

G50 4G Router with Gigabit Ethernet

Introduction

G50 series mobile wide-band router is a kind of internet of things wireless communication router, use WCDMA/HSUPA/HSPA+, EV-DO, LTE, etc ,to provide convenient and high speed network transmission function.

This series of product uses high performance industrial 32 bit communication processor, flush bonding real-time operation system as software supporting platform. It provides safe, high speed, stable 4G wireless network, and provides 4 Gigabit LAN, 1WAN, RS-485/232 and WIFI interface.

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 industrial 32bit processor
- Support low power consumption
- Support mode customized
- Use plate metal CRS shell, heat dissipation is good
- Power source: 7.5V~26V DC(extended to be 36V)
- Degree of protection: IP34(Max IP51)

Network characteristic

- Port flow detection
- Link real time monitoring
- Various VPN protocol (PPTP, L2TP, IPSec, VPN)
- Serial port DTU function supporting
- Support dial as required (audio, SMS, or data trigger)
- Support UPnP

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

- Support 4G network, down compatible 3G HSPA+/2G GPRS, EDGE
- Support 1*WAN+4*Gigabit LAN, provide 1*RS232/485 interface
- Support WIFI, IEEE802.11b/g/n and 802.11ac
- Support wired and wireless network mutual backups
- Support hardware WDT, provide anti-log off mechanism, ensure data terminal online forever
- Support PPTP, L2TP, IPSec, GRE, various VPN protocol
- Support SNMP management protocol
- Support WiFi Portal(forced advertising push)

- Support DHCP, DDNS, firewall, NAT, and DMZ
- Support ICMP, TCP, UDP, Telnet, FTP, HTTP, HTTPS protocol
- Support SIM/UIM card design
- Support base station and WiFi hybrid positioning

Advanced

- Support dual mode + dual SIM(optional)
- Support single mode + dual SIM(optional)
- Support GPS / beidou positioning(optional)
- Support build-in storage, 8G-64G(optional)

Specification

Wireless

Module:	Industrial wireless model
Frequency band:	FDD-LTE(Band 1 / 3 / 5 / 7 / 8 / 20 / 28), (Band 1 / 2 / 4 / 5 / 7 / 8 / 12 / 13 / 17 / 25 / 26) TDD-LTE(Band 38 / 39 / 40 / 41) HSPA(850 / 900 / 1900 / 2100MHz), GSM(850 / 900 / 1800 / 1900MHz) EV-DO(800MHz), TD-Scdma(Band 34 / 39)
Theory bandwidth:	HSPA+: 5.76 / 21Mbps; FDD/TDD LTE: 100 / 300Mbps (Cat6)
Transmit power:	<24dBm
Power consumption:	Data mode: <320mA/12V; Idle mode: <180mA/12V
Receive sensitivity:	<-109dBm

WiFi

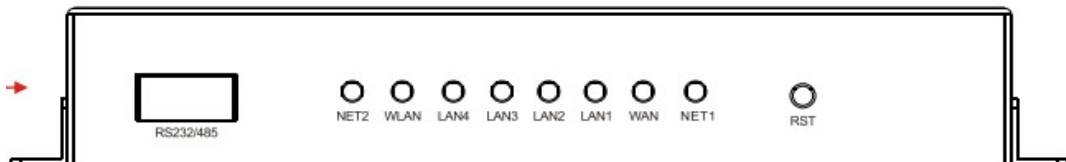
Bandwidth:	Support IEEE802.11b/g/n and 802.11ac, Max: 300Mbps / 866Mbps
Security Encryption:	Support WEP、WPA、WPA2 etc., optional for WPS function
Transmit power	16-17dBm (11g), 18-20dBm (11b) 15dBm (11n)
Receive sensitivity	<-72dBm@54Mbps

