

R9660L Series Industrial Router



Product Overview

The R9660L series industrial grade wireless routers use 4G/Wi-Fi high-speed wireless networks as data bearer networks to provide secure, high-speed wireless connections between remote devices and data centers. No matter where you are, your devices can quickly access the Internet by leveraging the global 4G/Wi-Fi networks.

The R9660L series industrial grade wireless routers meet the needs of industrial users, with low power consumption, operating temperature range of -30°C ~ 75°C, small size, light weight, strict EMC indexes, which can meet the network communication requirements under harsh temperature, humidity and electromagnetic interference environments. It is an ideal choice for industrial applications.

The R9660L series industrial grade wireless routers also have VPN functions, providing multiple VPN encryption modes such as IPSec, L2TP, GRE, etc. This allows device data to be transmitted in a secure data tunnel, preventing data from being accessed and tampered with, and provides higher security for network applications.



Key Features and Benefits

Industrial-grade Application Design for Better Business Experience

- Uses industrial-grade components and specialized design to adapt to harsh industrial site environments
- Fanless design allows long-term operation in -30°C to +75°C temperature environments
- Metal enclosure with IP30 protection level, especially suitable for industrial control applications
- Low power design, wide power input (6~35VDC), adaptable to different on-site power supply modes

High Reliability Design for Safe and Stable Business Operation

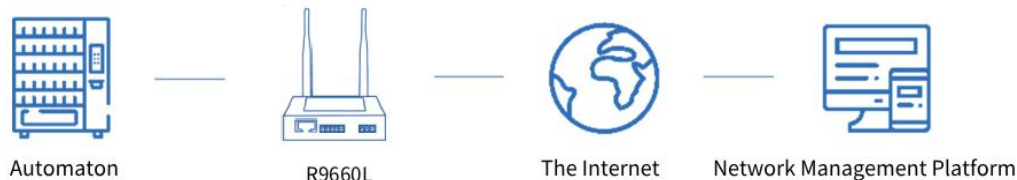
- Embedded watchdog technology for self-recovery to ensure normal device operation
- Adopts comprehensive anti-dropout mechanisms to keep data terminals always online
- WDT watchdog design, hardware interface isolation protection for system stability
- Supports multiple VPN encryption modes like IPSec, L2TP, GRE, N2N etc. to ensure secure data transmission

Intelligent Business Deployment and Convenient Maintenance

- Flexible data return methods support wireless options such as 4G/Wi-Fi
- Provides user-friendly WEB configuration interface for easy deployment
- Supports unified management of remote devices and real-time monitoring through cloud platform for improved maintenance
- Provides remote firmware upgrades for safe and convenient function expansions

