4G Industrial Router

F3X36Q

IP	192.168.1.1
SSID 2.4G	Four-Faith
Username	admin
Password	admin
Operating Voltage	+5V-36VDC

VPN

Remote Management

3G

4G

RS232

RS485

Dual-SIM

WIFI

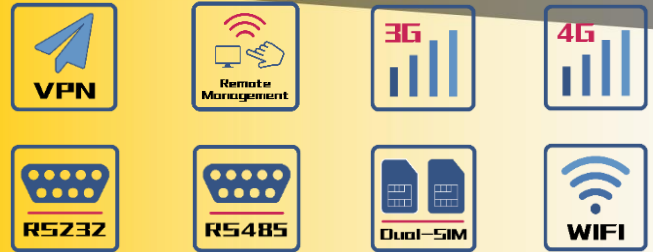## Introduction

F3X36Q Industrial Router is an IoT wireless communication router. It is using public cellular network GPRS/CDMA/WCDMA/EVDO/LTE to provide long distance, wireless and large data transmission function for users. The product uses the high-performance industrial-grade 32-bit CPU and wireless module, with the embedded real-time operating system as the software support platform. It provides a RS232 (or RS485), 4 Ethernet LAN, 1 Ethernet WAN and a WIFI, can be connected to the serial device, Ethernet devices and WIFI devices at the same time, achieve data pass-through function.

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

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High Performance

▶ Support dual-link intelligent switching function between primary card and backup card

▶ Support IP, DHCP, PPPOE, 2.5G/3G/4G

▶ Support LTE and wired WAN dual- link intelligent switching backup function (Optional)

▶ Support VPN client (PPTP, L2TP, IPSEC, OPENVPN, GRE) (only for VPN version)

▶ Support remote management, SYSLOG, SNMP, TELNET, SSHD, HTTPS, etc.

▶ Support upgrade software from the local and remote maintenance

▶ Support NTP

▶ Support various DDNS

▶ Support MAC address clone, PPPoE server

▶ Support 802.11 b / g / n WIFI network

▶ Support WIFI AP, AP Client, Bridge and various working mode (Optional)

▶ WIFI support variety types of encryption such as WEP, WPA and WPA2.

▶ Support SMS, phone ringing, serial data, network data online/offline trigger modes

▶ Support SPI firewall, VPN traversal, access control, URL filtering, etc.

▶ Support various network protocols including TCP/IP, UDP, FTP (Optional), HTTP, etc.
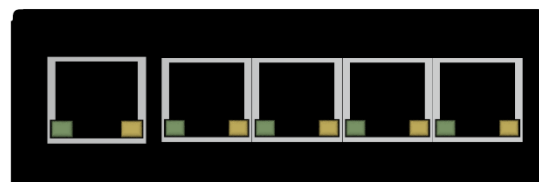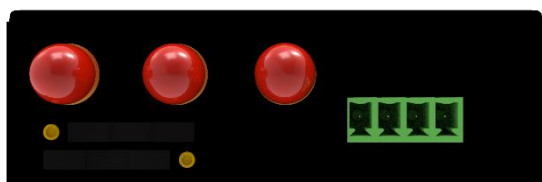
▶ Support MAC address filtering.

Product Specification

Cellular Specification	
Items	**Contents**
Cellular Module	Industrial grade wireless module
Standard and Band	Support: FDD-LTE, TD-LTE, EVDO, WCDMA, TD-SCDMA, CDMA1X, GPRS/EDGE
Bandwidth	FDD-LTE: Downstream rate 150Mbps, uplink rate 50Mbps TD-LTE: Downstream rate 130Mbps, uplink rate 35Mbps TD-HSPA+: Downstream rate 4.2Mbps, uplink rate 2.2Mbps 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, 128MB(Optional)
DDR2	128MB

