

Introduction

G50-Q6S Redcap 5G router is a kind of internet of things wireless communication router, uses Sub6 / LTE mobile cellular network, to provide convenient and high speed network transmission function.

This series of product uses high performance ARM Dual-Core industrial communication processor, flush bonding real-time operation system as software supporting platform. It provides secure, reliable, stable 5G wireless network, and provides 5 Gigabit LAN, RS-485/232 and dual band 2.4 G + 5.8G Wi-Fi6.

It can be used in finance, postal, smart power grids, smart transportation, environment monitor, fire protection monitor, security, water conservancy, public safety, advertising release, industrial control, earth quake monitor, meteorological watch, instrument monitor etc.



Features

Industrial design

- Use high performance industrial wireless module
- Use high performance ARM Dual-Core industrial communication processor
- Support low power consumption, including sleep mode, timing on/off line mode and timing switch on/off mode
- Use plate metal CRS shell, heat dissipation is good
- Power source: 12V~32V DC(extended to be 36V)
- Degree of protection: IP34(Max IP51)

Network characteristic

- Port flow detection and link real time monitoring
- Various VPN protocols (PPTP, L2TP, IPSec, OpenVPN, GRE, Wireguard, Zerotier etc.)
- Serial port DTU function supporting
- Support dial as required (audio, SMS, or data trigger)
- Support UPnP, Firewall, Port forwarding, IP passthrough and Hotspot(Wi-Fi Portal) etc.

Stability

- Use soft hardware watchdog and multi-level link detection , with capability of fault automatic diagnosis, automatic recovery, ensure equipment to work in stable and safe way
- Multiple equipment self-checking mechanism
- ESD protection for each port, prevent static shock
- Wireless network signal indicator light, 3 levels to show the signal strength on-site

Remote management

- Remote parameter configuration
- Remote parameter backups
- Remote restart and log query
- Remote equipment upgrade
- Equipment online monitoring

Functions

- Down compatible LTE, WCDMA, HSPA, GPRS, EDGE
- Support 5 x Gigabit LAN (10/100/1000M) or 4 x LAN + 1 x WAN
- Provide standard RS232/485 interface, support serial DTU(data transmission unit) function
- Support 2.4G + 5.8G WIFI6, IEEE802.11b/g/n and 802.11ax
- Support DHCP, DDNS, firewall, NAT, and DMZ host etc.
- Support ICMP, TCP, UDP, Telnet, SSH, API, FTP, HTTP, HTTPS protocols etc.

Advanced

- Support Gigabit WAN, wire and wireless backup(optional)
- Support GPS / Beidou orientation(optional)
- Support USB internal storage extension, 8GB-256GB(optional)

Customization

- Deeply customize intelligent routing system based on OpenWRT
- Support customer secondary development
- Run the OpenJDK development environment
- Run the R language development environment

Specification

Hardware		Software		
CPU	Dual-core ARM Cortex-A53 at 1.0 GHz	Network protocols	PPPoE, TCP, UDP, DHCP, NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.	
RAM	4Gb DDR3	VPN tunnels	IPsec, OpenVPN, GRE, WireGuard, Zerotier	
Flash	128Mb Nor + 1Gb NAND	Firewalls	DMZ, NAT, Filtering (IP/Domain name/MAC address), QoS	
Cellular Interface		Remote management	Web, CLI, SMS	
Number of antennas	2	Serial port protocols	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway	
Connector	SMA-K	Device Management		
SIM	2 x SIM/UIM	Basic	Local or remote web browser(IE v8 or above) VLAN SNMP v2, v2c, v3	
Ethernet Port		Optional	M2M management platform CLI/Telnet command SSH configure MQTT TR069	
Number of ports	5(5 x LAN or 1 x WAN+4 x LAN) 10/100/1000M(IEEE 802.3, IEEE 802.3u)			
Serial Port				
Number of ports	1 x RS-232 or 1 x RS-485			
Connector	1 x 4-pin 3.5 mm female socket	Physical Characteristics		
Wi-Fi Interface		Ingress protection	IP34	
Number of antennas	2(Wi-Fi1+Wi-Fi2)	Housing & Weight	Metal, 420 g	
Connector	RP-SMA-K	Dimensions	150 x102 x 24.5 mm	
Standards	IEEE802.11 b/g/n/ax	Operating temperature	-30 ~ +75 °C	
Frequency bands	2.4 GHz + 5GHz	Storage temperature	-40 ~ +85 °C	
Maximum Bandwidth	2.4G 600Mbps / 5.8G 1200Mbps	Relative humidity	5 ~ 95% RH (non-condensing)	
Security	WEP, WPA, WPA2 encryption	Regulatory and Type Approvals		
Power supply and consumption		Standard	EN 300 328 v 1.7.1(2016-11)	EN 301 489-17
Connector	5.5x2.1 mm DC		EN 301 489-1	EN 301 489-52
Input voltage	12 ~ 32 V DC		EN 301 908-1	EN 301 908-2/13
Power consumption	Idle: 600mA@12 V Max: 850mA@12 V		EN 55024:2015	EN 60950-1
Recommended power supply	12V DC/2 A power adapter		EN 55032:2015	EN 61000-3-2
Others			EN 61000-3-3:2008	EN 62311:2008
Reset button	1 x RST	Certificates		
LED indicators	1 x WLAN, 1 x WAN, 4 x LAN, 2 x NET	Passed	CE	
Watchdog	Built-in		RoHS	
Guarantee	One year		CCC	
Customization	Support			

