WLINK®

WL-G535 5G Router

Engineered for mission-critical industrial IoT applications, the G535 delivers ultra-reliable 5G connectivity compliant with 3GPP Release 17 standards. It operates in both 5G SA and NSA modes with network slicing capabilities, while maintaining full backward compatibility with 4G LTE and 3G networks. Through advanced carrier aggregation technology, it achieves a theoretical peak throughput of 3.4Gbps, enabling real-time data transmission for latency-sensitive industrial operations.

Powered by a quad-core 1.8GHz ARM Cortex-A53 processor and a dedicated hardware encryption engine, the router integrates 5x GbE Ethernet ports, 1x RS232, 1x RS485 serial ports, and programmable DI/DO digital controls. Its 802.11ax Wi-Fi 6 dual-band module supports concurrent speeds up to 1.8Gbps, while supported a deeply customized OpenWrt-based operating system optional, which embraces a variety of open-source components and multi runtime environments—empowering customers to tailor solutions for custom applications.

Widely applicable across industries, the G535 is an ideal solution for factory automation, smart grids, intelligent transportation, environmental monitoring, security surveillance, public safety, advertising, and more.

Cutting-Edge 5G Performance

Global 5G Sub-6GHz NSA&SA/4G LTE network for backup among multiple carrier networks
5G blazing fast Mobile Broadband Internet, delivering ground-breaking download speeds up to 5Gbps.

Versatile Connectivity

Multiple interfaces including Gigabit Ethernet,USB, RS-232,RS-485,and DI/DO.IP-based PLC communication,with support for IPv6,and plug- and-play terminals. GNSS tracking and Storage are optional.

Quad-Core Powerhouse

Qualcomm ARM Quad-core A53 processor enables efficient multitasking and low latency.
Handles high-bandwidth applications like video streaming.

Flexible and Customizable OS

WLINK OS and OpenWRT OS optional.
Support deeply customized OpenWrt system with open-source support.
Supports multiple programming languages environment and tailored business logic development.

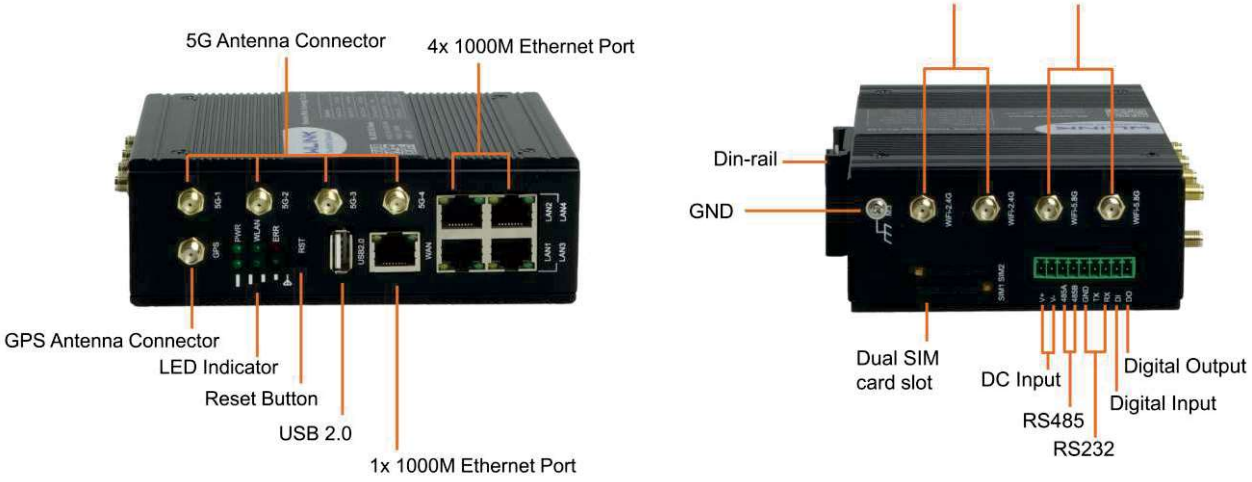
Blazing Fast Wi-Fi6

Wi-Fi 6 revolutionizes wireless connectivity with blazing speed(1.8Gbps), massive device capacity, ultra-low lag and robust security.

