



## Industrial 4G Router

ZXF0251

### Introduction

ZXF0251 is an industrial cellular router with embedded intelligent software features that are designed for multifarious M2M/IoT applications. Supporting global WCDMA and 4G LTE, ZXF0251 provides drop-in connectivity for operators and makes a giant leap in maximizing uptime.

Adopting high-performance and low-power consumption industrial grade CPU and wireless module, ZXF0251 is capable of providing wire-speed network with low power consumption small package to ensure the extremely safe and reliable



#### Industrial-grade Design

- ▶ High performance industrial-grade wireless communication module
- ▶ High performance industrial grade 32-bit MIPS processor
- ▶ Use plate metal CRS shell, heat dissipation is good
- ▶ Low power consumption and low heat generation
- ▶ Support Desktop or Wall mount installation Wide
- ▶ power input range:7.5V~36V DC



#### Stability&Reliability

- ▶ Hardware and Software WDT design
- ▶ Built-in 1.5KV electromagnetic isolation protection for Ethernet interface
- ▶ Always keep online, reboot automatically if disconnected to ensure continual connection
- ▶ RS232 interface power and data isolation Remote online



#### Cloud platform remote management

- ▶ monitoring
- ▶ Parameter configuration
- ▶ Equipment upgrade or reboot
- ▶ log query, parameter backup

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## High Performance

- ▶ 7.5V~36V DC
- ▶ Multiple WAN connection methods, include Static IP/DHCP/PPPOE
- ▶ Support VPN client&server: PPTP, L2TP,
- ▶ Support DHCP, DDNS, Firewall, NAT, and DMZ host
- ▶ Support SNMP , ICMP , TCP /IP, UDP , Telnet , SSH , FTP , HTTP , HTTPS network
- ▶ Support scheduled reboot
- ▶ 128MB RAM
- ▶ Relay Serial port offer Data Transfer Unit(DTU) function
- ▶ optional: Modbus TCP/Modbus RTU/MQTT industry
- ▶ Protocol Support APN network access
- ▶ WIFI Support 802.11b/g/n.....

## Product Specification

### cellular Parameter

Wireless Module	Industrial-grade wireless communication module
Standard Frequency	Refer to the catalog(Global bands,customized. )
Theoretical Bandwidth	FDD LTE:150(DL)/50(UL)Mbps   FDD LTE:112(DL)/10(UL)Mbps HSPA+:5.76/21Mbps
Transmit Power	2.3W
Receiving Sensitivity	<-109dBm

### WIFI Parameter

Frequency	Support IEEE802.11b/g/n, 2.4G, support AP mode
Security Encryption	Support WEP, WPA, WPA2 and other encryption methods
Transmit Power	16-17dBm(11g),18-20dBm(11b),15dBm (11n)
Receiving Sensitivity	<-72dBm@54Mbps

### Hardware

CPU	Industrial-grade 32-bit MIPS processor
Memory	16MB Flash,128MB DDR2 RAM

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## Interfaces

WAN	1xEthernet interface,Auto MDI/MDIX, built-in 1.5KV electromagnetic isolation protection,can be converted to LAN
LAN	1xEthernet interface ( RJ45 ) ,Auto MDI/MDIX, built-in 1.5KV electromagnetic isolation protection
Serial Port	1xRS232
Indicators	"LAN1", " LAN2", "SYS", "LINK" four indicating lamps, the "LINK" is a color indicator (red: network signal is poor; Orange: network signal is general; green: network signal is good)
Antenna	3-4 standard SMA antenna interface (WIFI and 3G/4G), 50ΩSMA, GPS(optional)
SIM/UIM	Standard drawer type user card interface ,Support 1.8V/3V SIM/UIM card built-in 15KV ESD protection

## Power

Reset Button	Restore the router's parameter configuration to factory values
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## Power Supply

Standard	DC12V/1A
Range	7.5V-32V
Consumption	2.3W

## Physical Characteristics

Housing	Metal
Dimensions	100*82*27mm
Weight	About 700g
Mounting	Desktop or wall or Din-rail mounting(require additional purchase of mounting accessories)

