

# WLINK<sup>®</sup>

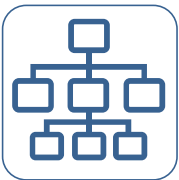
## WL-R522 4G ROUTER



WL-R522 is the professional IIoT router with 4G LTE module for wireless M2M applications. It is based on high quality module, state-of-the-art CPU processor and offers the users with stable connection and high data throughput over 4G LTE Cat.4 network. It is consisted of rugged housing and various of interfaces including Dual SIM slot, Ethernet 100Mbps, RS232/485 serial and I/O ports.

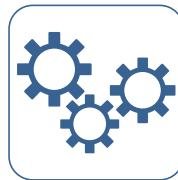
WL-R522 Router is dedicated for the users looking for easy and robust mobile internet access. Internet connection is easily available and configurable via internet browser without any need of installing software or drivers. Together with its robust design and wide supply voltage range, make it be the universal solution for all low-volume M2M/(I)IoT and mobile data applications including metering, traffic systems, transportation and logistics, security, vending machines and facility management.

High speed 300Mbps 802.11b/g/n Wi-Fi also make it ideal for the applications which hotspot functionality is required.



### Extensive Interfaces, Enabling Flexible Expansion

Multiple interfaces, including Gigabit Ethernet, RS-232, RS-485 and DI/DO. IP-based PLC communication, with support for IPv6, and plug-and-play terminals. GPS tracking and Storage is option to be added on R522.



### High performance, Industrial-Grade Design

Fan-free design, Robust housing and a wide operating temperature range (-40°C to 70°C). Resilient against strong magnetic interference. Dual power supplies for redundancy, isolated input, and a wide voltage range (9V DC to 60V DC).



### Secure and Reliable Network

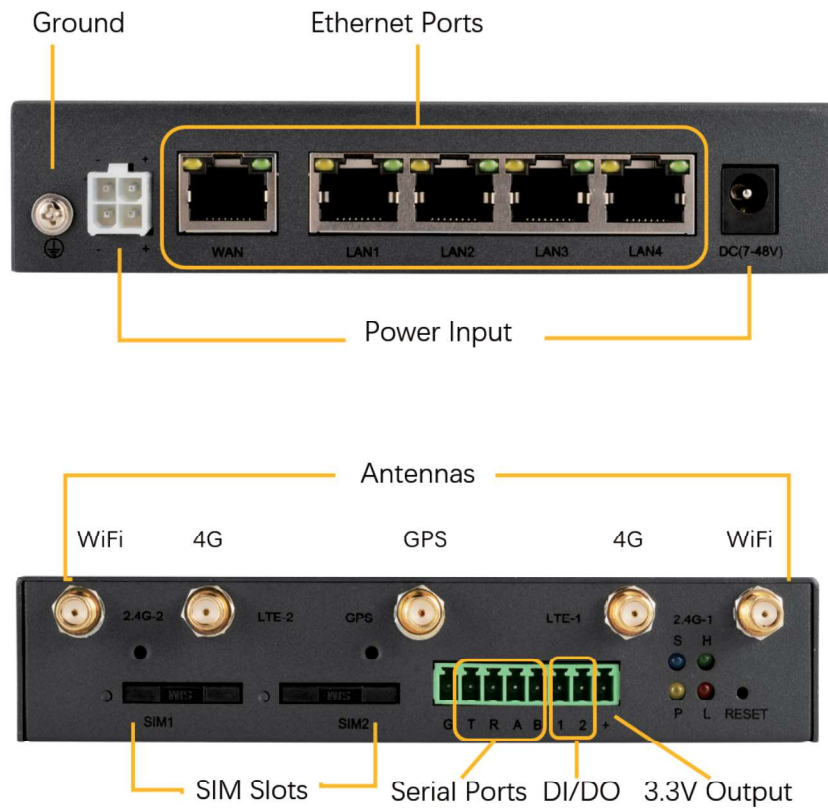
Support robust security features, such as PPTP/L2TP, OpenVPN, IPsec, NAT, port forwarding, a stateful firewall and packet filtering, data encryption, Access Control List (ACL) and provide secure, reliable communications.



### Easy to and deploy and mount

Support various of mounting way includes DIN Rail Mount, Rack Mount and Desktop etc.

## Interface Diagram



## Typical Application



**WLINK**  
Solution

## Specification

### Physical

<b>Network</b>	LTE-A/LTE HSPA/UMTS EDGE/GPRS	<b>Hardware System</b>	MIPS 580MHz CPU 128Mb Flash 512Mb DDR2 RAM Hardware Watchdog
<b>Interface</b>	5x 10/100M Ethernet Port (4x LAN, 1x WAN Configurable, ) 1x RS232(TTL Optional), 1x RS485 2x IO 2x SIM Slots 1x DC Power Socket(DC5.5*2.1mm) 1x DC(4 Pins plugs) 2x SMA-K(Female) 4G Antenna 2x SMA-RP Wi-Fi Antenna 1x SMA-K GNSS Antenna(Optional)	<b>GPS(Optional)</b>	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
<b>LED Indicators</b>	P(Power), S(System), H(Good Signal), L(Poor Signal), Ethernet LED	<b>Wi-Fi(Optional)</b>	IEEE 802.11 b/g/n 300Mbps(2T2R) Output Power 11n HT40 MCS7: 15dBm, 11b CCK: 18dBm, 11g OFDM: 15dBm Sensitivity 300Mbps: -65dBm 54Mbps: -73dBm 11Mbps: -86dBm
<b>Consumption</b>	Voltage: DC +9~48V (standard 12V/1.5A power adapter) SIM/R-UIM Card: 1.8V/3V Idle: 120mA@+12VDC Online (Without Wi-Fi): 171mA@+12VDC (with Wi-Fi) 198mA@+12VDC	<b>Other</b>	Galvanized metal with grounding Screw Dimension: 137mm x 88mm x 27mm (not including antenna) Weight: 330g (not including accessories) Operation temperature: -30~+75°C Storage temperature: -40~+85°C Relative humidity: 0~95% (non-condensing) Guarantee: two years
<b>Compliance</b>	FCC CE RoHS CCC	<b>Package Content</b>	1x WL-R522 Router 2x Wi-Fi antenna 2x 4G Magnetic antenna 1x Ethernet Cable 1x Power Supply Adapter

