

### 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.



- 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



Standard & Convenience

- 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



- 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**

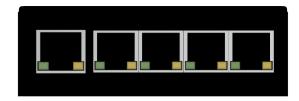
Cellular Specification				
Items	Contents			
Cellular Module	Industrial grade wireless module			
Standard and Band	Support: FDD-LTE, TD-LTE, EVDO, WCDMA, TD-SCDMA, CDMA1X, GPRS/EDGE			
	FDD-LTE: Downstream rate 150Mbps, uplink rate 50Mbps			
	TD-LTE: Downstream rate 130Mbps, uplink rate 35Mbps			
Bandwidth	TD-HSPA+: Downstream rate 4.2Mbps, uplink rate 2.2Mbps			
Bandwidth	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				
Items	Contents			
Standard and Band	IEEE802.11b/g/n			
Danduidth	IEEE802.11b/g: 54Mbps (Maximum)			
Bandwidth	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			
	1 x RS232/485 serial interface with built-in 15KV ESD			
	Data bits:5, 6, 7, 8 bits			
Serial	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			
	(Optional)			
Power Interface	Standard 3.5mm terminal block interface, with built-in phase-reversal and over-voltage protection			



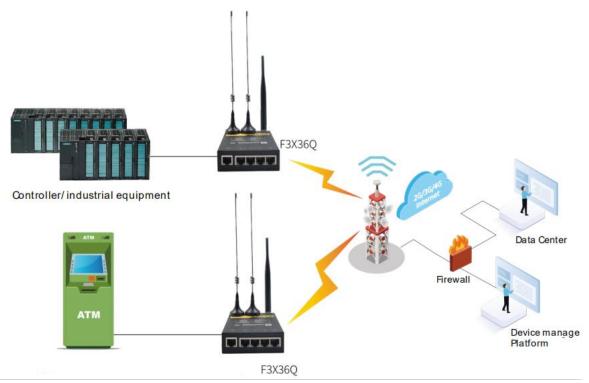


Note: There may be differences between models of accessories and interfaces, actual products shall prevail.



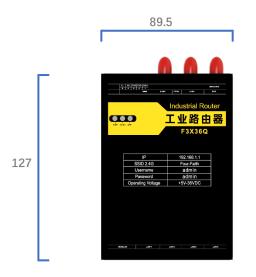
Power					
Items	Contents				
Input Voltage	DC 12V/1.5A				
Accepted Range	DC 5~36V				
Power Consumption					
Work Mode	Consumption				
Standby	95~135mA@12VDC				
Communicating	165~220mA@12VDC				
Sleep	<150uA@10.8VDC(<30uA@10.8VDC,close BLE module)				
Physical Properties					
Items	Contents				
Casing	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)				

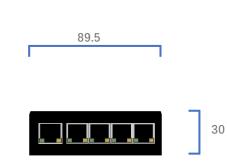
## Topology





## **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	



ЛЁГКОСТЬ, ЭФФЕКТИВНОСТЬ, СОВЕРШЕНСТВО

СЕТЕВЫЕ РЕШЕНИЯ В СФЕРЕ ИНТЕРНЕТА ВЕЩЕЙ (ІОТ)