Interface

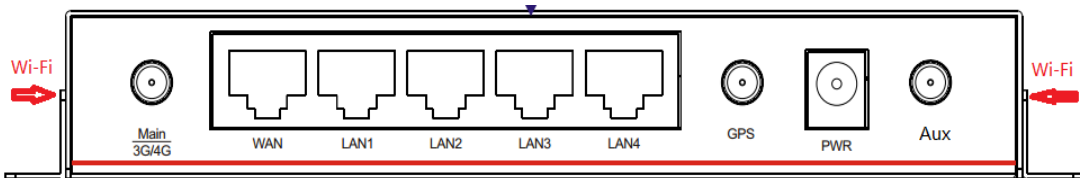
LAN:	4*LAN Gigabit Ethernet interface (RJ45), self-adaption MDI/MDIX, built-in electromagnetism insulation blocking
WAN:	1*WAN interface, self-adaption MDI/MDIX, built-in electromagnetism insulation Blocking
Serial:	1*RS485/RS232 interface, connect the acquisition device which has RS485/232 port
Indicator light:	4 indicator, "WAN", 4 x "LAN", "WLAN" and "NET", 3 colors for "NET"(red: bad, yellow: good, green: perfect)
Antenna interface:	5*SMA antenna interface(Wi-Fi x 2, GPS and 4G MIMO x 2), 50 Ω
SIM/UIM:	SIM/UIM, Industrial SIM slot, prevent SIM from falling; 1.8V/3V auto detection
Power:	7.5V~32V(standard DC12V/1.5A), built-in power instant overvoltage protection
Reset:	

G50 Series Panel

Front:



Back:



Power supply

- Standard: DC 12V/1.5A

Appearance

- Casing: Metal
- Dimension: 150x102x25.5mm
- Weight: about 530g

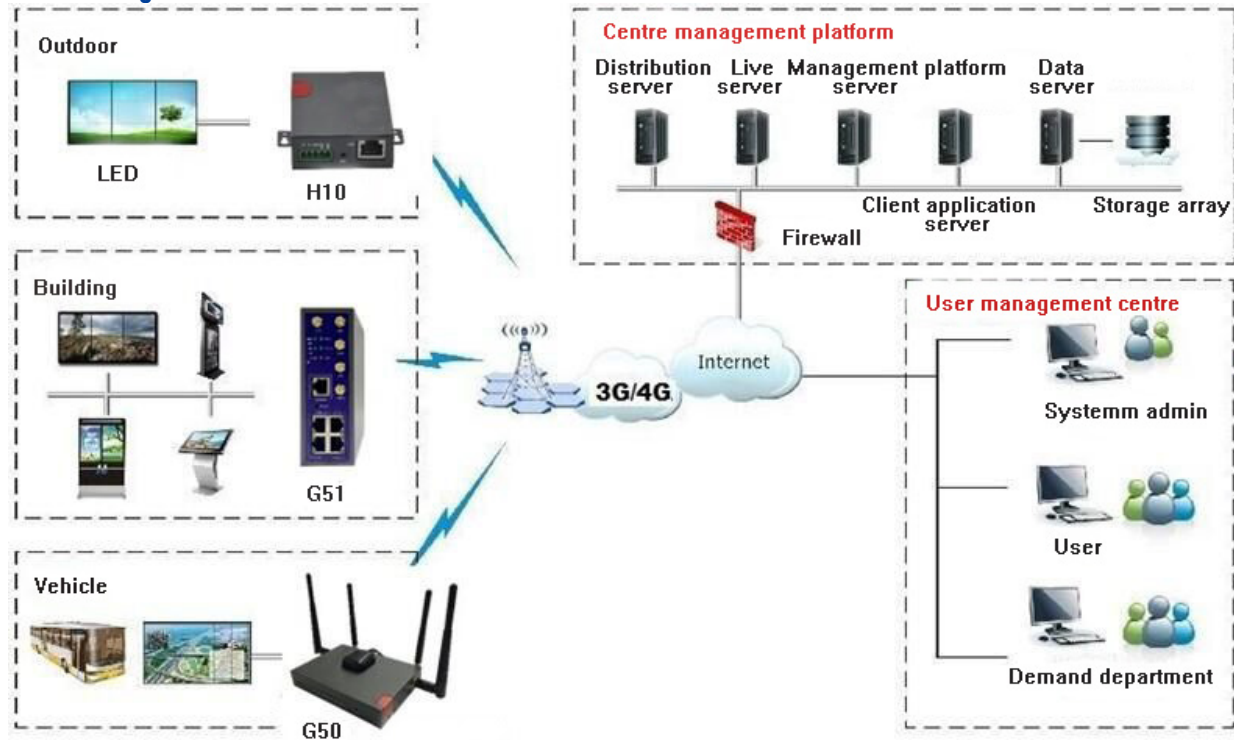
Others

- CPU: ARM A7 Core. 900MHz / 867Mbps
- Flash/RAM: 128Mb / 1Gb DDR3
- Working temp: -30~+75°C
- Storage temp: -40~+85°C
- Related humidity: < 95% non-condensing

