

# 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.



- 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)



- 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 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)

# Industrial 4G Router YF325 Series



- 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
Bandwidth	EDGE/GPRS/GSM 850/900/1800/1900MHz
	LTE CAT4: 150Mbps(DL), 50Mbps(UL)
	LTE CAT1 : 10Mbps(DL) , 5Mbps(UL)
Transmit Power	DC-HSPA+: Downstream rate 42Mbps, uplink rate 5.76 Mbps
Sensitivity	HSPA+: Downstream rate 21Mbps, uplink rate 5.76 Mbps
	UMTS: 384Kbps
	< 23dBm
	< -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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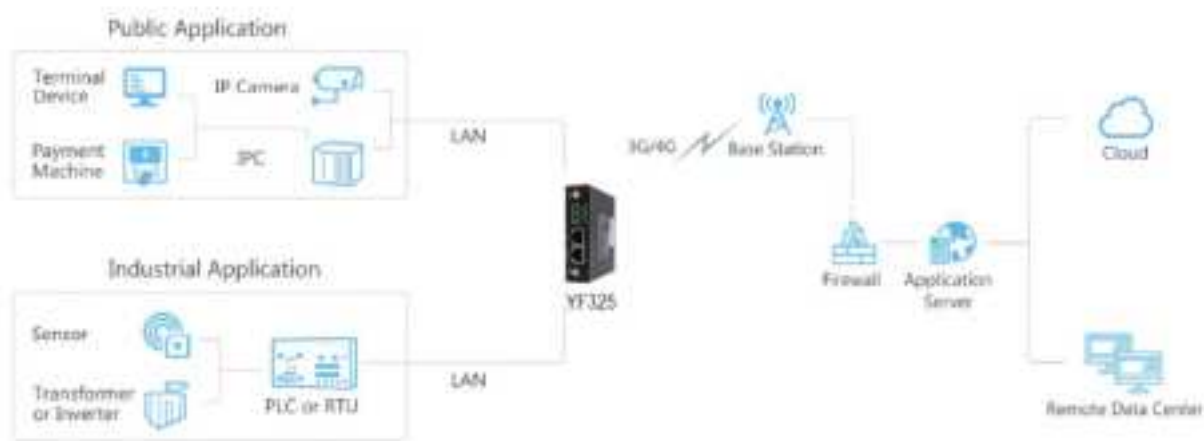
Note: There may be differences between models of accessories and interfaces, actual products shall prevail.

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)

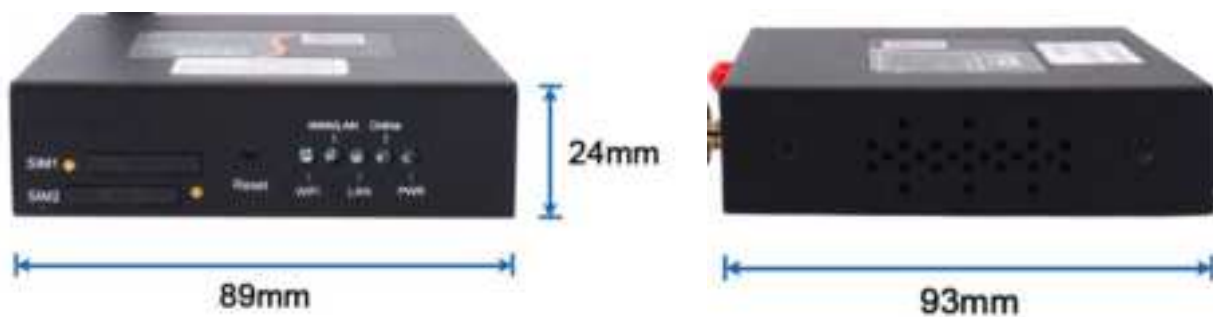
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## Topology



## 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

### **FCC Warning**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.