

R210 Series Router

Industrial Robust construction, Versatile Interfaces

WLINK R210 Series Router is a robust IIoT (Industry Internet of Things / M2M (Machine to Machine) mobile broadband 4G/3G router designed to deliver reliable, secure, and high-speed wireless connectivity over 4G or 3G cellular networks. Equipped with I/O ports and VPN support, this powerful and programmable industrial router features a high-performance, rugged casing, making it ideal for remote management, telemetry, condition monitoring, CCTV, ATMs, vending machines, and other M2M applications.

R210 4G Router excels in transferring large data loads, offering download speeds of up to 150Mbps and upload speeds of up to 50Mbps on 4G networks. Its built-in VPN functionality allows users to securely access virtual private networks through 4G/3G connectivity, making it a reliable solution for the demanding workloads of modern industrial and commercial environments.

The R210 series also includes a dual SIM function, ensuring uninterrupted connectivity by automatically switching between SIM cards for network backup. With optional GPS capability, the router is perfect for fleet tracking and access management. Designed for harsh and remote environments, the R210 features a durable metal casing, I/O ports, DIN-Rail mounts, and an extended operating temperature range of -30°C to 70°C, making it a dependable choice for M2M/IIoT connectivity in challenging conditions.



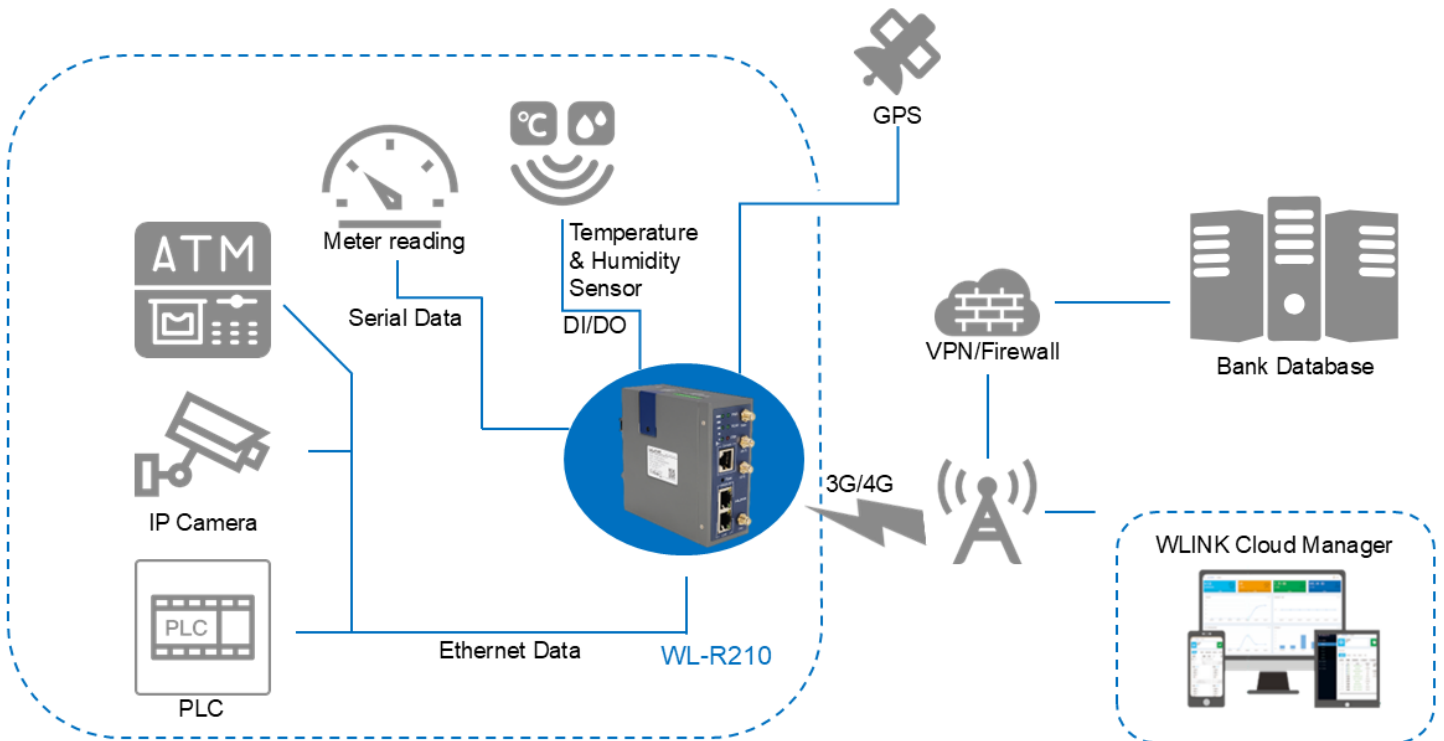
Basic Features

- Durable Industrial Design: Compact metal housing with robust construction for harsh environments.
- High-Speed Connectivity: Supports FDD/TDD 4G and 3G networks, with backward compatibility for 2.5G.
- Electromagnetic Interference Resistance: Built to withstand strong electromagnetic interference.
- Thermal Performance: Excellent heat endurance and radiation dissipation capabilities.
- Reliability Features: Built-in watchdog and multi-link detection for uninterrupted operation.
- Advanced Security: Supports multiple VPN protocols, including PPTP, L2TP, GRE, IPsec, and OpenVPN.
- Industrial Protocol Support: Compatible with ModBus TCP for industrial applications.
