4G

3G

Din-Rail

Remote Management

Cloud Platform

RS232

RS485

VPN

Introduction

YF310 Industrial Router is a kind of cellular terminal device that provides large data transfer function by public GPRS/CDMA/WCDMA/EVDO/LTE network. It adopts high-powered industrial 32-bits CPU and embedded real time operating system. It supports RS232/RS485 and Ethernet port that can conveniently and transparently connect one device to a cellular network, allowing you to connect to your existing serial and Ethernet devices with only basic configuration. The product has been widely used in the M2M/IoT industry.

Industrial-grade Design

▶ High-performance industrial-grade CPU
▶ High-performance industrial-grade wireless communication module
▶ Support low-consumption mode, scheduled power-on/power-off mode (Optional)
▶ Metal casing, IP30 protection level, suitable for most industrial control applications.
▶ Wide range power input (DC 5~36V)

Stability & Reliability

▶ SIM/UIM card slot with built-in 15KV ESD
▶ Ethernet interface with built-in 15KV ESD
▶ RS232/RS485 with built-in 15KV ESD
▶ Multiple protection mechanism to ensure system stability, always keeping online
▶ Auto recovery mechanism, including online detect and auto redial
▶ Support hardware and software WDT

Standard & Convenience

▶ Support standard RS232 (or RS485/RS422) and Ethernet port
▶ Provide management software for remote management
▶ Support intellectual mode, automatically enter transmission status after power-on
▶ Easy to use and flexible, has multiple working modes
▶ Convenient configuration and maintenance interface (WEB or CLI)
▶ DIN-Rail mounting, wall mounting or desktop

Industrial 4G Router YF310 Series

High Performance

- ▶ Support 3G/HSPA/4G WAN access methods.
- ▶ Support NTP, RTC embedded
- ▶ Support APN/VPDN
- ▶ Support multiple DDNS provider service
- ▶ Support remote management
- ▶ Support DHCP server/client, NAT, DMZ host, Qos.
- ▶ Support firewall, URL block, traffic statistics, real time link speed statistics, etc.
- ▶ Support VPN server (PPTP, L2TP, OPENVPN,IPSEC and GRE)
- ▶ Support VPN Client (PPTP, L2TP, OPENVPN,IPSEC and GRE)
- ▶ Support SMS, phone ringing, serial data, network data online/offline trigger modes
- ▶ Support mulitiple DDNS provider service
- ▶ Full protocol support, such as TCP/IP, UDP, ICMP, SMTP, HTTP, POP3, OICQ, TELNET, FTP, SNMP, SSHD.
- ▶ Schedule Reboot, Schedule Online and Offline, etc.

Product Specification

Cellular Specification	
Items	**Contents**
Standard and Band	LTE FDD: B1/B3/B5/B7/B8/B20/B28 B1/B2/B3/B4/B5/B7/B8/B28 (Optional), B2/B4/B5/B12/B13/B17/B66/B71 (Optional) LTE TDD: B38/B39/B40/B41 HSPA+/HSUPA/HSDPA/WCDMA/UMTS 2100/1900/900/850MHz EV-DO: BC0 CDMA 1x: BC0 EDGE/GPRS/GSM 850/900/1800/1900MHz
Bandwidth	FDD-LTE: Downstream rate 150Mbps, uplink rate 50Mbps TD-LTE: Downstream rate 130Mbps, uplink rate 35Mbps DC-HSPA+: Downstream rate 42Mbps, uplink rate 5.76 Mbps HSPA+: Downstream rate 21Mbps, uplink rate 5.76 Mbps UMTS: 384Kbps
Transmit Power	< 23dBm
Sensitivity	< -93.3dBm

Industrial 4G Router YF310 Series

Hardware System	
Items	**Contents**
CPU	Industrial-grade CPU
Flash	16MB(Extendable to 64MB)
DDR2	128MB

Interfaces	
Items	**Contents**
LAN Interface	1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD
Serial	1 x RS232/RS485 serial interface with built-in 15KV ESD Data bits:5, 6, 7, 8 bits Stop bits:1, 1.5 (optional), 2 bits Error detection: none, even parity, odd parity, SPACE (optional) and MARK (optional) Serial Port Rate: 2400~115200bits/s
LED Indicators	"PWR", "SYS", "SIM", "Online", "ETH", "Signal Strength"
Antenna Interface	Cellular: 2 * Standard SMA female antenna interface, characteristic impedance: 50 Ω
SIM/UIM Slot	Standard SIM card slot, support 1.8V/3V SIM/UIM card, built-in 15KV ESD
Power Interface	Standard 3-PIN power jack, reverse-voltage and overvoltage protection
Reset Button	Restore the router to its original factory default settings

Note: There may be differences between models of accessories and interfaces, actual products shall prevail.
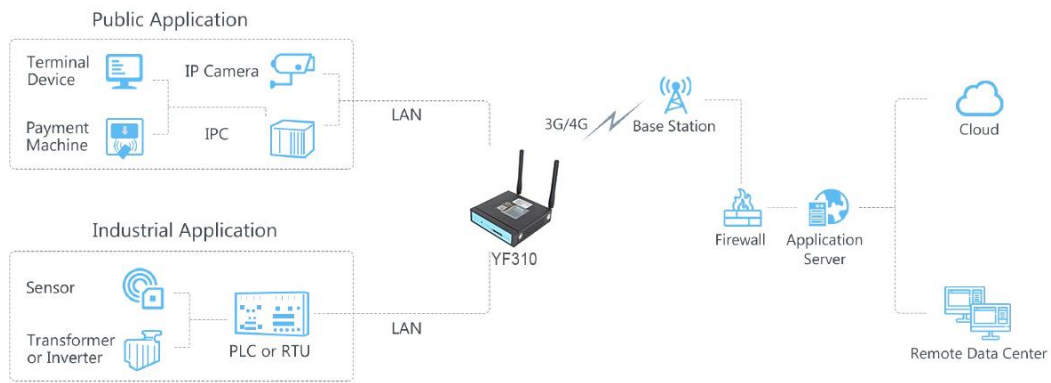
Industrial 4G Router YF310 Series

Power	
Items	**Contents**
Input Voltage	DC 12V/1.5A
Accepted Range	DC 5~36V

Power Consumption	
Work Mode	**Consumption**
Standby	103 ~ 115mA@12VDC
Communicating	278~305mA@12VDC
Timing shutdown	3.15~3.70mA@12DVC

Physical Properties	
Items	**Contents**
Casing	Metal casing, IP30 protection level, suitable for most industrial control applications.
Dimensions	100x97x25 mm (excluding antennas and mountings)
Weight	320g

Others	
Items	**Contents**
Operating Temperature	-35~+75℃
Storage Temperature	-40~+85℃
Relative Humidity	95% (non-condensing)

Industrial 4G Router YF310 Series

Topology

Dimension

Order Information

Models	Description	LAN	RS232/RS485	Cellular Antennas	SIM/UIM
YF310-L	Industrial LTE Router	1	1	2	1