

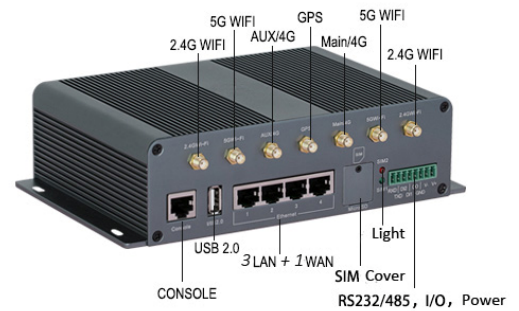
# G90-FT2T multimode 4G broadband Router Spec

## Introduction

G90-FT2T multimode 4G broadband Router is a kind of internet of things wireless communication router. It uses 5 modes 13 bands(TDD/TDScdma/FDD/WCDMA/GSM) or 7 modes 15 bands(TDD/TDScdma/FDD/WCDMA/GSM/EVDO/CDMA 1X) mobile broadband network, to provide convenient and high speed network transmission function.

This series of product uses industrial grade ARM dual-core communication processor, and embedded real-time operation system as software supporting platform. It provides safe, high speed, stable 3G/4G wireless network, and provides 4 gigabit Ethernet, RS-485/232 and 2.4G/5G 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 ARM dual-core processor
- Support low power consumption, include sleep mode, timing online and offline mode, timing switch on and off mode
- Use plate metal CRS shell, with good heat dissipation
- Power supply: +7.5V~32V DC
- Degree of protection: IP34(can be extended to IP51)

### Network characteristic

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

### Stability

- Soft and hardware watchdog and multilevel link detection, with the capability of fault automatic diagnosis and automatic recovery, to ensure device working on stable and safe way
- Multiple-mechanisms of equipment self-checking, to ensure link unimpeded and alarming
- ESD protection for each port, to prevent static shock
- Wireless network signal indicator light(NET)

### Remote management

- Remote parameter configuration
- Remote parameter backup
- Remote reboot and log query
- Remote upgrading
- Remote online monitoring

**Functions**

- Support 4G(FDD and TDD) LTE network, down compatible for all kinds of 3G network
- Support 4x gigabit Ethernet, provide RS-232 / RS-485
- Support WIFI(IEEE802.11n / 802.11ac)
- Support wire and wireless backup
- Support hardware WDT, provide anti-log off mechanism to ensure data terminal online forever
- Support PPTP, L2TP, GRE etc. multiple VPN
- Support SNMP management protocol
- Support Wi-Fi forced AD pushing function
- Support DHCP, DDNS, firewall, NAT and DMZ etc.
- Support ICMP, TCP, UDP, Telnet, FTP, HTTP, HTTPS etc.
- SIM/UIM Card shed protection design

**Extended functions**

- Single mode dual SIM 【optional】
- GPS/Beidou orientation 【optional】
- Built-in storage extension, 8GB-128GB 【optional】
- Built-in 4Gb Nand Flash storage

## Specification

**Wireless**

Wireless module:	Industrial grade
Bands:	FDD-LTE (Band1 / 2 / 3 / 4 / 5 / 7 / 8 / 20) / (Band2 / 4 / 5 / 13 / 17 / 25 / 26) TDD-LTE (Band38 / 39 / 40 / 41), TD-Scdma (Band34 / 39) HSPA (900 / 2100MHz) / GSM (850 / 900 / 1800 / 1900MHz) EV-DO&CDMA 1X (800MHz)
Theory bandwidth:	FDD: 100 / 50Mbps , TDD:61 / 18Mbps
Transmitted power:	<24dBm
Consumption:	data<320mA/12V; idle <180mA/12V
Receive sensitivity:	<-109dBm

**WIFI**

Bandwidth:	IEEE802.11n/802.11ac standard, 300Mbps / 833Mbps 【optional】
Security encryption:	WEP, WPA, WPA2, WPS 【optional】
Transmitted power:	16-17dBm (11g) , 18-20dBm (11b) 15dBm (11n)
Receive sensitivity:	<-72dBm@54Mbps

