

# WLINK

## WL-G520 Series

### Gigabit Ethernet Dual Band WLAN



## OVERVIEW

WLINK G520 is the next-generation industrial 4G LTE router, built to deliver unmatched performance and reliability. As the enhanced version of the WL-R520, the G520 features Gigabit Ethernet ports and dual-band 2.4G and 5G Wi-Fi, offering users two independent Wi-Fi networks. This innovative design reduces 2.4G Wi-Fi congestion and interference, ensuring faster speeds and a more stable connection for your critical operations.

Powered by the world-class ARM Cortex A7 900MHz CPU, the WL-G520 achieves blazing-fast data rates of up to 1 Gbps, enabling seamless gigabit routing for even the most demanding industrial environments.

But that's not all. The WL-G520 is packed with advanced features to meet your industrial needs: Dual SIM slots for automatic failover, ensuring uninterrupted connectivity, Serial ports and a wide range of configuration options, including GPS and storage capabilities. Terminal block power input for flexible power supply options. Advanced routing functionality to segment networks and protect mission-critical data. Robust redundancy technologies to guarantee continuous operation, even in the harshest conditions.

Built with a rugged design and engineered to withstand extreme industrial temperature ranges, the WL-G520 is the perfect solution for a wide variety of industrial applications. Whether you're in manufacturing, transportation, or remote monitoring, the WL-G520 delivers the speed, reliability, and durability you need to stay connected.

Upgrade to the WLINK WL-G520 and experience the future of industrial connectivity today.

## KEY BENEFITS



### Ultra Performance

- Powerful Cortex A7 900MHz CPU
- Blazing-Fast LTE Speeds: Support for Cat4, Cat6, and Cat12
- Simultaneous Dual-Band 2.4G & 5G Wi-Fi
- Built-in 5-Port Gigabit Ethernet Switch eliminating clutter and the need for additional equipment.
- Expandable Storage Option



### Absolutely Industrial Design

- Rugged Metal Enclosure: Heavy-duty design with superior heat dissipation
- Screw cover design ensures your SIM card stays safe and secure
- DIN Rail Mounting design for Industry
- Shock & Vibration Resistant
- Scheduled reboot via Timing/SMS/Platform
- Screw cover design ensures your SIM card stays safe and secure



### Security & Protection

- Automatic recovery from failures with a built-in watchdog
- Multi-link detection for enhanced reliability
- Strong resistance to electromagnetic interference
- Non-polarity and anti-reverse power protection
- Redundant SIM slots with automatic switching for uninterrupted network connectivity
- Advanced data protection through firewall and VPN tunneling(IPsec, OpenVPN, GRE, L2TP, PPTP)



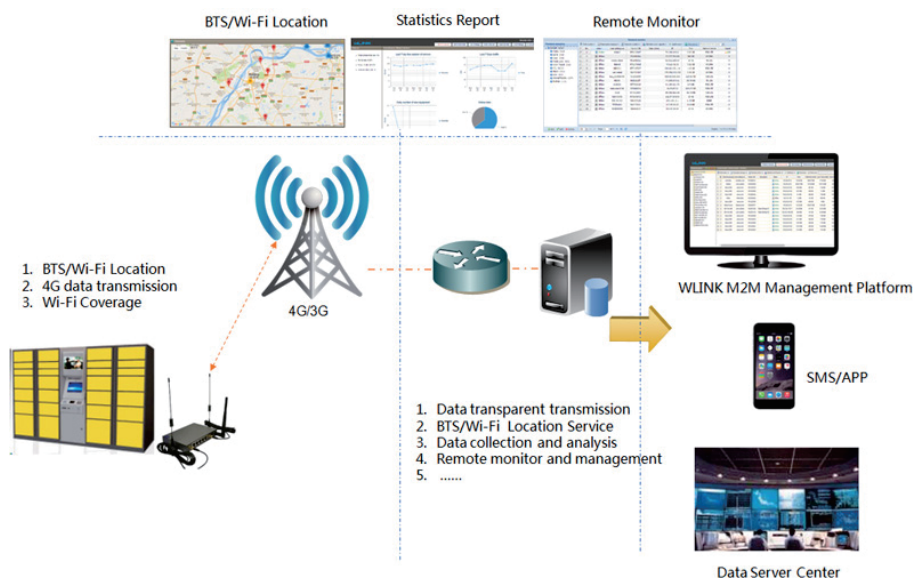
### Cloud-based management & Maintenance besides user-friendly WEB GUI

- Efficient device management and rapid configuration.
- Real-time device status monitoring for enhanced oversight
- Remote firmware upgrades to ensure optimal performance.
- Comprehensive statistics and analysis for data-driven insights.
- Supports up to 100,000+ devices for scalable deployment.

