WL-G510 Series

GBE, 802.11 b/n/g/ac, Compatible with 4G+/5G, Industrial

WLINK WL-G510 innovative industrial Powerful 4G LTE Router is built for harsh environments industrial applications and enables highly complex M2M and industrial IoT deployments.

With the world's leading ARM Cortex A7 900MHz CPU, the G510 achieves data rates up to 1 Gbps and enables gigabit routing. Especially, the internal communication interfaces of G510 are based on USB3.0 which maximum speed is up to 5Gbps, absolutely compatible with LTE advanced (Cat 6, Cat 11) and even future 5G cellular network. WL-G510 contains variants of optional models which are designed for different target regions and nearly cover all the main stream carriers worldwide.

Simultaneous 2.4G and 5G Wi-Fi gives the users two independent Wi-Fi network which also help reduce 2.4G Wi-Fi congestion and interference to ensure fast and reliable network service.

The WL-G510 is equipped with terminal block offering serial port, DI&DO port and secure power supply connectors for industrial application. The optional integrated GPS module allows you to locate the position of the device with a high accuracy or to use the GPS signal as the time base.Integrating into map services like Google Maps allows you to track the device if it's mounted in moving equipment.



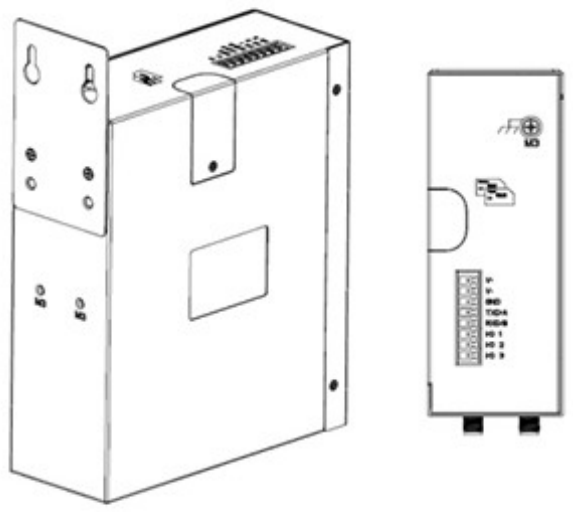


Highlights

Ultra Performance

- High-performance Cortex A7 900MHz CPU
- High speed (Cat4/ Cat6/Cat11)and reliable network
- Simultaneous Dual-band 802.11 b/g/n/ac
- Built-in 4-Port GbE Switch, reducing clutter and the need for extra equipment.
- Optional EUDM for extended storage





Absolutely Industrial Design

- Industrial robust, heavy-duty metal enclosure and connectors designed, good heating diffusion
- Terminal Block for Secure Power Supply
- SIM screw cover design for secure SIM card
- DIN Rail Mounting design for Industrial
- Shock and vibration resistant
- Rich Serial and I/O interfaces
- Scheduled reboot via Timing/SMS/Platform
- Endure wide operating temperature range: -30 to 75 degree

Security & Protection

- Recover from various failures automatically by built-in watch dog, Multi-link detection
- Strong electromagnetic interference Resistance
- Power Non-polarity and Anti-reverse
- Redundant SIM slots with automatic switching for reliable network.
- Protect sensitive data by firewall and VPN tunnel (IPsec/OpenVPN/GRE/L2TP/PPTP)