## Environmental

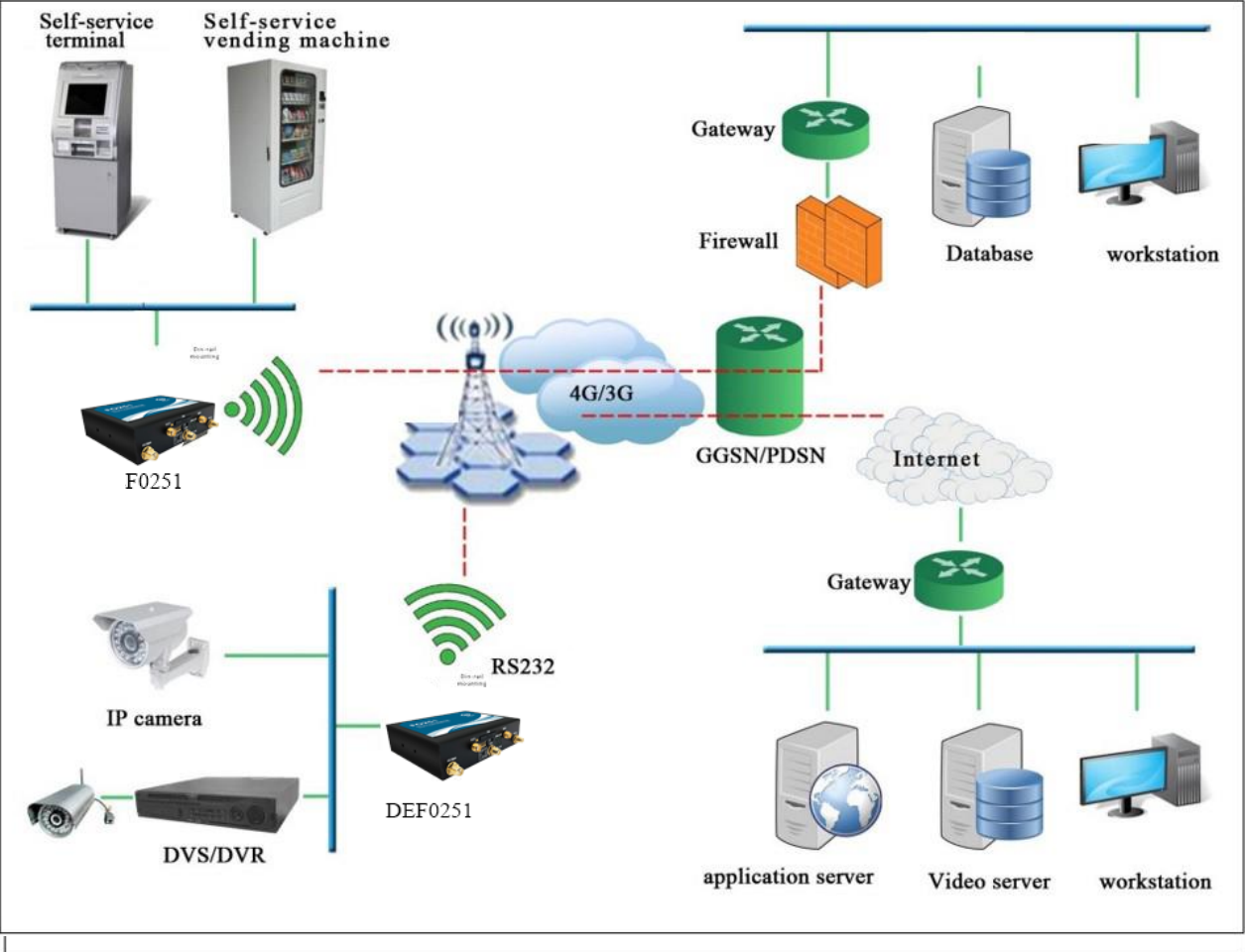
Operating Temperature	-30~+70°C
Storage Temperature	-40~+80°C
Relative Humidity	0% to 95% (No condensation)