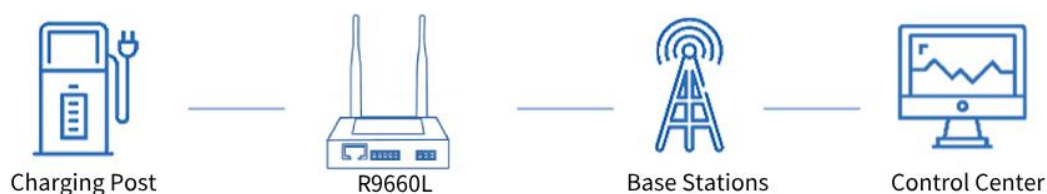
Typical Applications

Self-Service Retail Terminals



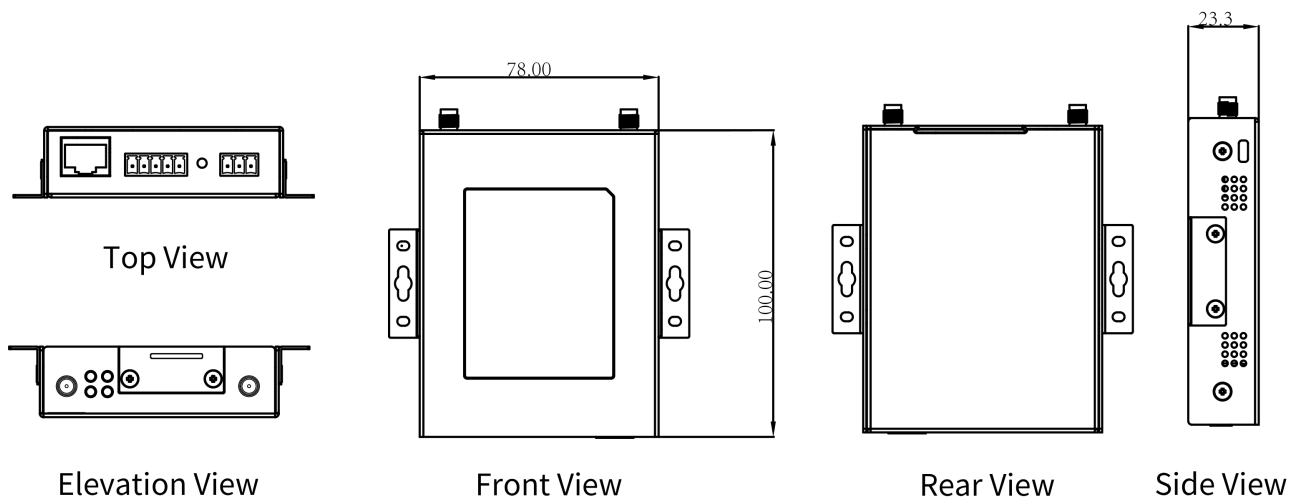
Self-service vending machines, ticket machines and other self-service retail terminals are mostly located in basements of shopping malls, metro stations, train stations, etc. where wired networking is difficult and costly. They often suffer from poor network signals and unstable operation. The R9660L series industrial routers solve these problems well by using wireless networking to replace wired networking, saving construction costs. 4G networking ensures network conditions. The routers establish data channels with the management server of the vending machine networking system to realize wireless networking of the self-service terminals and real-time upload of retail data. Multiple VPN encryption modes provide data transmission security protection for the vending machines.

Charging Piles/Stations



Charging infrastructure mainly includes various centralized charging stations and decentralized charging piles. Since charging facilities are dispersed and large in quantity, networking and building an intelligent charging service platform is necessary to ensure user experience and operational efficiency. Rigoiot provides differentiated solutions based on different charging facilities and customer needs. For decentralized charging piles, Rigoiot' industrial wireless data transmission terminal R9660L is used for networking. For centralized charging stations, or some charging operators using box-type transformer technology to launch smart charging systems, Rigoiot provides industrial routers R9660L to realize networking of the charging facilities.

Dimensions and Appearance



Product Specifications

Specifications	R9660L
Hardware Specifications	
CPU Platform	Industrial-grade 32-bit communication processor
DRAM capacity	64MB
Flash capacity	16MB
Operating System	PanGu OS (deeply customized Linux-based OS)
SIM/UIM Card	Standard drawer-type slot Support 1.8V/3V SIM/UIM Built-in 15KV ESD protection
Serial Port	5PIN terminal interface 1×RS232, 1×RS485
Ethernet Port	1×FE LAN 10/100Mbit/s adaptive, built-in 1.5KV electromagnetic isolation protection
Antenna Connector	2 external antenna interfaces (standard SMA female connectors, characteristic impedance 50 Ω), 1×4G antenna, 1× Wi-Fi antenna
LED	PWR×1,ETH×1,SYS×1,NET×1
Interface	Terminal power seat, built-in reverse polarity protection and overvoltage protection
Reset Button	With this button, the parameter configuration of the device can be restored to the factory values
Standard Power Supply	DC 12V/1A
Power Supply Range	DC 6-35V
Maximum Power Consumption	2.4W
Standby Power	120mA@12VDC
Average Power	150mA@12VDC
Peak Power	200mA@12VDC
Housing	Metal, protection rating IP30
Dimensions (W×D×H)	100mm × 78mm × 22mm (not including antenna and mounting parts)
Weight	210g
Operating Temperature	-30 ~ +75°C
Storage Temperature	-40 ~ +85°C
Relative Humidity	5 to 95%(non-condensing)
Installation Method	Wall mounting

