Industrial 5G WiFi Router 5-Port Dual-SIM

GP-R650 Series

Introduction

GP-R650 series is an industrial-grade 5G WiFi router with high-adaptability, high-reliability and high-stability. It integrates 5G/4G/3G, supports 2.4G & 5.8G dual-band WiFi, routing, switching, network management, VPN, firewall, security and other technicals. It provides static/dynamic routing, 5G/4G/3G dial-up, QOS, industrial serial communication and other software features.

GP-R650 series industrial 5G WiFi router widely used in finance, postal, smart grid, charging piles, self-service equipment, intelligent transportation, environmental monitoring, fire monitoring, security monitoring, water conservancy monitoring, public safety, advertising, industrial control, seismic monitoring, meteorological monitoring, instrument monitoring and other industries.

Main Feature

Industrial Design

- Adopt High-performance industrial-grade 5G module
- Adopt high-performance industrial-grade dual-core processor
- Power supply: +7.5V~+32V DC
- Adopt sheet metal cold-rolled steel shell, which has strong heat dissipation
- Protection Level : IP40 (Can be designed up to IP51)

Platform Manage

- Support Online Monitoring
- Support Remote Parameter Backup
- Support Remote Parameter Configuration
- Support Remote Device Upgrades
- Support Remote Reboot and Log Query

Network Feature

- Support Port Traffic Detection
- Support Real-time Link Monitoring
- Support serial port DTU function
- Support MQTT Protocol/Modbus protocol/custom protocol
- Support GPS Positioning (optional function)
- Support UDP Data Broadcast Relay Mode
- Support Port forwarding, DMZ, and static NAT

Network Function

- Support 5G network and backward compatible with 4G/3G/2G
- Support wired and 5G load balancing/backup,/automatic switching
- Support WiFi IEEE802.11b/g/n/ac protocol
- Support standard RS-232/485 serial port and supports serial port DTU
- Support hardware WDT and provide anti-drop mechanism
- Support multiple VPN protocols.
- Support DHCP, DDNS, firewall, NAT, and DMZ host functions
- Support ICMP, TCP, UDP, Telnet, SSH, FTP, HTTP, HTTPS, Modbus and etc Network function
- Support SNMP Management Protocol

Stable & Reliable

- ESD protection for all interfaces to prevent electrostatic shocks
- Multiple device self-test mechanisms ensure smooth links and alarms
- Support network signal strength indicator display in three levels
- Adopt software and hardware watchdog and multi-level link detection mechanism
- Support automatic fault detection and automatic recovery to ensure the stable and reliable operation of the equipment.

Software Parameter

Function	Working Mode	Wired/Wireless/Compatible Mode
	WiFi	AP/ Client Mode
	Router	Support PPPOE/ staticIP/ dynamicIP
	Serial Server	Support DTU Transmission Support TCPserve/TCPclient Support UDP Support Modbus Protocol
	VPN	GRE, PPTP, L2TP, IPSec, EOIP, openVPN, N2N
	Management	Local Deploy/Remote Deploy
	Extended Function	Support GPS Positioning【Optional】 Support internal storage expansion，2GB-32GB【Optional】
5G	Wireless Module	Industrial-grade 5G module
	Frequency	NR（N1, N2, N3, N5, N7, N8, N12, N20,N25, N28, N40, N41, N66, N71,N77, N78, N79） FDD-LTE（B1~B5, B7, B8, B12, B13,B14, B17~B20, B25, B26,B28, B29, B30 , B32, B66, B71） TDD-LTE（B34, B38, B39, B40, B41, B42, B43, B48） NR（n41/n77/n78/n79） FDD-LTE（B1/B3/B5/B7/B8/B20/B28） TDD-LTE（B34/B38/B39/B40/B41） HSPA（850/900/1900/2100MHz） ECDO（800MHz） TD-Scdma（B34/B39）
	Theoretical Bandwidth	5G Sub-6G：UL 300Mbps / DL 4Gbps LTE CAT20: UL 150Mbps / DL 2.4Gbps
	Transmit Power	<23dBm
	Receiving Sensitivity	<-109dBm
WiFi	Frequency	Support IEEE802.11 b/g/n/a/ac
	Rate	5G: Up to 867Mbps 2*2 MIMO 2.4G: Up to 300Mbps 2*2 MIMO
	Max Users	64+
	Bandwidth	IEEE802.11b/g：54Mbps IEEE802.11n：300Mbps IEEE802.11ac：866Mbp
	Security Encryption	Support WEP, WPA, WPA2 and other encryption methods
	Transmit Power	16-17dBm(11g),18-20dBm(11b),15dBm (11n)
	Receiving Sensitivity	<-72dBm@54Mpbs
GPS		Optional