Interfaces

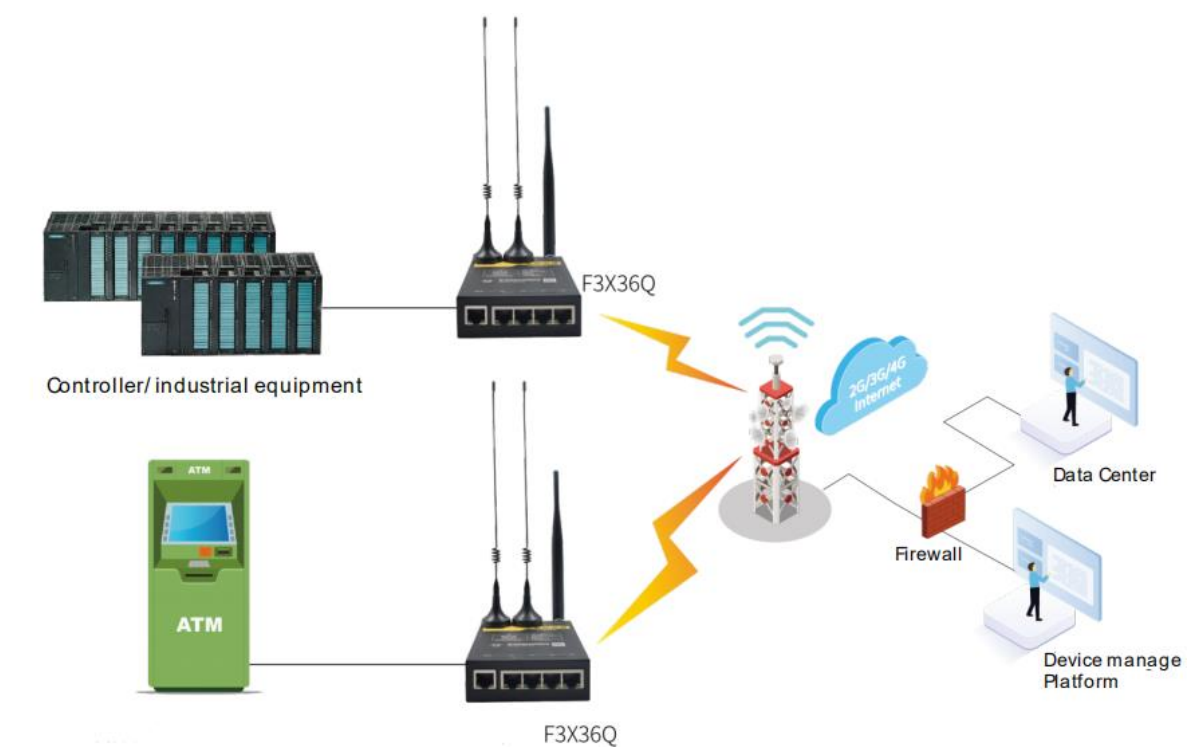| Items	Contents
WAN Interface	1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD
LAN Interface	4 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD
Serial	1 x RS232/485 serial interface with built-in 15KV ESD Data bits:5, 6, 7, 8 bits Stop bits:1, 1.5 (optional), 2 bits Error detection: none, even parity, odd parity, SPACE (Optional) and MARK (Optional) Serial Port Rate: 2400~115200bits/s
LED Indicators	"PWR", "Online", "WIFI"
Antenna Interface	Cellular: 2*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

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

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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
Sleep	<150uA@10.8VDC （<30uA@10.8VDC， close BLE module）

Physical Properties	
Items	**Contents**
Casing	Metal casing, IP30 protection level, suitable for most industrial control applications.
Dimensions	127x89.5x30mm (excluding antennas and mountings)
Weight	345g

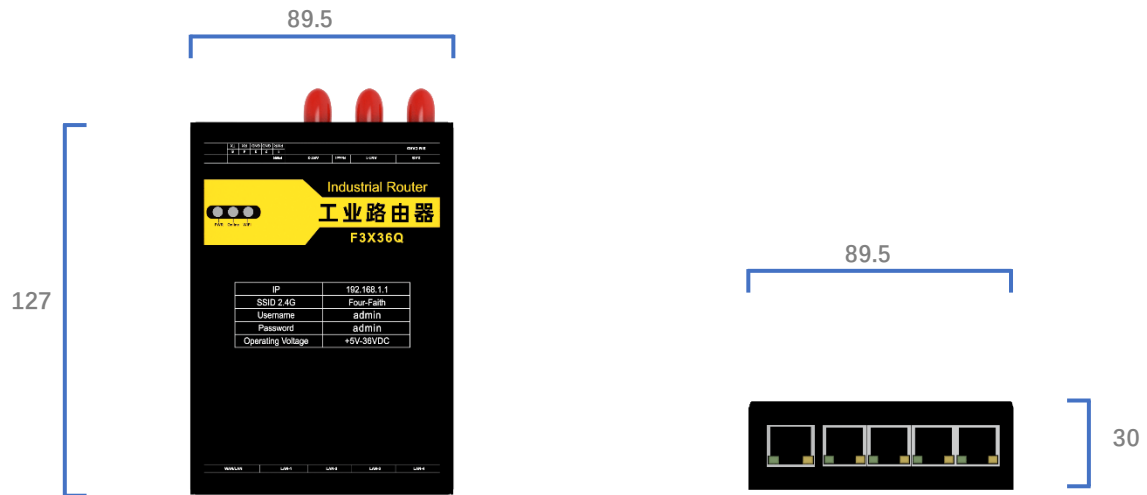| Others	
Items	**Contents**
Operating Temperature	-35~+75℃
Storage Temperature	-40~+85℃
Relative Humidity	95% (non-condensing)

Topology

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Dimension (mm)

Order Information

Models	Description	WAN	LAN	Cellular Antenna	WIFI Antenna	SIM/UIM
F3X36Q	LTE WIFI Industrial Router	1	4	2	1	1
F3X36Q-SIM2	LTE WIFI Industrial Router	1	4	2	1	2