

F2X16 V2



让万物更加智慧
Bringing Intelligence Across All Beings

F2X16 V2 Specification

Version	class
V1.0.3	



F2X16 V2 IP MODEM is an IoT wireless data terminal

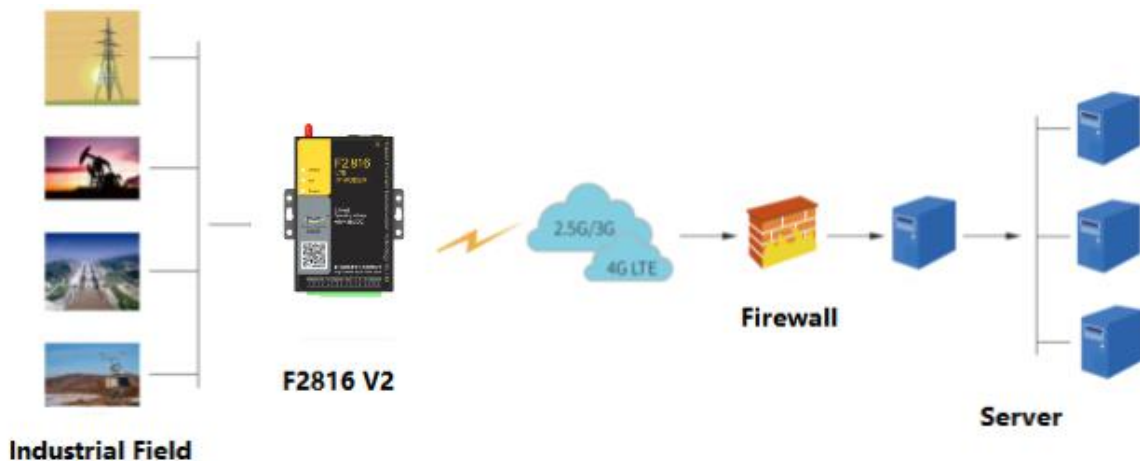
Use public cellular network to provide users with wireless long-distance data transmission.

The product adopts high-performance industrial-grade 32-bit communication processor and industrial-grade wireless module, with embedded real-time operating system as the software support platform, while providing RS232 and RS485 interfaces, which can be directly connected to serial devices to achieve transparent data transmission function.

Low power consumption design, provide 1 ADC, 2 I/O, can realize the functions of digital input and output, pulse output, analog input, pulse counting and so on.

This product has been widely used in the M2M industry in the IoT industry chain.

Application



Feature

Industrial Design

- ◆ High-performance industrial-grade wireless module
- ◆ High-performance industrial-grade 32-bit communication processor
- ◆ Low power design
- ◆ Metal shell, IP30 Protect
- ◆ Wide voltage input (DC 5~36V)

Reliable

- ◆ Watch dog design
- ◆ Anti-drop mechanism
- ◆ RS232/RS485 with 15KV ESD protect
- ◆ SIM/UIM with 15KV ESD protect
- ◆ Built-in reverse phase protection and over voltage protection for power interface
- ◆ Antenna interface lightning protection (optional)

Standard

- ◆ Industrial terminal interface
- ◆ 1 x RS232 and 1 x RS485
- ◆ Supports customize TTL , ADC
- ◆ Plug and play
- ◆ Central Management Software (optional)
- ◆ Multiple work mode
- ◆ Easy configurations
- ◆ Support serial upgrade

Functions

- ◆ Supports TCP server
- ◆ Dual data center backup transmission and multi-data center synchronous transmission
- ◆ Supports APN
- ◆ Provide 2 x DI/DO + 1 x ADC (DI/DO can be customized to pulse counting)
- ◆ Multiple offline trigger modes, Including SMS, phone ringing, serial port data trigger online and offline mode
- ◆ Support access to the center based on domain name and IP address
- ◆ Embedded standard TCP/IP protocol stack, support transparent data transmission

Specification

F2X16 V2

Project	Content
F2116 V2 GPRS IP MODEM	
Frequency	GSM850/900/1800/1900MHz GSM phase 2/2+ GPRS class 10/12
Bandwidth	85.6Kbps
Power	GSM850/900: <33dBm GSM1800/1900: <30dBm