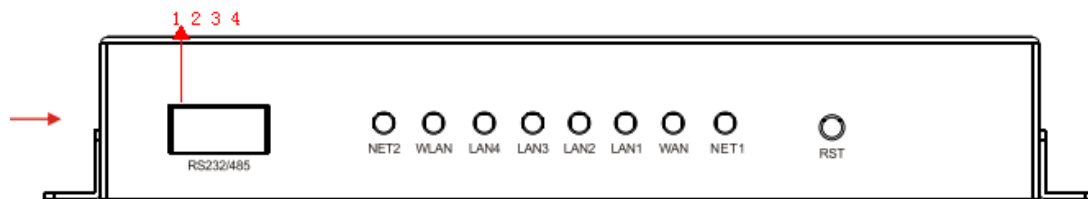
Product mode list

G50	Standard	4G LTE	Single mode Dual SIM+4G	GPS+4G	Storage+4G
WAN	●	●	●	●	●
LAN1-4	●	●	●	●	●
802.11n WIFI	○	●	○	○	○
HSPA+	●	●	●	●	●
EV-DO	○	-	○	○	○
TD-Scdma	○	-	○	○	○
FDD-LTE	-	●	-	●	●
TDD-LTE	-	●	-	○	○
GPS	○	○	○	○	○
RS232	●	●	●	-	-
RS485	○	○	○	-	-
Single Card	●	●	-	○	○
Double Card	○	○	●	○	○
Storage(8GB~64GB)	○	○	○	○	●
mode:	G50-WA2T	G50-FA2T	G50-FA2T-D	G50-FA2T-G	G50-FA2T-64GB

Network diagram

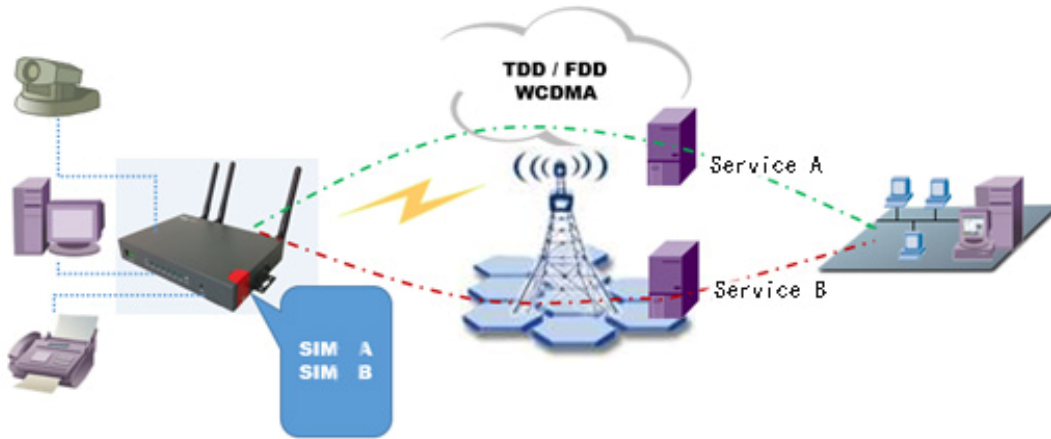


Serial interface:



1	2	3	4	1 (red)	VCC	+3.3V 【default N.C, can be opened as requirements】
				2 (black)	GND	GND
				3 (green)	TXD/485-B	RS232, output; or 485-B
				4 (yellow)	RXD/485-A	RS232, input; or 485-A

G50 3G/4G Router has single module dual SIM version, supports dual-link backup.



Network diagram