role Functionality:** Supports AP/Client/Repeater modes for extended Wi-Fi coverage.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Yeacomm Industrial 4G LTE Router (YET-R100-L)
- Antennas (quantity may vary based on configuration)
- Power Adapter (not explicitly listed but implied for operation)
- Mounting Accessories (not explicitly listed but common for industrial routers)

4. HARDWARE DESCRIPTION

4.1 Front Panel Layout

Figure 4.1: Front panel view of the YET-R100-L router with port labels.

- **LED Indicators:** PWR (Power), SYS (System), WIFI (Wi-Fi Status), SIM (SIM Card Status), Online (Network Connection), Signal (Cellular Signal Strength).
- **WIFI Antenna Port:** Connector for the Wi-Fi antenna.
- **LTE Antenna Ports (ANT-1, ANT-2):** Connectors for the 4G LTE cellular antennas.
- **Console Port:** RJ45 port for serial console access.
- **WAN Ethernet Port:** RJ45 port for wired WAN connection.
- **LAN Ethernet Ports (LAN-1 to LAN-4):** Four RJ45 ports for local area network devices.

4.2 Top Panel Layout

Figure 4.2: Top panel view detailing SIM card slots, power, and serial interfaces.

- **SIM Card Slots:** Dual slots for inserting 4G LTE SIM cards.
- **MicroSD Slot:** For expandable storage.
- **DI/DO Terminals:** Digital Input/Output for industrial control.
- **GND Terminal:** Ground connection.
- **RELAY Terminal:** Relay output.
- **Power Supply Terminal:** Input for 5-36VDC power.
- **RST Button:** Reset button (recessed).

5. SETUP INSTRUCTIONS

5.1 Antenna Installation

1. Carefully screw the Wi-Fi antenna onto the WIFI antenna port.
2. Screw the two LTE antennas onto the ANT-1 and ANT-2 ports. Ensure they are securely tightened.

5.2 SIM Card Insertion

1. Locate the SIM card slots on the top panel.
2. Insert your activated 4G LTE SIM card(s) into the designated slot(s) until they click into place. Ensure the SIM card is oriented correctly as indicated on the device.

5.3 Power Connection

1. Connect the power adapter to the Power Supply terminal on the top panel.
2. Connect the other end of the power adapter to a suitable power source. The PWR LED should illuminate.

5.4 Initial Network Connection

For initial configuration, connect a computer to one of the LAN Ethernet ports using an Ethernet cable.

6. OPERATING INSTRUCTIONS

6.1 Accessing the Web Interface

1. Ensure your computer is connected to a LAN port of the router.
2. Open a web browser and enter the default IP address: http://192.168.1.1
3. Enter the default login credentials: **Username:** admin, **Password:** admin.
4. Upon successful login, you will access the router's configuration interface. It is recommended to change the default password immediately for security.

6.2 Basic Configuration

- **WAN Settings:** Configure the cellular (4G LTE) or wired (Ethernet) WAN connection. For cellular, ensure the APN settings are correct for your SIM card provider.
- **LAN Settings:** Adjust the router's LAN IP address, subnet mask, and DHCP server settings if necessary.
- **Wi-Fi Settings:** Configure the Wi-Fi SSID, security type (WPA2/WPA3 recommended), and password.

6.3 Advanced Features

- **VPN:** Configure IPSec or OpenVPN tunnels for secure data transmission.
- **WAN Failover:** Set up automatic switching between primary (e.g., wired WAN) and secondary (e.g., 4G LTE) internet connections to maintain uptime.
- **Band Lock:** Access advanced cellular settings to lock the router to specific LTE bands (B2/4/5/12/13/14/66/71) for optimized performance in certain areas.
- **Remote Management:** Utilize the Yeacomm Cloud Dashboard for remote monitoring, rebooting, and configuration of the router.
- **M2M/IoT Integration:** Configure the RS232/RS485 serial ports for connecting industrial devices and sensors. Refer to the specific protocol documentation for detailed setup.

7. MAINTENANCE

7.1 Firmware Updates

Regularly check the Yeacomm official website (http://www.yifanwireless.com) for firmware updates. Firmware updates can provide new features, performance improvements, and security patches. Follow the instructions provided with the firmware package for a safe update process.

