Industrial 4G Router

YF325

Introduction

YF325 is a cost-effective industrial cellular router with embedded intelligent features that are designed for M2M/IoT applications. It is using public cellular network LTE/ WCDMA/EVDO/GPRS to provide long distance, wireless and large data transmission function for users. The product has been widely used in the M2M industry of the IoT industrial chain, such as smart grid, intelligent transportation, smart manufacturing, smart home, and finance.

Industrial-grade Design

- High-performance industrial-grade CPU
- High-performance industrial-grade wireless communication module
- Metal casing, IP30 protection level, suitable for most industrial control applications.
- Wide range power input (DC 5~36V)

Stability & Reliability

- Multiple protection mechanism to ensure system stability, always keeping online
- Ethernet interface with built-in 15KV ESD
- RS232/RS485 with built-in 15KV ESD
- SIM/UIM card slot with built-in 15KV ESD
- Power interface with built-in phase-reversal and over-voltage protection
- Antenna interface with lightning protection (optional)

Standard & Convenience

- Standard RS232/RS485, ethernet and WIFI interface, can be connected to the serial device, ethernet devices and WIFI devices
- Standard wired WAN interface (support standard PPPOE protocol), Can be connected to ADSL devices directly
- Intelligent data terminal, automatically enter transmission status after power-on
- Powerful central management software for easy device management (optional)
- Easy to use and flexible, has multiple working modes
- Convenient system configuration and maintenance interface (including local and remote WEB or CLI access)

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High Performance

- Support dual-link intelligent switching function between primary card and backup card
- Support various WAN connection type, including static IP, DHCP-4G, PPPOE, 3G/UMTS/4G/LTE
- Support remote management, SYSLOG, SNMP, TELNET, SSHD, HTTPS, etc.
- Support upgrade software from the local and remote maintenance
- Support various network protocols including TCP/IP, UDP, FTP (optional), HTTP, etc.
- Support SPI firewall, access control, URL filtering, etc.
- Support 802.11 b / g / n WIFI network, support WIFI AP, AP Client, Bridge and various working mode (optional)
- Support VPN Client (PPTP/L2TP/OPENVPN/IPSEC/GRE)
- Support VPN Server (PPTP/L2TP/OPENVPN/IPSEC/GRE)
- Support DHCP server and client, firewall, NAT, DMZ host , URL block, QOS, traffic, statistics, real time link speed statistics etc.
- 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/B12/B17/B28/B66 (Optional), B2/B4/B5/B12/B13/B17/B66/B71 (Optional) LTE TDD: B38/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	LTE CAT4: 150Mbps(DL), 50Mbps(UL) LTE CAT1：10Mbps(DL)，5Mbps(UL) 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	< -97dBm

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WIFI Specification

Items	Contents
Standard and Band	IEEE802.11b/g/n
Bandwidth	IEEE802.11b/g: 54Mbps (Maximum) IEEE802.11n: 144Mbps (Maximum)
Security	Support WEP, WPA, WPA2 encrypt methods, optional WPS function
Transmit Power	15 ± 2dBm
Sensitivity	< -72dBm @ 54Mbps

Hardware System

Items	Contents
CPU	Industrial-grade CPU
Flash	16MB
DDR2	128MB

Interfaces

Items	Contents
WAN Interface	1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD
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”, “Online”, “LAN”, “WAN/LAN”, “WIFI”
Antenna Interface	Cellular: Standard SMA female antenna interface, characteristic impedance: 50 Ω WIFI: Standard SMA male antenna interface, characteristic impedance: 50 Ω
SIM/UIM Slot	Standard SIM card slot, support 1.8V/3V SIM/UIM card, built-in 15KV ESD, support dual-SIM card (optional)
Power Interface	Standard 3.5mm terminal block interface, with built-in phase-reversal and over-voltage protection
Reset Button	Can reset router’s configuration to default factory setting by this button

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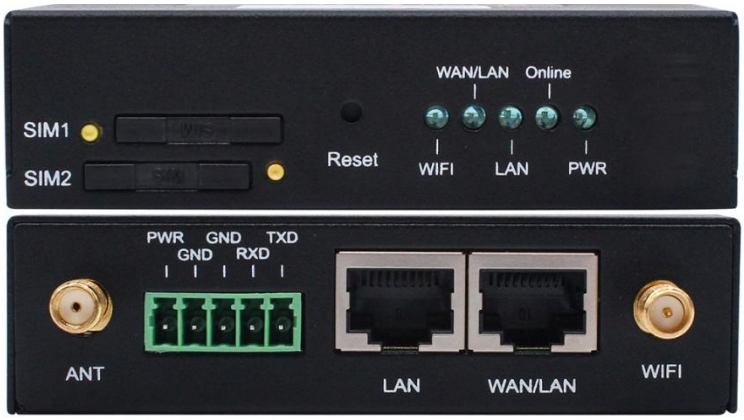

Note: There may be differences between models of accessories and interfaces, actual products shall prevail.