# Industrial 4G Router



## Network Diagram



# OUTDOOR HIGH-SPEED NETWORKING INDUSTRIAL WIRELESS ROUTER

WLAN/LAN, wired /4G intelligent switching, 4G networking



Powerful function, quality assurance



**5G HIGH-SPEED NETWORKING**

Networking



**5G DUAL GIGABIT PORT**

5g To gigabit port



**RS232S+485 SERIAL PORT**

Serial transmission



**INDUSTRIAL STANDARD**

Industrial



**SMALL VOLUME FOR EASY INSTALLATION**

Small volume



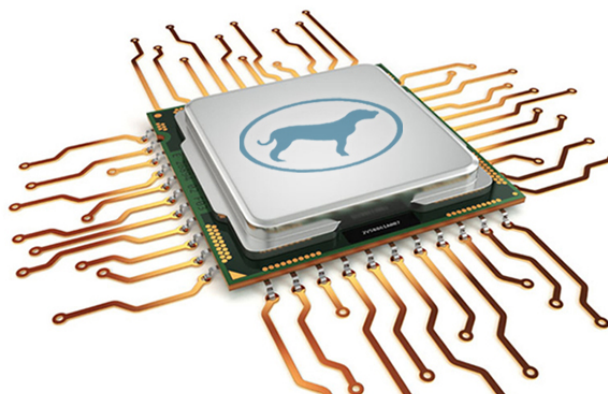
**PLUG AND PLAY**

Plug and play

## INTELLIGENT HARDWARE AND SOFTWARE WATCHDOG DESIGN

INTELLIGENCE

7X24h stable operation



# SERIAL PORT

INTELLIGENCE

## Communication server

Supports serial client/server

Supports RS232/RS485



## 接口信息

INTELLIGENCE

## INTERFACE INFORMATION



Power interface LAN1(WAN) LAN2

# Industrial 4G Router DEF0251



## Catalog

Series	Model	Fruquency Band	Applicable Countries	Specification
DEF 0251	ZXF0251 S (Wifi) DEF0250 S (No Wifi)	TDD-LTE:B38/B39/B40/B41 FDD-LTE:B1/B3/B5/B8 UMTS:B1/B8 TD-SCDMA:B34/B39 EVDO:BC0 CDMA1x:BC0 GSM:B3/B8 GSM:B2/B3/B5/B8	Mainland China	WiFi:IEEE802.11b/g/n Frequency 2.4Ghz EthernetPort:RJ45,1x10/100Mbps WAN+1x10/100Mbps LAN Serial Port:RS232+RS485(DTU) 1 Sim card slot(Nano card) Support VPN ptocol SupportDHCP,DDNS,firewall,NAT,DMZ Support strong WDT, self-recovery, schedule reboot function, keeping always online Antenna:1x3dBi 4G Antenna(SMA),1x3dBi WiFi Atenna
	ZXF0251 E (Wifi) DEF0250 E (No Wifi)	LTE FDD: B1/B3/B7/B8/B20/B28A LTE TDD: B38/B40/B41 WCDMA: B1/B8 GSM: B3/B8	Europe/Middle Asia/Africa/Korea/Thailand/India	
	ZXF0251 N (Wifi) DEF0250 N (No Wifi)	1.FDD:B2/4/5/12/13/17/B18/B25/26 TDD:B41 WCDMA:B2/4/5 EVDO:BC0/1 GSM:850/1900 2.LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5	North America	
	ZXF0251 A (Wifi) DEF0250 A (No Wifi)	FDD:B1/3/5/7/8/28 TDD:B40 WCDMA:B1/5/8 GSM:850/900/1800/1900	Australia/New Zealand/Taiwan	
	ZXF0251 V (Wifi) DEF0250 V (No Wifi)	FDD:B2/4/5/7/8/28 TDD:B40 WCDMA:B2/5/8 GSM:850/900/1800/1900	Latin America	
	ZXF0251 G (Wifi) DEF0250 G (No Wifi)	LTE-TDD: B34/B38/B39/B40/B41 LTEFDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66 UMTS/HSPA+ :B1/B2/B4/B5/B6/B8/B19 GSM/GPRS/EDGE:850/900/1800/1900MHz	Globe	