7.2 Resetting the Device

To restore the router to factory default settings, press and hold the recessed RST button on the top panel for approximately 5-10 seconds while the device is powered on. Release the button when the SYS LED starts blinking rapidly. The router will then reboot with default settings.

7.3 Cleaning

Use a soft, dry cloth to clean the exterior of the router. Do not use liquid cleaners or aerosols, as they may damage the device.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Power (PWR LED off)	Power adapter not connected or faulty; power source issue.	Check power adapter connection and power outlet. Ensure the power supply voltage is within the 5-36VDC range.
No Internet Connection	SIM card not inserted correctly; incorrect APN settings; no cellular signal; WAN cable disconnected.	Verify SIM card insertion and activation. Check APN settings in the web interface. Relocate router for better signal. Check WAN cable connection.
Cannot Access Web Interface	Incorrect IP address; network configuration issue on PC; router frozen.	Ensure PC is set to obtain IP automatically or has a static IP in the 192.168.1.x range. Try http://192.168.1.1. Reboot the router.
Slow Wi-Fi Speed	Interference; outdated firmware; too many connected devices.	Change Wi-Fi channel. Update firmware. Limit connected devices or optimize network usage.

9. Specifications

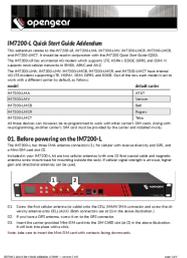| Feature	Specification
Model Name	YET-R100-L
Connectivity Technology	Ethernet, 4G LTE Cellular
Wireless Communication Standard	802.11b (Wi-Fi)
Frequency Band Class	Quad-Band (LTE)
LTE Bands Supported (US)	B2/4/5/12/13/14/66/71
Ethernet Ports	4 x LAN, 1 x WAN, 1 x Console
SIM Card Slots	Dual SIM
Serial Interfaces	RS232/RS485
Operating Temperature	-40°C to 75°C
Power Input	5-36VDC
Dimensions	11.42 x 7.09 x 3.15 inches (approximate)
Item Weight	1.76 pounds (approximate)

10. Warranty and Support

Yeacomm provides 24/7 technical support for its products. If you encounter any issues during the use of the YET-R100-L router, please contact the customer service team. US-based technicians are available to provide assistance, firmware updates, and compatibility optimization.

For support, please visit the official Yeacomm website or refer to the contact information provided with your product documentation.

Related Documents - YET-R100-L

[Yeacomm NR610 Smart 5G ODU: High-Speed Outdoor 5G CPE](#)
Detailed specifications and features of the Yeacomm NR610, a Sub-6G 5G NR outdoor CPE offering high-speed internet, IP67 rating, dual SIM support, and robust connectivity for residential, business, and enterprise users.

	[EZVIZ DL03 Pro Smart Rim Lock: Keyless Entry and Remote Access](#)
	Upgrade your home security with the EZVIZ DL03 Pro Smart Rim Lock. Enjoy keyless entry via fingerprint, passcode, proximity card, or smartphone app. Features direct Wi-Fi connectivity, remote unlocking, and integration with EZVIZ cameras for enhanced protection.
	[NovAtel ProPak6 Quick Start Guide: Setup and Operation](#)
	A comprehensive quick start guide for the NovAtel ProPak6 GNSS receiver, covering setup, configuration, connectivity options (Wi-Fi, Bluetooth, Cellular), data logging, and basic operation.
	[Perle IOLAN SCG L Secure Console Server: Out-of-Band IT Infrastructure Management with Integrated LTE](#)
	Explore the Perle IOLAN SCG L Secure Console Server, a robust solution for out-of-band IT infrastructure management. Features include integrated LTE, modular port options (RS232, RS422, RS485, USB 3.0), advanced security, high availability, and comprehensive network protocol support for data centers.
	[Opengear IM7200-L Quick Start Guide Addendum: Cellular Modem Setup](#)
	A guide to setting up and configuring the cellular modem for Opengear IM7200-L devices, covering initial setup, connection, signal strength, remote access, and advanced modes like cellular router and failover.
	[SENECA Edge IIoT Multifunction Gateways: Industrial IoT Connectivity and Control](#)
	Explore SENECA's versatile Edge IIoT Multifunction Gateways, offering advanced connectivity, data logging, routing, security, and PLC capabilities for industrial automation. Discover models like Z-PASS, R-PASS, and SSD for seamless integration.