Power	
Items	**Contents**
Input Voltage	DC 12V/1.5A
Accepted Range	DC 5~36V
Power Consumption	
Work Mode	**Consumption**
Standby	95~135mA@12VDC
Communicating	165~220mA@12VDC
Physical Properties	
Items	**Contents**
Casing	Metal casing, IP30 protection level, suitable for most industrial control applications.
Dimensions	93x89x24mm (excluding antennas and mountings)
Weight	250g
Others	
Items	**Contents**
Operating Temperature	-35~+75℃
Storage Temperature	-40~+85℃
Relative Humidity	95% (non-condensing)

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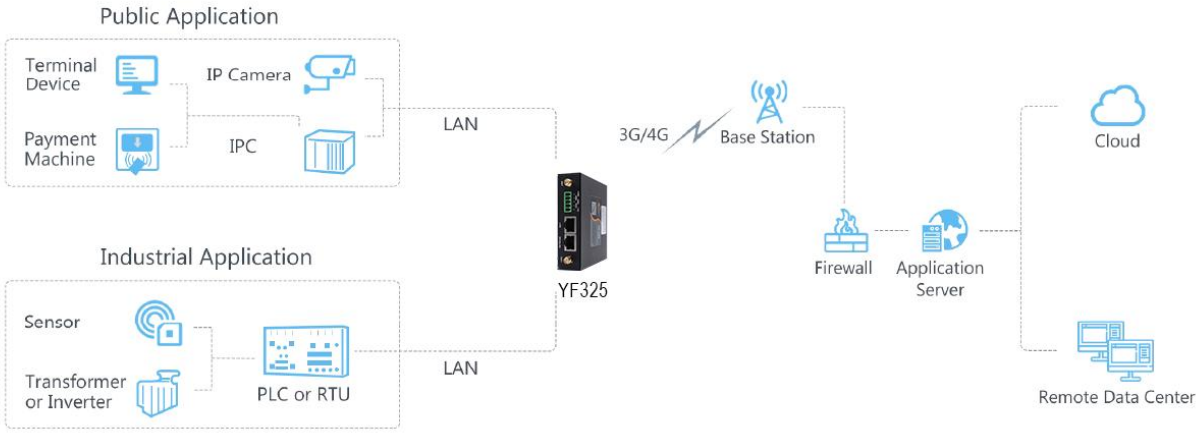
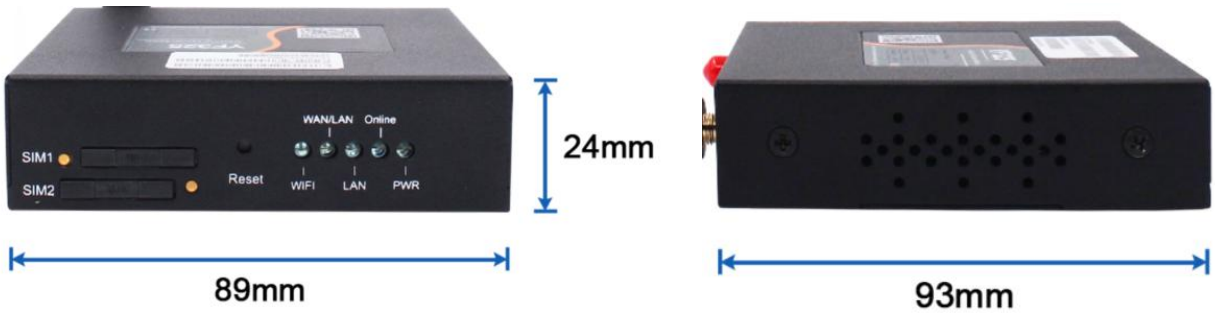
Topology



Dimension



Order Information

Models	Description	Category	WAN/ LAN	LAN	Cellular Antenna(s)	WIFI Antenna	SIM/UIM
YF325-L	Industrial LTE Router	CAT4	1	1	1	1	1
YF325-L-SMA3	Industrial LTE Router	CAT4	1	1	2	1	1
YF325-L-SIM2	Industrial LTE Router	CAT4	1	1	1	1	2
YF325-L-SIM2-SMA3	Industrial LTE Router	CAT4	1	1	2	1	2
YF325-L1	Industrial LTE Router	CAT1	1	1	1	1	1
YF325-L1-SIM2	Industrial LTE Router	CAT1	1	1	1	1	2

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