## TYPICAL APPLICATION

<b>Energy</b>	Digital Oil Field, Smart Mining, Solar, Smart Grid, Transformer Monitoring, Connectivity for EV Charge Station, Wind Power
<b>Retail</b>	ATM, POS(Point-of-Sale), Self-service Kiosk, Vending Machine, Lottery Machine, Branch network, Digital Signage, Video Surveillance, failover between WAN&4G/3G
<b>Industry</b>	Remote Telemetry, Tanking Monitoring, Automation, Remote PLC, Remote AMR, Smart Irrigation, Urban Heat supply system, Geological Disaster Monitoring System, Smart Ware house, Smart Factory
<b>Smart City</b>	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
<b>Healthcare</b>	Mobile Medical Equipment Remote Monitoring, Telemedicine
<b>Transportation</b>	Bus WiFi, WiFi on Board, Vehicle video surveillance, Fleet tracking and management, Bus Advertising, Cold Chain Logistic, Highway Monitoring

## TOPOLOGY DIAGRAM



# SPECIFICATION

Item	Description	Item	Description
Optional Cellular Network	<ul style="list-style-type: none"> <li>4G LTE-Advanced / FDD-LTE / TDD-LTE</li> <li>DC-HSPA+/HSPA+ /HSPA/HSDPA</li> <li>EDGE/GPRS</li> <li>Support future 5G</li> </ul>	Ethernet Standard	<ul style="list-style-type: none"> <li>10/100/1000 Base-T (IEEE 802.3)</li> <li>Mode: Full or half duplex (self-adaptive)</li> </ul>
WLAN	<ul style="list-style-type: none"> <li>Standard: Dual Radio, 2.4G and 5G WiFi for local coverage</li> <li>IEEE 802.11ac compliant &amp; backward compatible with 802.11a/b/g/n</li> <li>Security: WEP, WPA and WPA2 encryption</li> <li>Mode: AP, Client, station, bridge mode support</li> </ul>	Hardware System	<ul style="list-style-type: none"> <li>CPU: Cortex A7 Core. 900MHz/867Mbps</li> <li>Memory: 128Mb Flash, 1Gb DDR3 RAM</li> <li>Storage: SD U Disk inside mainboard</li> </ul>
Route protocol	<ul style="list-style-type: none"> <li>Static route</li> <li>IPv2/OSPF dynamic route</li> </ul>	VPN Tunnel	<ul style="list-style-type: none"> <li>IPSec</li> <li>PPTP/L2TP client</li> <li>GRE</li> <li>OpenVPN</li> </ul>
Firewall & Filter	<ul style="list-style-type: none"> <li>IP packet/Domain/MAC filter</li> <li>NAT</li> <li>DMZ</li> </ul>	GPS (Optional)	<ul style="list-style-type: none"> <li>GPS sensitivity: better than -160dBm</li> <li>GPS accuracy: 2.5m CEP</li> <li>Update Rate: 1Hz@5Hz</li> <li>Time to First Fix: Cold Status 27s, Hot status 1S</li> <li>Protocol: NMEA-0183 2.3V</li> </ul>
Device management	<ul style="list-style-type: none"> <li>Local or remote web browser (IE v8 or above)</li> <li>CLI/Telnet command</li> <li>M2M management platform (optional)</li> <li>SSH configure (optional)</li> </ul>	LED instruction	<ul style="list-style-type: none"> <li>NET</li> <li>WLAN</li> <li>WAN</li> <li>LAN (LAN1 ~ LAN4)</li> </ul>
Interface	<ul style="list-style-type: none"> <li>5x Gigabit Ethernet (3xLAN,1xWAN/LAN)</li> <li>1x RS232 (RS485 optional)</li> <li>1x DC power interface</li> <li>5x SMA-K antenna interface</li> <li>1/2x Standard SIM/R-UIM slot</li> </ul>	Other	<ul style="list-style-type: none"> <li>Dimension: 150mm x 102mm x 25.5mm (not including antenna)</li> <li>Weight: 410g</li> <li>Operation temperature: -30~+70°C</li> <li>Store temperature: -40~+85°C</li> <li>Related humidity: &lt;95% (non-condensing)</li> <li>Guarantee: Two Years</li> </ul>
Power Consumption	<ul style="list-style-type: none"> <li>Operate: 520mA@+12VDC,</li> <li>Idle: 400mA@+12VDC</li> <li>Power Supply: 7.5VDC-32VDC (max 48VDC extendable)</li> <li>Over Voltage protect</li> <li>Connect protection</li> </ul>	Package Info	<ul style="list-style-type: none"> <li>1x 4G/3G Router</li> <li>2x Wi-Fi antenna</li> <li>2x 4G Magnetic antenna</li> <li>1x Ethernet Cable</li> <li>1x Power Supply Adapter</li> <li>1x DIN Rail Mounting Kits</li> </ul>

