

# F3X36Q Serial

## F3X36Q Industrial Router Specification

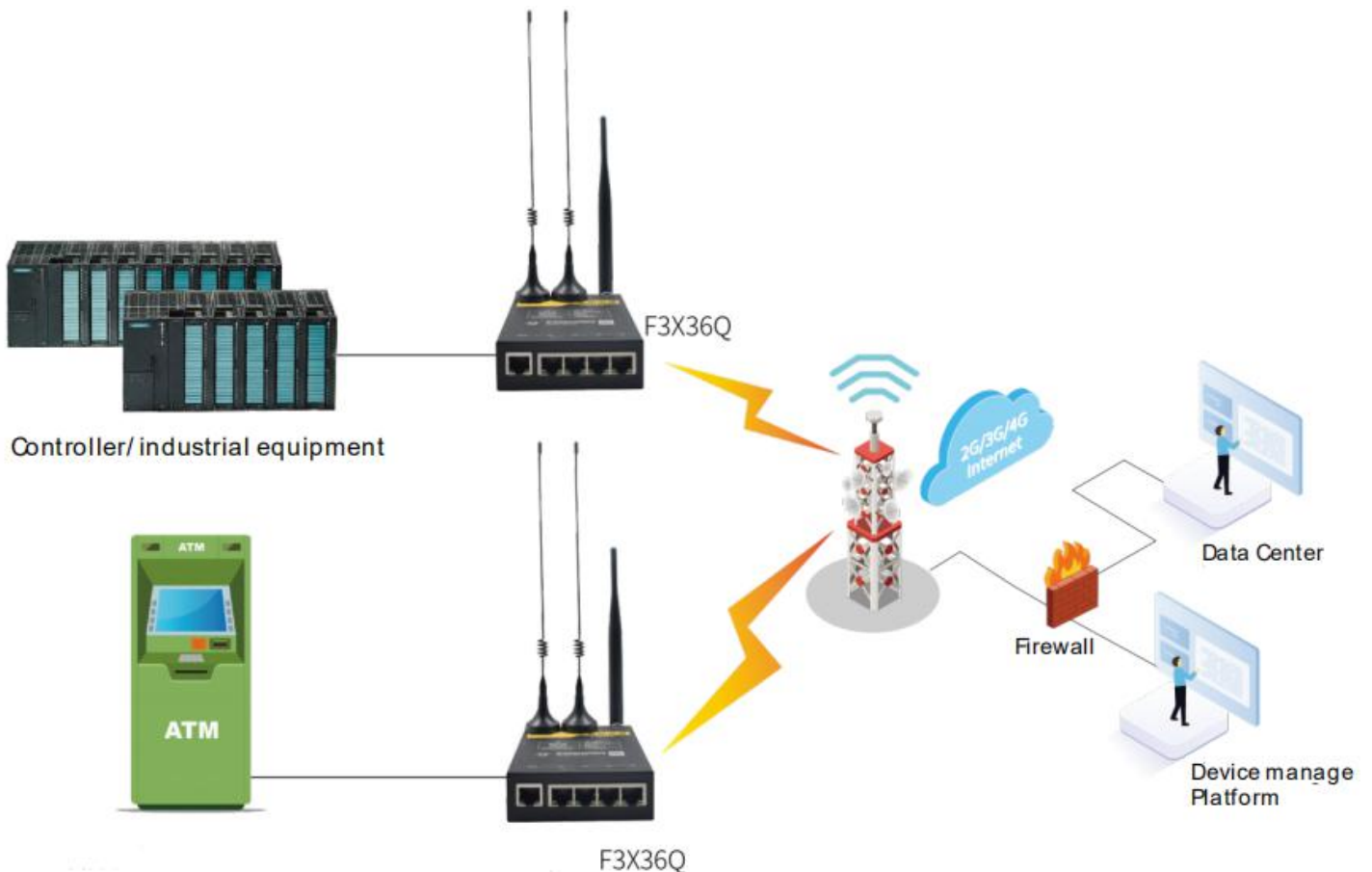


F3X36Q Industrial Router is an IoT wireless communication router. It is using public cellular network GPRS/CDMA/WCDMA/EVDO/LTE to provide long distance, wireless and large data transmission function for users.

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.

The product has been widely used in the M2M industry of the IoT industrial chain, such as smart grid, intelligent transportation, smart home, finance, mobile POS terminals, supply chain automation, industrial automation, intelligent building, fire protection, public safety, environmental protection, meteorology, digital medical, telemetry, agriculture, forestry, water, coal, petrochemical and other related fields.

### Topology



# Features

## 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)

## STABLE & RELIABLE

- ◆ 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 INTERFACE & EASY-TO-USE

- ◆ 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)

## POWERFUL FUNCTIONS

- ◆ Support dual-link intelligent switching function between primary card and backup card
- ◆ Support various WAN connection type, including static 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 MAC address filtering.
- ◆ Support various online/offline trigger modes, including SMS, phone ringing, serial data, network data to trigger.
- ◆ Support APN/VPDN
- ◆ Support multi-way DHCP server and DHCP client, DHCP bound with MAC address, DDNS, firewall, NAT, DMZ, QoS, traffic statistics, real-time transfer rate monitoring
- ◆ Support various network protocols including TCP/IP, UDP, FTP (optional), HTTP, etc.
- ◆ Support SPI firewall, VPN traversal, access control, URL filtering, etc.

## Product Specification

### Cellular Specification

Item	Content
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

### WIFI Specification

Item	Content
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

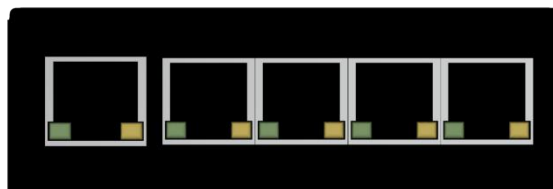
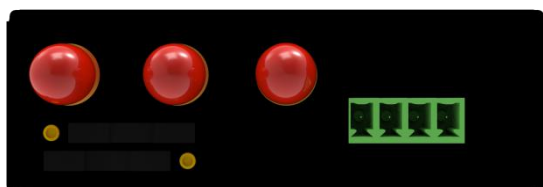
Item	Content
CPU	Industrial-grade CPU
FLASH	16MB

DDR2

128MB

## Interface

Item	Content
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 $\Omega$ WIFI: Standard SMA male antenna interface, characteristic impedance: 50 $\Omega$
SIM/UIM Slot	Standard SIM card slot, support 1.8V/3V SIM/UIM card, built-in 15KV ESD, support dual-SIM card option
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.

## Power Supply

Item	Content
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

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

## Others

Item	Content
------	---------

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

● **Order Information**

Model	Description	WAN	LAN	Cellular Antenna	WIFI Antenna	SIM/UIM
<b>F3X36Q</b>	LTE WIFI Industrial Router	1	4	2	1	1
<b>F3X36Q-SIM2</b>	LTE WIFI Industrial Router	1	4	2	1	2