**Interface**

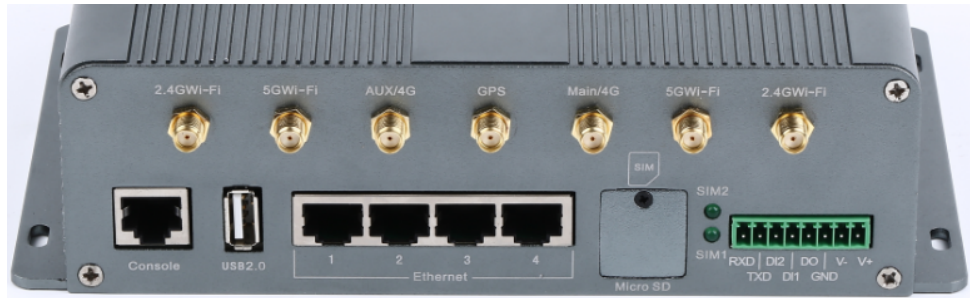
LAN:	4x Gigabit Ethernet(RJ45 port), self-adaption MDI/MDIX, built-in electromagnetic isolation protection
Console:	1x Console port
Industrial interface:	1x RS485/RS232 port, apply to the collecting equipment which comes with RS485/232 interface
Indicator light:	4 x “LAN”, “2.4G WLAN”, “5G WLAN”, “NET”(red: bad; yellow: normal; green: good) , “SYS”, “PWR”
Antenna interface:	7x SMA interface(4G MIMO; 2.4G Wi-Fi x 2; 5.8G Wi-Fi x 2; GPS/BD; Main) , 50ohm
SIM/UIM interface:	SIM/UIM card with shed protection design, 1.8V/3V automatic detection
Power interface:	7.5V~32V, terminals interface, no-polarity
Reset:	Parameters can be restored to the factory
USB:	USB2.0, used for external data storage or system upgrading
GPIO:	2x GPIO input signal detection and 1x GPIO output instruction

**G90 interface graph**

Front:



Back:



**Power supply**

- Standard power: DC 12V/2A, non-polarity

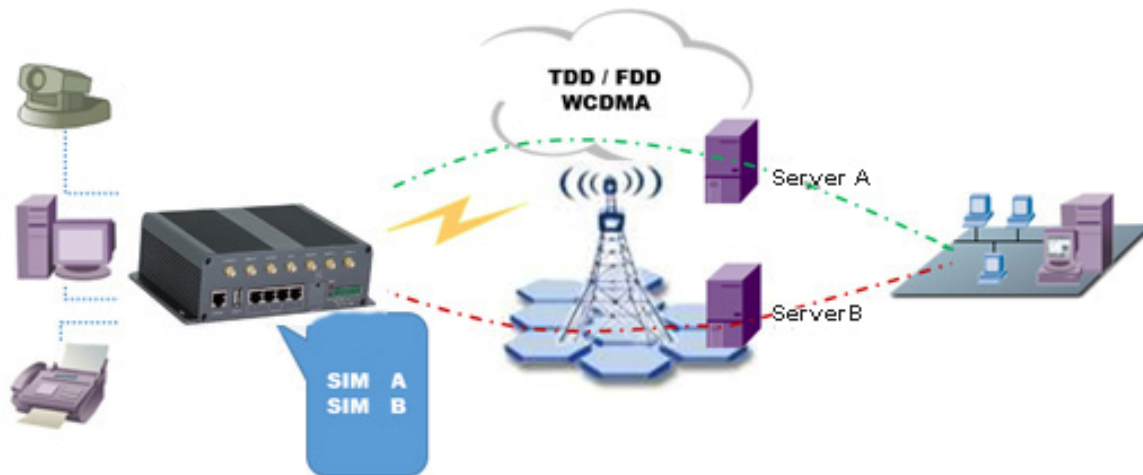
**Appearance**

- Shell: aluminum profiles
- Dimension: 220×150×45mm
- Weight: about 600g

**Others**

- CPU: ARM Cortex A9 Dual Core – 800MHz
- Flash/RAM: 32MB /128MB DDR2
- NAND Flash: 512MB
- Working temperature: -30~+75°C
- Storage temperature: -40~+85°C
- Relative humidity: < 95% non condensing