Cloud-Based Platform Management

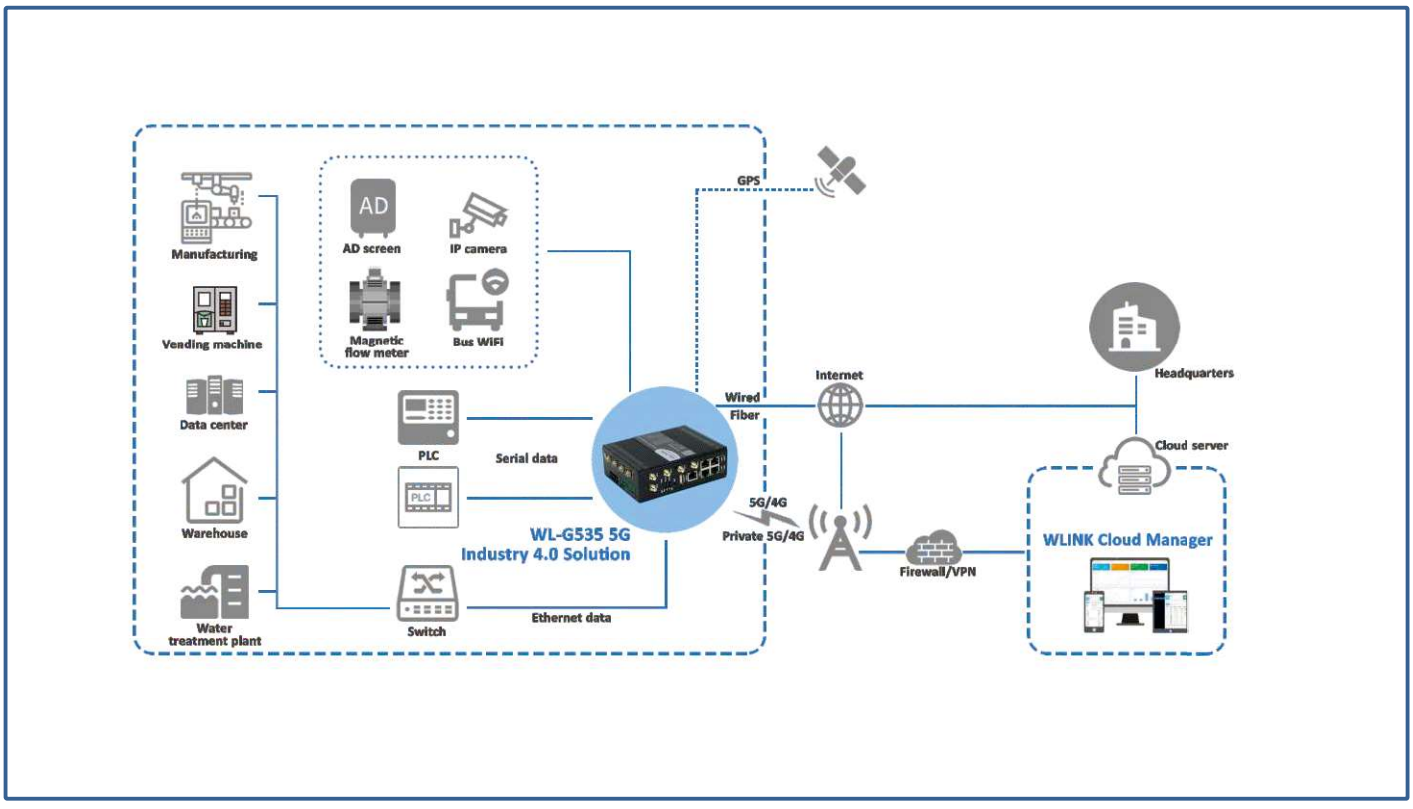
G535 can be managed via cloud management platform which provide easy setup, centralized configuration, network analysis and maintenance of large installations.