Application

ATM & Retail

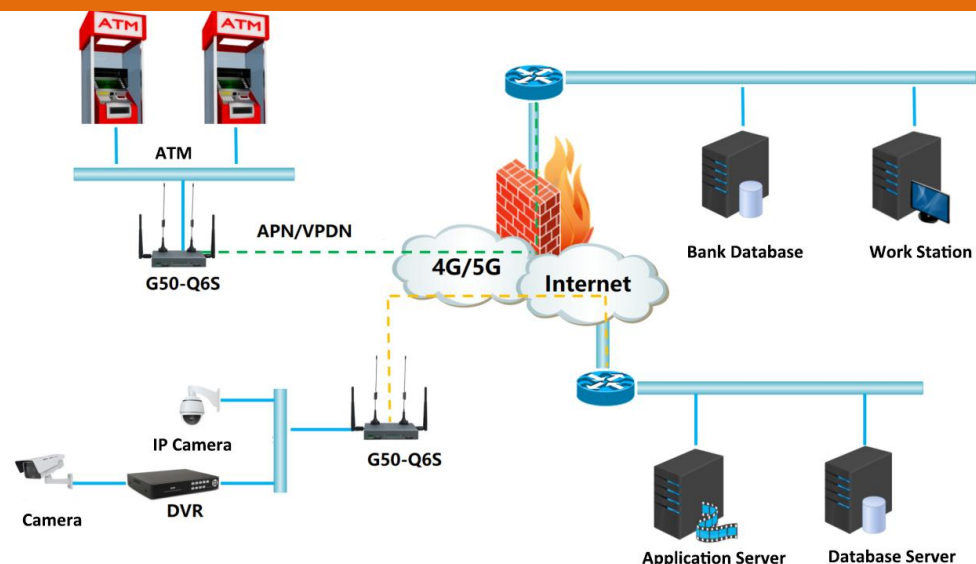
Transportation & Logistics

Energy & Utilities

Oil, Gas & Mining

Industrial IoT

Enterprise IT



Interface

G50-Q6S series Panel	
Front	
Back	

Order Information

Model	Frequency Bands	Country/Region	Interface	Wi-Fi	GPS	Package Contains
G50-Q6S	5G: N1/N2/N3/N5/N7/N8/N12/N20/ N25/N28/N40/N41/N66/N71/ N77/N78/N79 4G: LTE-FDD Band:B1/B2/B3/B4/B5/B7/ B8/B12/B13/B14/B17/B18/B19/ B20/B25/B26/B28/B29/B30/ B32/B66/B71 LTE-TDD Band :B34/B38/B39/B40/ B41/B42/B43/B48	Global	5 x LAN 1 x RS232 or 1 x RS485	2.4G + 5G	√	1 x G50-Q6S router 2 x Cellular antennas 2 x Wi-Fi antennas 1 x GPS antenna(optional) 1 x RJ45 cable 1 x 4-pin serial connector 1 x 12V/2A Power supply

**For more information about frequency bands in different countries, please contact your Homtecs sales representative.*