- High Reliability: Hardware link self-recovery ensures consistent performance.
- Enhanced Connectivity: MIMO antenna technology for superior 4G signal reception.
- Always Online: Automatic reboot and reconnection in case of disconnection to maintain continuous connectivity.
- Private Network Access: Supports APN and VPDN for secure wireless private network access.
- Network Monitoring: LCP/ICMP/flow/heartbeat checks to ensure network availability and usability.
- Flexible Configuration: Web-based interface, CLI, SSH, and management platform support for easy setup and management.
- Network Management: SNMP support for efficient network monitoring and NTP for time synchronization.
- Remote Management: Local and remote configuration, status monitoring, and firmware upgrades.
- DHCP Server: Built-in DHCP server for simplified network configuration.
- DNS Support: DNS proxy and Dynamic DNS (DDNS) for seamless domain management.
- Timing Operations: Supports scheduled tasks and timing-based operations.
- Status Indication: LED indicators for real-time status monitoring.
- Rugged Design: Shock and vibration resistant for reliable operation in demanding environments.
- Digital Port: 3 x GPIO I/O (Input/Output)

Typical Application

Energy	Digital Oil Field, Smart Mining, Solar, Smart Grid, Transformer Monitoring, Connectivity for EV Charge Station, Wind Power
Retail	ATM, POS(Point-of-Sale), Self-service Kiosk, Vending Machine, Lottery Machine, Branch network, Digital Signage, Video Surveillance, failover between WAN&4G/3G
Industrial	Remote Telemetry, Tanking Monitoring, Automation, Remote PLC, Remote AMR, Smart Irrigation, Urban Heat supply system, Geological Disaster Monitoring System, Smart Ware house, Smart Factory
Smart City	Traffic, Street lighting, Public Safety & Security, 5G/4G Public hotspot, Environment monitoring, Video Surveillance, Smart Package Locker, Utilities, Wastewater Treatment, Smart Trash Can, Remote control of Golf Irrigation System, Smart Building
Healthcare	Mobile Medical Equipment Remote Monitoring, Telemedicine
Transportation	Bus WiFi, WiFi on Board, Vehicle video surveillance, Fleet tracking and management, Bus Advertising, Cold Chain Logistic, Highway Monitoring