### Software

<b>Operating System</b>	WLINK OS based Linux	<b>Firewall</b>	NAT/DMZ Port Map IP Filter Mac Filter Key Word Filter Domain Name Filter
<b>Network Protocol</b>	PPPoE, UDP, TCP, ICMP, NTP, DHCP, Modbus TCP, HTTP/HTTPS, UPNP, SNMP, DDNS,Telnet/SSH, MQTT	<b>Network Monitoring</b>	ICMP Check Traffic Check Traceroute Data Capture Bandwidth Graph Data Traffic Graph
<b>VPN</b>	OpenVPN : TLS1.2, Encryption as DES, RC2, BF, 3DES, CAST5,AES,SEED 45 encryption methods PPTP/L2TP : Client mode, L2TPv3 supported GRE : CRE Tunnel IPSec : IKEv1, IKEv2, DES, 3DES, AES128, AES192, AES256 multiple encryption methods supported.	<b>Network Features</b>	WAN/4G Load Failover/Load Balance Band Lock Bandwidth Management IGMP Proxy Static/Dynamic Routing Source Address/Port Routing Real-time network Traffic Graph Terminal Bandwidth Graph CPU/Memory/Data Monitor Graph
<b>Router Management</b>	Local/Remote GUI Telnet/SSH	<b>WLAN Mode</b>	IEEE 802.11b/g/n, WISP and Client modes WiFi users up to 128 simultaneous connections Wi-Fi Hotspot Wireless Black/White List Coova Chilli Push WiFi Client mode supports 3 Peer SSID, Signal Lock, BSSID Lock
<b>SMS Management</b>	Router Information Query SIM Information Query Router Status Query Signal Query SMS Configuration	<b>WiFi Security</b>	WEP WPA Personal/Enterprise WPA2 Personal/Enterprise WPA/WPA2 Personal/Etherprise AES, TKIP, Auto Cipher modes

## Ordering Information

### Partial Order Number List

Part No.	4G/4G+	3G	SIM	Category	DL	UL	WiFi	Region	GPS/GNSS
<b>WL-R522-LA</b>	FDD-LTE: B1/B3/B5/B7/B8/ B20/B28 TDD-LTE: B38/40/41 ASR Solution	B1/B5/B8	Two	Cat4	150M	50M	802.11b/g/n	Asia Europe Africa	Optional
<b>WL-R522-LFX</b>	FDD-LTE: B1/B3/B7/B8/ B20/B28A TDD-LTE: B38/40/41	B1/B8	Two	Cat4	150M	50M	802.11b/g/n	Asia Europe Africa	Optional
<b>WL-R522-LF</b>	FDD-LTE: B1/B3/B5/B7/ B8/B20 TDD-LTE: B38/40/41	B1/B5/B8	Two	Cat4	150M	50M	802.11b/g/n	Asia Europe Africa	Optional
<b>WL-R522-LF1</b>	FDD-LTE: B1/B2/B3/B4/B5/ B7/B8/B28 TDD-LTD: B40	B1/B2/B5/B8	Two	Cat4	150M	50M	802.11b/g/n	Australia New Zealand Latin America	Optional
<b>WL-R522-LF2</b>	FDD-LTE: B2/B4/B5/B12/ B13/B14/B66/B71	B2/B4/B5	Two	Cat4	150M	50M	802.11b/g/n	North America FirstNet	Optional
<b>WL-R522-LF3</b>	FDD-LTE: B2/B4/B5/B12/ B17	B1/B6/B8/B19	Two	Cat4	150M	50M	802.11b/g/n	Japan	Optional
<b>WL-R522-LG</b>	LTE-FDD: B1/2/3/4/5/7/8/ 12/13/18/19/20/ 25/26/28 LTE-TDD: B38/39/40/41	B1/B2/B4/B5/ B6/B8/B19	Two	Cat4	150M	50M	802.11b/g/n	Global	Optional
<b>WL-R522-LF6</b>	FDD-LTD: B1/B3/B5/B7/B8/ B20/B28/B32 TDD-LTD: B38/ B40 /B41	B1/B3/B5/B8	Two	Cat6	300M	50M	802.11b/g/n	Asia Asia- pacific Europe Africa	Optional
<b>WL-R522-LF7</b>	FDD-LTD: B2/B4/B5/B7/ B12/B13/B17/ B25/B26/B29/ B30/B66 TDD-LTD: B40	B2/B4/B5	Two	Cat6	300M	50M	802.11b/g/n	Amefrica	Optional

#### Note:

1. If request other frequency band model, please consult wink sale person or local distributor.
2. Please consult WLINK or local distributor if request GPS .
3. Please cosnult WLINK or local distributor if request special features
4. The above list only includes partial available models, please consult wink sale person if can't find a suitable one.

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