**Technical graph**

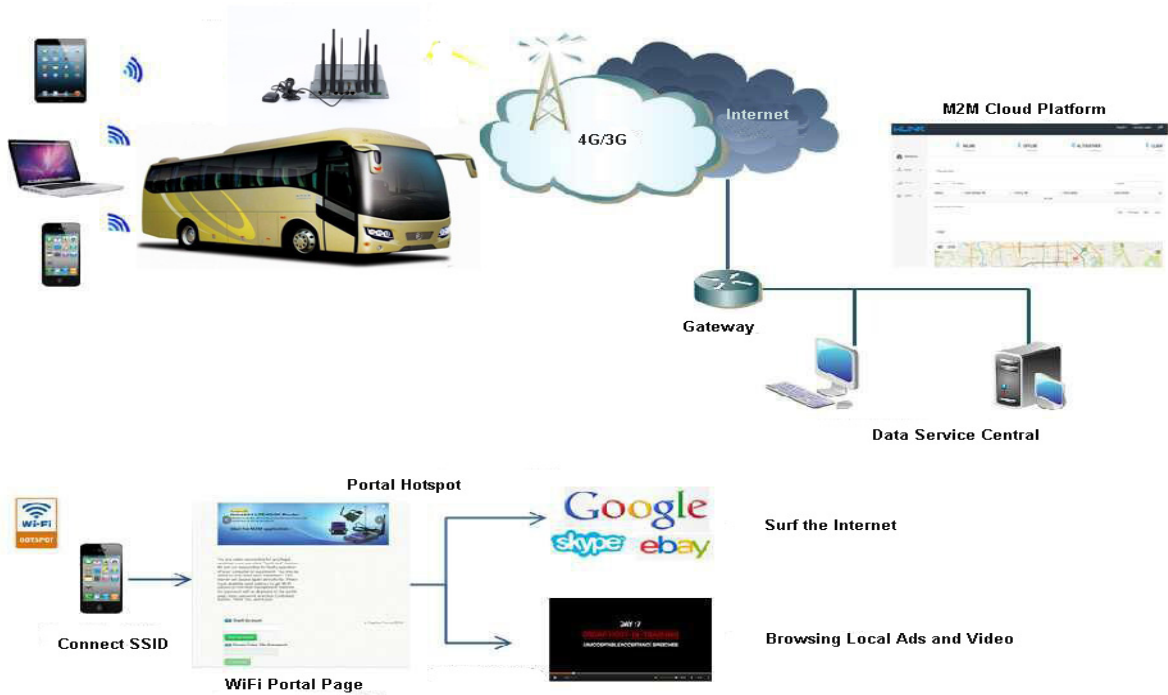


**Add: 5 modes 13 bands single mode dual SIM version**

G90-FT2T-D router support 3 modes 13 bands and single mode dual SIM. It is suitable for the environment operated by different operators with the same network type, for the purpose of double-link backup.

5 modes: TDD-LTE / FDD-LTE / TD-Scdma / WCDMA / GSM

13 bands: TDD(Band38/39/40/41), FDD(Band1/3/5), TD-Scdma(Band34/39), WCDMA(Band1/5) and GSM Band4



**Product list**

G90	Standard	FDD	Single mode+dual SIM	WIFI enhance	GPS
WAN	○	○	○	○	○
LAN1-4	●	●	●	●	●
802.11n Wi-Fi	○	○	○	●	○
802.11ac Wi-Fi	○	○	○	●	○
HSPA+	○	○	●	○	○
EV-DO	○	○	○	●	○
TD-Scdma	○	○	○	○	○
FDD-LTE	●	●	●	●	●
TDD-LTE	●	○	●	●	●
GPS	○	○	○	○	●
RS232	●	●	●	●	●
RS485	○	○	○	○	○
Single Card	●	●	○	○	○
Double Card	○	○	●	●	●
Storage (8GB~128GB)	○	○	○	○	○
<b>Refer NO.</b>	<b>G90-FT2T</b>	<b>G90-FA2T</b>	<b>G90-FT2T-D</b>	<b>G90-FT2T-W</b>	<b>G90-FT2T-G</b>