Topology Diagram



Specification

Physical

Optional Cellular Network		Hardware System	
<ul style="list-style-type: none">• LTE-A• LTE• HSPA/UMTS	<ul style="list-style-type: none">• EDGE/GPRS• Compatible with 5G	<ul style="list-style-type: none">• MIPS32 Core 580Mhz• 128Mb Flash, 512Mb DDR2 RAM• Hardware Watchdog	
Interface		GPS (Optional)	
<ul style="list-style-type: none">• 2x 10/100M Ethernet (1x LAN, 1X LAN/1x WAN Configurable)• 1x Console Port• 2x SIM Slot• 8Pins Terminal block connector• 1x RS232(RS485 Optional)	<ul style="list-style-type: none">• 2x Digital Input• 1x Digital Output• 1x DC Power Interface (Anti-reverse)• 2x SMA-K(Female) 4G Antenna Interface• 1x RP-SMA Wi-Fi Interface	<ul style="list-style-type: none">• GPS Sensitivity: -160dBm• GPS Accuracy: 2.5m CEP• Update Rate: 1Hz@5Hz• Tim to First Fix: Cold Status 27s, Hot status 1s.• Protocol: NMEA-0183 2.3V	
LED Indicators		Wi-Fi	
<ul style="list-style-type: none">• PWR• WLAN	<ul style="list-style-type: none">• Sinal• ERR	<ul style="list-style-type: none">• IEEE 802.11 b/g/n• 2.4G	
Consumption		Other	
<ul style="list-style-type: none">• Voltage: DC +7.5~32V (standard 12V/1A power adapter)• SIM/R-UIM Card: 3V• Idle: <170mA@+12VDC• Online: <300mA@+12VDC		<ul style="list-style-type: none">• Galvanized metal with grounding Screw• Dimension: 102mm x 100mm x 42mm (not including antenna)• Weight: 300g (not including accessories)• Operation temperature: -30~+75°C	
<ul style="list-style-type: none">• Store temperature: -40~+85°C• Related humidity: 0~95% (non-condensing)• Gurantee: Two Years			
Compliance		Package Content	
<ul style="list-style-type: none">• FCC• CE	<ul style="list-style-type: none">• RoHS• CCC	<ul style="list-style-type: none">• 1x WL-R210 Router• 1x Wi-Fi antenna• 2x 4G Magnetic antenna	<ul style="list-style-type: none">• 1x Ethernet Cable• 1x Power Supply Adapter
Software			
Operating System		Firewall	
<ul style="list-style-type: none">• WLINK OS based on Linux		<ul style="list-style-type: none">• IP Filter• Mac Filter• Domain name Filter	
Network Protocol		Network Monitoring	
<ul style="list-style-type: none">• IPV4, IPV6 (OPTIONAL)• PPPOE• UDP/TCP/ICMP/NTP/DHCP,	<ul style="list-style-type: none">• HTTP/HTTPS• UPNP• SNMP	<ul style="list-style-type: none">• ICMP Check• Traffic Check• Traceroute	
<ul style="list-style-type: none">• Data Capture• Bandwidth Graph• Data Traffic Graph			
VPN		Network Features	
<ul style="list-style-type: none">• Wireguard/Zerotier/GRE Tunnel• OpenVPN Client/Server• PPTP/L2TP Client/Server	<ul style="list-style-type: none">• L2TP V3• IPsec Client/Server• DMVPN	<ul style="list-style-type: none">• 4G/WAN Failover• VLAN• Bandwidth Management	<ul style="list-style-type: none">• NAT/DMZ• IP Passthrough / Port Redirection• Static/Dynamic routing
Router Management		WLAN Mode	
<ul style="list-style-type: none">• Local/Remote GUI• Telnet/SSH• WLINK M2M Platform		<ul style="list-style-type: none">• Access Point• AP + WDS• Wireless Client	
<ul style="list-style-type: none">• Wireless Ethernet Bridge• WDS			
Wi-Fi Network Mode		WiFi Security	
<ul style="list-style-type: none">• 2.4G		<ul style="list-style-type: none">• WEP• WPA Personal/Enterprise• WPA2 Personal/Enterprise	
<ul style="list-style-type: none">• WPA/WPA2 Personal/Eterprise• Radius			

Partial Ordering Number List

Model	Region	4G	3G	Interface	DL	UL	SIM	WiFi	GPS
WL-R210LA-d	Asia/Europe/Africa	LTE-FDD: B1/3/5/7/8/20/28 LTE-TDD: B38/40/41	B1/5/8	2x LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R210LA-g									✓
WL-R210LFX-d	Asia/Europe/Africa	LTE-FDD: B1/3/7/8/20/28A LTE-TDD: B38/40/41	B1/8	2x LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R210LFX-g									✓
WL-R210LF-d	Asia/Europe/Africa	LTE-FDD: B1/3/5/7/8/20 LTE-TDD: B38/40/41	B1/5/8	2x LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R210LF-g									✓
WL-R210LA1-d	Latin America/ Australia/New Zealand	LTE-FDD: B1/2/3/4/5/7/8/28/66 LTE-TDD: B40	B1/2/4/5/8	2x LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R210LA1-g									✓
WL-R210LF1-d	Latin America/ Australia/New Zealand	LTE-FDD: B1/2/3/4/5/7/8/28 LTE-TDD: B40	B1/2/4/5/8	2x LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R210LF1-g									✓
WL-R210LF2-d	North America FirstNet	LTE-FDD: B2/4/5/12/13/14/66/71	B2/4/5	2x LAN 1x RS232 3x I/O	FDD 150M	FDD 50M	Two	✓	
WL-R210LF2-g									✓
WL-R210LF3-d	Japan	LTE-FDD: B1/3/8/18/19/26/41	B1/6/8/19	2x LAN 1x RS232 3x I/O	FDD 150M	FDD 50M	Two	✓	
WL-R210LF3-g									✓
WL-R210LG-d	Global	LTE-FDD: B1/2/3/4/5/7/8/12/13/ 18/19/20/25/26/28 LTE-TDD: B38/39/40/41	B1/2/4/5/6/ 8/19	2x LAN 1x RS232 3x I/O	FDD 150M TDD 130M	FDD 50M TDD 35M	Two	✓	
WL-R210LG-g									✓
WL-R210H2-d	Global	N/A	HSPA 850/900/1900/ 2100MHz	2x LAN 1x RS232 3x I/O	14M	5.76M	Two	✓	
WL-R210H2-g									✓

Note:

1. If request other frequency band model, please consult WLink sales.
2. Please specify when order if request other optional features.
3. The above list includes partial of WLINK models only, please consult WLink sales or distributor if can't find a suitable model from the above list.
4. WL-R210-WM is the special model without cellular for backup applicton, please contact us for more details.