Interface Diagram



eMBB(enhanced Mobile Broadband)	URLLC(Ultra Reliable Low Latency Communications)	Massive IoT
Key network considerations Per-connection peak speed,network capacity Includes streaming and high definition video,360 degree video,public transit,and other data-intensive and image-intensive use cases	Key network considerations Reliability, latency such as VR and AR,remote control of critical infrastructure,vehicles,Industrial automation and utilities	Key network considerations scalability to very large number of connections includes Smart City,Connected Vehicles,Smart Home,Smart Media,Smart Factories, Healthcare,Smart Metering,Smart Grid, Oil and gas

Typical Application



Specification

Physical

Cellular Network	5G SA/NSA n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/ 38/40/41/48/66/70/71/75/76/77/78/79 LTE-A/LTE B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/ 66/71/34/38/39/40/41/42/43/48	Hardware System	Qualcomm ARM A53 Quad-core 1.8GHz 1GB DDR3 RAM 32MB NOR Flash (256MB NAND FLASH optional) Hardware Watchdog
Interface	5 x Gigabit Ethernet (5x LAN, 4X LAN/1x WAN Configurable) 1 x RS232, 1xRS485 Optional, 1x DC (2Pins plugs) 1 x USB 2.0(Configuration, upgrade, trouble-shootin) 1 x DC (Non-polarized, anti-reverse protection) 2 x I/O (Dry contact) 2 x SIM Slots 1 x RST 4x SMA-K (Female) 5G Antenna Interface 4x RP-SMA Wi-Fi Interface 1 x SMA-K(Female) GPS Antenna (optional)	GPS(optional)	GPS sensitivity: -160dBm GPS accuracy: 2.5m CEP Update Rate: 1Hz@5Hz Time to First Fix: Cold Status 27s, Hot status 1s. Protocol: NMEA-0183 2.3V
LED Indicator	PWR Signal WLAN NET LAN (LAN1~LAN4, WAN)	WLAN(Wi-Fi6)	IEEE 802.11b/g/n/ax 2x2 2.4GHz MUMIMO OFDMA 600Mbps 2x2 5GHz MU-MIMO OFDMA 1201Mbps
Consumption	Voltage: DC +9~60V (standard 12V/1.5A power adapter) SIM/R-UIM Card: 1.8V/3V Idle: 600mA@+12VDC Online: 750mA@+12VDC	Others	Dimension: 142mm x 108m x 48mm Weight: 750g (not including accessories) Mount: Din-Rail Mount as default, Wall Mount Optional Operation temperature: -30~ + 75 Store temperature: -40~ +85 Related humidity: 0~95% (non-condensing) Guarantee: two years
Ethernet Protocol	IEEE 802.3, IEEE 802.3u, 802.3az, Auto MDI/MDIX	Certification	CE, CCC, RoHS

Software

Operating System	WLINK OS Based Linux as default OpenWRT OS Optional	Firewall	SNAT/DMZ Port Forwarding IP/Mac/Key Word/Domain Name Filter Anti-DoS Access Control
Network Protocol	IPv4/v6, PPPoE, UDP, TCP, ICMP, NTP, DHCP, Modbus, HTTP/HTTPS, UPNP, SNMPv3, TR069, DDNS,Telnet/SSH, MQTT	Network Monitoring	Ethernet Ports Status ICMP Check Traceroute Data Capture Bandwidth Graph Data Traffic Graph System Debugging Log
VPN	CRE Tunnel Zerotier VPN Wireguard VPN Client and Sever supported OpenVPN: TLS1.2, Encryption as DES, RC2, BF,3DES, CAST5,AES,SEED 45 encryption methods PPTP/L2TP: Client mode, L2TPv3 supported IPSec: GRE Over IPsec, L2TP over IPsec, Two tunnels Failover, IKEv1, IKEv2, DES, 3DES, AES128, AES192, AES256 multiple encryption methods supported. DMVPN: mGRE, NHRP, IPsec	Network Features	Dual-SIM Failover WAN/4G Failover Serial Port Client/Server Applications AT command over IP VRRP VLAN IP Passthrough Bandwidth Management Static Routing/Policy Routing RIPV2/OSPF/BGP Dynamic Routing
Router Management	Local/Remote GUI Telnet/SSH SNMP v3/TR069 USB port Troubleshooting, configuration and upgrade firmware WLINK M2M Management Platform	WLAN	IEEE 802.11b/g/n/ac/ax, AP, Wireless Client and Ethernet Bridge modes WiFi usersup to 128 simultaneous connections Wi-Fi Hotspot Wireless Black/White List Multi-SSID WPA Personal WPA2 Personal WPA/WPA2 Personal AES, TKIP, Auto Cipher modes Wi-Fi Captive Hotspot

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