Hardware Parameter

Size		100mm×195mm×45mm
Weight		670g
Port	WAN	1 x 1000M Eth/M12 port, Auto adapt MDI/MDIX, Built in 1.5KV ESD
	LAN	4x 1000M Eth/M12 port, Auto adapt MDI/MDIX, Built in 1.5KV ESD
	Serial Server	Support RS-232/RS485（Default RS-232） Rate:110-115200bit/s
	Indicator	1×"PWR" 1×"WiFi" 1×"WAN" 4×"LAN" 3×"Signal"
	Antenna	4 × SMA Female Antenna（3G/4G/5G Antenna Port） 2 × SMA Female 2.4G WiFi Antenna Port 2 × SMA Female 5.8G WiFi Antenna Port GPS：Optional
	SIM/UIM	Standard Drawer Type(2 x SIM slot) 1.8V/3V SIM/UIM,15KV ESD protection
Reset Button		1×Reset Button
CPU		800MHz Dual-Core
FLASH		16MB, support expand to 64MB
RAM		256MB
Working/Storage Temperature		-40°C ～ 80°C/-45°C ～ 85°C
Working/Storage Humidity		5%~95%(non-Condensation)
IP Protection		IP40 Protection,Electromagnetic shielding, windproof, sunproof, shockproof and heat dissipation design
Power		DC5V~DC36V（Standard：DC12V/1.5A Built-in power supply instantaneous overvoltage protection

Appearance & Accessories

195mm

100mm

45mm

2.4G Antenna

GPS(Optioinal)

5G Antenna

DC7.5~32V

LAN 1-4

WAN

Reset

RS232/485

SIM1

SIM2
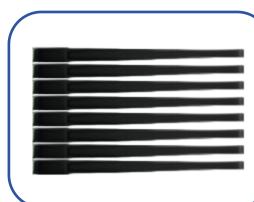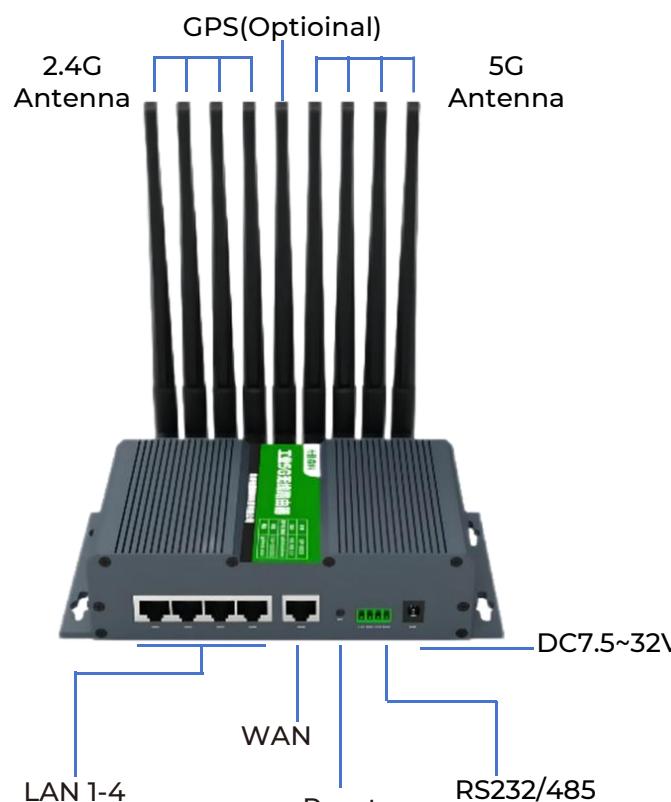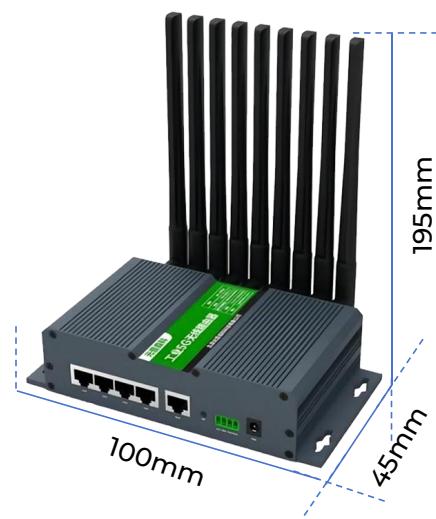
Packing*1

Device*1

Rubber Duck Antenna*8

Accessories *1

Manual*1

Model Selection

Model	GP-R650-232	GP-R650-W-232	GP-R650-485	GP-R650-W-485	-D Series
5G	●	●	●	●	
4G-FDD	●	●	●	●	
4G-TDD	●	●	●	●	
2.4G Wifi	-	●	-	●	Domestic Chipset
5.8G Wifi	-	●	-	●	
RS232	●	●	-	-	
RS485	-	-	●	●	
GPS	○	○	○	○	

INDUSTRIAL NETWORK SOLUTION SPECIALIST

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