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

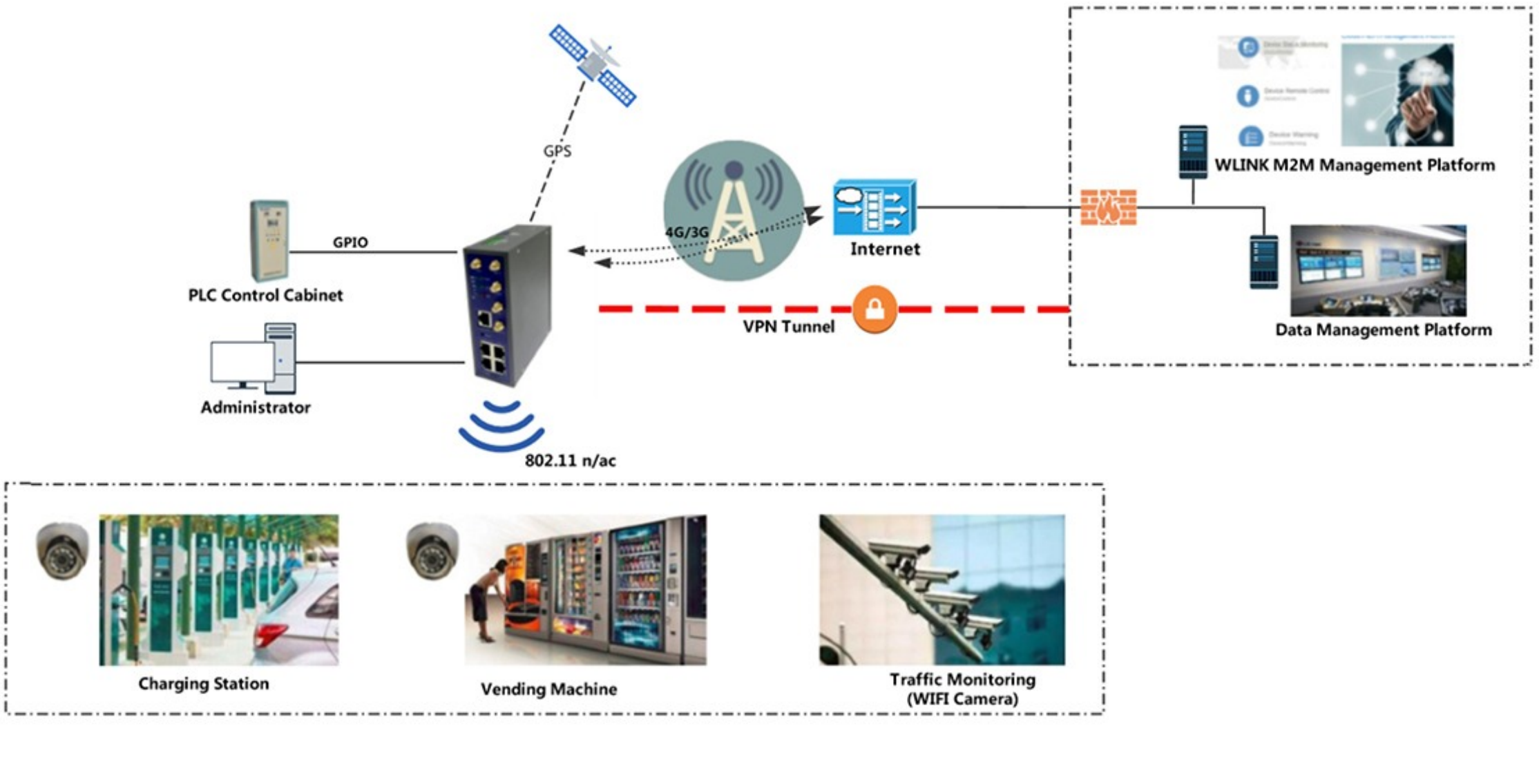
- Efficiently management and quick configuration
- Devices Status Monitoring
- Remote Firmware Upgrade
- Statistics and Report
- Max support Number of Devices: 10000+ units



Typical Application

Energy	Digital Oil Field, Coal Mine, Solar, Smart Grid
Utilities	Smart City, Traffic, Street lighting, Public Safety &Security, 4G Public hotspot, Environment monitoring, Video Surveillance, Smart Package Locker
Industrial	Remote Telemetry, Tanking Monitoring, Automation, Remote PLC, Remote AMR, Remote Monitoring and control
Retail	ATM, POS(Point-of-Sale), Vending Machine, Lottery Machine, Branch network, Digital Signage, Video Surveillance, failover between WAN&4G/3G
Transportation	Bus Wi-Fi, Wi-Fi on Board, Fleet tracking and management, Bus Advertising