Software Specification Description	
Network Access	APN, VPDN
Access Authentication	CHAP/PAP/MS-CHAP/M S-CHAPV2
LAN Protocol	ARP, Ethernet
WAN Protocol	Static IP, DHCP, PPPoE
VLAN	VLAN Management
IP Application	Ping, Traceroute, DHCP Server/Client, DNS Relay, Dynamic DNS, Telnet, SSH, HTTP, HTTPS, TFTP, FTP, SFTP, NAT
IP Routing	Static routing, dynamic routing
VPN	IPsec, L2TP/PPTP, GRE, OpenVPN, N2N
Firewall	NAT, PAT, DMZ, Port mapping, IP filtering, Port filtering, MAC filtering
Hot Backup	Link switching for 4G wireless networks, Wi-Fi, and wired Ethernet
Link Detection	TCP/Ping heartbeat detection, VPN link detection, disconnection automatic connection
QoS Management	Upstream and downstream bandwidth restrictions
Embedded Watchdog	Equipment operation self-test, equipment operation fault self-repair
DTU	Built-in software DTU function
WLAN	IEEE 802.11 b/g/n AP, Client working mode Open system, shared key, WPA/WPA2 authentication
Traffic Management	Real-time Traffic Statistics Monthly Traffic Statistics Traffic Limit Settings
Scheduled	Timed restarts
SNMP	SNMP v1/v2c/v3
Configuration and Maintenance	Web Management Telnet and SSH terminal system status monitoring NTP client, support equipment system clock network synchronization Support Rigoiot Device Cloud platform remote management Configuration import and export Network tools: Ping, Tracert
Firmware Management	Firmware upgrade, support local (HTTP/ serial) and remote upgrade
Event Alarms	System logs, application logs

Package Contents

Standard Configuration

- 1 x R9660L Series Industrial Wireless Router
- 1 x 1M Full Band Suction Cup Antenna

Optional Accessories

- Power Adapter (12VDC, 1A)
- 2M/3M Full Band Suction Cup Antenna
- Wall Mounting Kit

Configuration Options

Main Unit

Select a host based on the port type and service requirements.

Accessories

Configure the type and number of antennas and serial cables according to the actual access environment.

Ordering Information

Model	Region	Frequency Bands	WLAN
R9660L-LE-<W>	Europe & APAC	FDD-LTE: B1/B3/B7/B8/B20/B28A TDD-LTE: B38/B40/B41 WCDMA: B1/B8 GSM: B3/B8	W: Wi-Fi <N/A>: No Wi-Fi
R9660L-LU-<W>	North America	FDD-LTE: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5	W: Wi-Fi <N/A>: No Wi-Fi
R9660L-LA-<W>	Australia & South America	FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B28 TDD-LTE: B40 WCDMA: B1/B2/B4/B5/B8 GSM: B2/B3/B5/B8	W: Wi-Fi <N/A>: No Wi-Fi
R9660L-LJ-<W>	Japan	FDD-LTE: B1/B3/B8/B18/B19/B26 LTE-TDD: B41 WCDMA: B1/B6/B8/B19	W: Wi-Fi <N/A>: No Wi-Fi
R9660L-LK-<W>	Korea	LTE-FDD: B1/B3/B5/B7/B8/B20 TDD-LTE: B38/B40/B41 WCDMA: B1/B5/B8 GSM: B3/B8	W: Wi-Fi <N/A>: No Wi-Fi

Example: R9660L-LE-W: R9660L Series Industrial Wireless Router, supports IPSec/PPTP/L2TP/OPEN VPN, 4G LTE (Europe & APAC) network, supports WiFi, RS232 serial port and RS485 serial port.

For more information, please visit the official website of Rigoiot <http://www.rigoiot.com> Or contact the service phone number 4000-780-190.