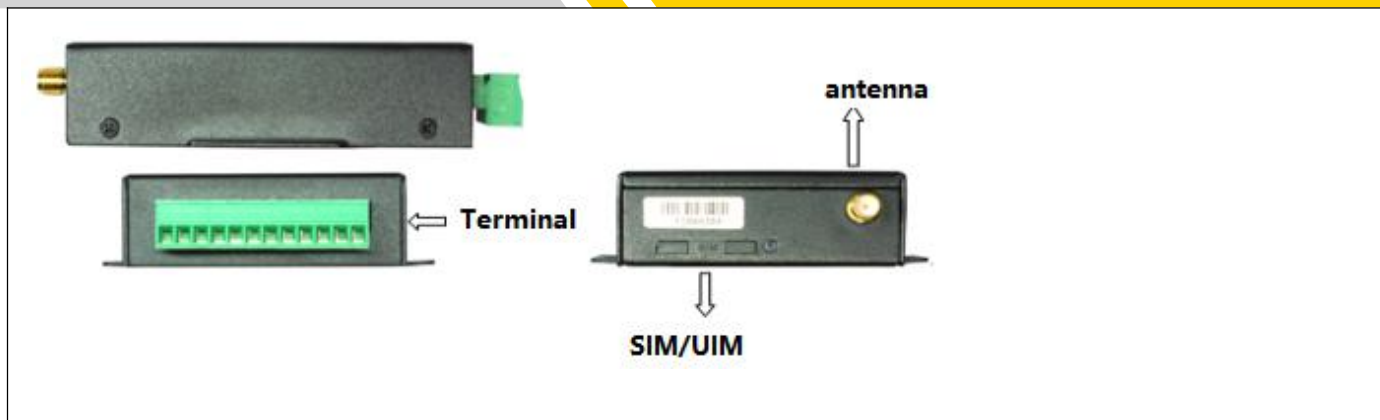
Sensitive	<-108dBm
F2816 V2 LTE IP MODEM	
Frequency	LTE FDD、LTE TDD、EVDO、WCDMA、TD-SCDMA、CDMA1X、GPRS/EDGE
Bandwidth	LTE FDD: 150Mbps(DL), 50Mbps(UL) LTE TDD: 130Mbps(DL), 35Mbps(UL) DC-HSPA+: 42Mbps(DL), 5.76Mbps(UL) TD-HSPA+: 4.2Mbps(DL), 2.2Mbps(UL) EVDO Rev. A: 3.1Mbps(DL), 1.8Mbps(UL)
Power	<23dBm
Sensitive	<-98dBm
F2C16 V2 Cat.1 IP MODEM	
Frequency	LTE FDD、LTE TDD、GSM/GPRS.
Bandwidth	LTE FDD: 10Mbps(DL), 5Mbps(UL) LTE TDD: 8.2Mbps(DL), 3.4Mbps(UL) GPRS: 85.6kbps(DL), 85.6kbps(UL)
Power	LTE FDD/TDD: 23 ± 1 dBm GSM 900: 32.5 ± 1 dBm DCS 1800: 29.5 ± 1 dBm
Sensitive	LTE FDD/TDD: -98+1 dBm GSM 900: -109.5 dBm DCS 1800: -108 dBm

● Interface

Project	Content
CPU	Industrial-grade 32-bit communication processor
FLASH	512KB (can customize to 8MB)
SRAM	256KB

● Hardware

Project	Content
Serial	1 x RS232+ 1 x RS485, with 15KV ESD protect: Data bit: 5、6、7、8 Stop bit: 1、1.5、2 Check : none、even、odd Baud rate: 1200~230400 bits/s
indicator	Power,online, System
antenna	SMA interface, resistance= 50 Ω
SIM/UIM	Standard sim card slot with 1.8V/3V SIM/UIM, with 15KV ESD protect
Power	Terminal



● Power Supply

Project	Content
Standard	DC 12V/0.5A
range	DC 5~36V

● Consumption

Status	content
Communication	20~65mA@12VDC(2G:20~40 mA 4G:20~65mA) 20~95mA@9VDC (2G:30~45 mA 4G:20~95mA)
standby	15~30 mA@12VDC 20~40 mA@9VDC
sleep	5~17mA@12VDC 6~22mA@9VDC

● Physical

Project	content
Shell	Metal shell , IP30
size	91x58.5x22 mm (antenna not included)
Weight	205g

● Others

Project	Content
Working Temperature	-35~+75°C (-22~+167°F)
Storage Temperature	-40~+85°C (-40~+185°F)
Humidity	95%(non condensation)

● Order info

model	content
F2116 V2	GPRS IP MODEM
F2816 V2	LTE IP MODEM
F2C16 V2	Cat.1 IP MODEM