Topology Diagram



Specification

Optional Cellular Network

- LTE-Advanced / FDD-LTE / TDD-LTE 4G
- DC-HSPA+/HSPA+ / HSPA / HSDPA
- EDGE/GPRS
- Support future 5G

Ethernet Standard

- 10/100/1000 Base-T (IEEE 802.3)
- Mode: Full or half duplex (self-adaptive)

WLAN

- Standard: IEEE 802.11 b/g/n/ac
- Security: WEP, WPA and WPA2 encryption
- Mode: AP, Client, station, bridge mode support

Hardware System

- CPU: Cortex A7 Core. 900MHz/867Mbps
- Memory: 128Mb Flash, 1Gb DDR3 RAM
- Storage: U disk built-in mainboard (optional)

Route protocol

- Static route
- IPv2/OSPF dynamic route

VPN Tunnel

- IPSec
- PPTP/L2TP client
- GRE
- OpenVPN

Firewall & Filter

- IP packet/Domain/MAC filter
- NAT
- DMZ

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

Device management

- Local or remote web browser (IE v8 or above)
- CLI/Telnet command
- M2M management platform (optional)
- SSH configure (optional)

LED instruction

- PWR
- WLAN
- Signal
- ERR

Power Consumption

- Operate 460mA@+12VDC
- Idle: 400mA@+12VDC

Power Supply

- 7.5VDC - 32 VDC
  (max 48VDC extendable)

Interface

- 4× Gigabit Ethernet (3xLAN,1xWAN/LAN)
- 1× Console Port
- 8 Pins Terminal Block contents:
  - 1×RS232 (RS485 Optional)
  - 2×Digital Input
  - 1×Digital Output
  - 1×DC power interface (Anti-reverse)
- 5× SMA-K antenna interface
- 2× Standard SIM/R-UIM Slot
- 1X expansion USB 3.0

Other

- Dimension: 132mm x 112mm x 44mm
  (not including antenna)
- Weight: 400g
- Operation temperature: -30 ~ +70℃
- Storage temperature: -40 ~ +85℃
- Relative humidity: <95% (non-condensing)
- Guarantee: one year

Certificate

- CE
- RoHS
- FCC

Package Info

- 1x 4G/3G Router
- 2x Wi-Fi antenna
- 2x 4G Magnetic antenna
- 1x Ethernet Cable
- 1x Power Supply Adapter

Partial Ordering Number List

Part No.	4G/4G+	3G	SIM	Category	DL	UL	WiFi	Region	GPS/GNSS	Storage
WL-G510-LH	FDD-LTE B1/B2/B3/B4/B5/B7/ B8/B20	B1/B2/B5/ B8/	Two	Cat4	150M	50M	802.11b/n/ac	Asia Europe Africa	Optional	Optional
WL-G510-LF	FDD-LTE B1/B2/B3/B4/B5/B7/ B8/B20	B1/B5/B8	Two	Cat4	150M	50M	802.11b/n/ac	Asia Europe Africa	Optional	Optional
WL-G510-LF1	FDD-LTD: B1/B2/B3/B4/B5/ B7/B8/B28 TDD-LTD: B40	B1/B2/B5/ B8	Two	Cat4	150M	50M	802.11b/n/ac	Australia Brazil	Optional	Optional
WL-G510-LF6	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/n/ac	Asia Europe Africa Australia	Optional	Optional
WL-G510-LF7	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/n/ac	North Amefrica	Optional	Optional
WL-G510-LF8	FDD-LTD: B2/B3/B4/B5/B7/B8/ B20/B28	B2/B3/B4/ B5/B8	Two	Cat6	300M	50M	802.11b/n/ac	Latin America	Optional	Optional
WL-G510-LT	FDD: B1/B2/B3/B4/B5/B7/ B8/B12/B13/B17/B20/ B25/B26/B28/B29/ B30/B66 TDD:B38/40/41	B1/B2/B4/ B5/B8	Two	Cat11	600M	75M	802.11b/n/ac	Worldwide	Optional	Optional

Note:

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

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