# PARTIAL ORDER NUMBER LIST

Part No.	Region	4G	3G	Interface	DL	UL	WiFi	Dual SIM	GPS
WL-G520LA	Asia/Europe/Africa	LTE-FDD: B1/3/5/7/8/20/28 LTE-TDD: B38/40/41	B1/5/8	5x GBE 1x Rs232	FDD 150M TDD 130M	FDD 50M TDD 35M	2.4GHz & 5GHz	✓	
WL-G520LA-d									✓
WL-G520LA-g									✓
WL-G520LA-dg									✓
WL-G520LFX	Asia/Europe/Africa	LTE-FDD: B1/3/7/8/20/28A LTE-TDD: B38/40/41	B1/8	5x GBE 1x Rs232	FDD 150M TDD 130M	FDD 50M TDD 35M	2.4GHz & 5GHz	✓	
WL-G520LFX-d									✓
WL-G520LFX-g									✓
WL-G520LFX-dg									✓
WL-G520LF	Asia/Europe/Africa	LTE-FDD: B1/3/5/7/8/20 LTE-TDD: B38/40/41	B1/5/8	5x GBE 1x Rs232	FDD 150M TDD 130M	FDD 50M TDD 35M	2.4GHz & 5GHz	✓	
WL-G520LF-d									✓
WL-G520LF-g									✓
WL-G520LF-dg									✓
WL-G520LA1	Latin America/ Australia/New Zealand	LTE-FDD: B1/2/3/4/5/7/8/28/66 LTE-TDD: B40	B1/2/4/5/ 8	5x GBE 1x Rs232	FDD 150M	FDD 50M	2.4GHz & 5GHz	✓	
WL-G520LA1-d									✓
WL-G520LA1-g									✓
WL-G520LA1-dg									✓
WL-G520LF1	Latin America/ Australia/New Zealand	LTE-FDD: B1/2/3/4/5/7/8/28 LTE-TDD: B40	B1/2/4/5/ 8	5x GBE 1x Rs232	FDD 150M TDD 130M	FDD 50M TDD 35M	2.4GHz & 5GHz	✓	
WL-G520LF1-d									✓
WL-G520LF1-g									✓
WL-G520LF1-dg									✓
WL-G520LF2	North America FirstNet	LTE-FDD: B2/4/5/12/13/14/66/71	B2/4/8	5x GBE 1x Rs232	FDD 150M	FDD 50M	2.4GHz & 5GHz	✓	
WL-G520LF2-d									✓
WL-G520LF2-g									✓
WL-G520LF2-dg									✓
WL-G520LF3	Japan	LTE-FDD: B1/3/8/18/19/26/41	B1/6/8/19	5x GBE 1x Rs232	FDD 150M	FDD 50M	2.4GHz & 5GHz	✓	
WL-G520LF3-d									✓
WL-G520LF3-g									✓
WL-G520LF3-dg									✓
WL-G520LG	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	5x GBE 1x Rs232	FDD 150M TDD 130M	FDD 50M TDD 35M	2.4GHz & 5GHz	✓	
WL-G520LG-d									✓
WL-G520LG-g									✓
WL-G520LG-dg									✓
WL-G520-LF6	EMEA/Asia/Australia / New Zealand/Brazil	LTE-FDD: B1/3/5/7/8/20/28/32 LTE-TDD: B38/40/41	B1/3/5/8	5x GBE 1x Rs232	FDD 300M TDD 222M	FDD 50M TDD 26M	2.4GHz & 5GHz	✓	
WL-G520-LF6-d									✓
WL-G520-LF6-g									✓
WL-G520-LF6-dg									✓
WL-G520-LF7	America	LTE-FDD: B2/4/5/7/12/13/17/25/26 /29/30/66 LTE-TDD: B40	B2/4/5	5x GBE 1x Rs232	FDD 300M TDD 222M	FDD 50M TDD 26M	2.4GHz & 5GHz	✓	
WL-G520-LF7-d									✓
WL-G520-LF7-g									✓
WL-G520-LF7-dg									✓
WL-G520-LF12	Global	LTE-FDD: B1/2/3/4/5/7/8/12/13/14 /17/18/19/20/21/25/2 6/28/29/30/32/66 LTE-TDD: B38/39/40/41	B1/2/3/4/ 5/8/9/19	5x GBE 1x Rs232	FDD 600M TDD 408M	FDD 150M TDD 90M	2.4GHz & 5GHz	✓	
WL-G520-LF12-d									✓
WL-G520-LF12-g									✓
WL-G520-LF12-dg									✓

**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.