

GPS+LTE IP Modem

F7916 V4



Introduction

F7916 V4 GPS+LTE IP MODEM is an IoT wireless data terminal, using public cellular network to provide users with wireless long-distance data transmission. Low power consumption design, provide 2xADC, 3xI/O, can realize the functions of digital input and output, pulse output, analog input, pulse counting and, etc. This product has been widely used in the M2M industry in the IoT industry chain.



Industrial-grade Design

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



Stability & Reliability

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



Standard & Convenience

- ▶ 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

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High Performance

- ▶ Supports TCP server
- ▶ Dual data center backup transmission
- ▶ Supports APN
- ▶ Support multi-data center synchronous transmission
- ▶ Provide 3 x I/O + 2 x ADC
- ▶ Support access to the center based on domain name and IP address
- ▶ Embedded standard TCP/IP protocol stack, support transparent data transmission

Product Specification

Cellular Specification	
Items	Contents
Frequency	LTE FDD, LTE TDD, EVDO, WCDMA, TD-SCDMA, CDMA1X, GPRS/EDGE
Bandwidth	LTE FDD: 100Mbps(DL), 50Mbps(UL) LTE TDD: 61Mbps(DL), 18Mbps(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)
Transmit Power	<23dBm
Sensitivity	<-98dBm
Industrial GPS Module	
Items	Contents
Signal Reception	BDS/GPS/GLONASS/GALILEO/QZSS/SBAS
Number of RF Channels	2 channel RF, supporting all constellation BDS and Number of RF channels GPS
Starting Time	Cold start TTFF ≤32s Hot start TTFF ≤1s Recapture TTFF ≤1s
Positional Accuracy	<2.5m (CEP50)
Velocity Measurement Accuracy	<0.1m/s (1σ)
GPS&BD Power Consumption	<25mA @ 3.3V
Hardware System	
Items	Contents
CPU	Industrial-grade 32-bit communication processor
FLASH	1MB
SRAM	256KB

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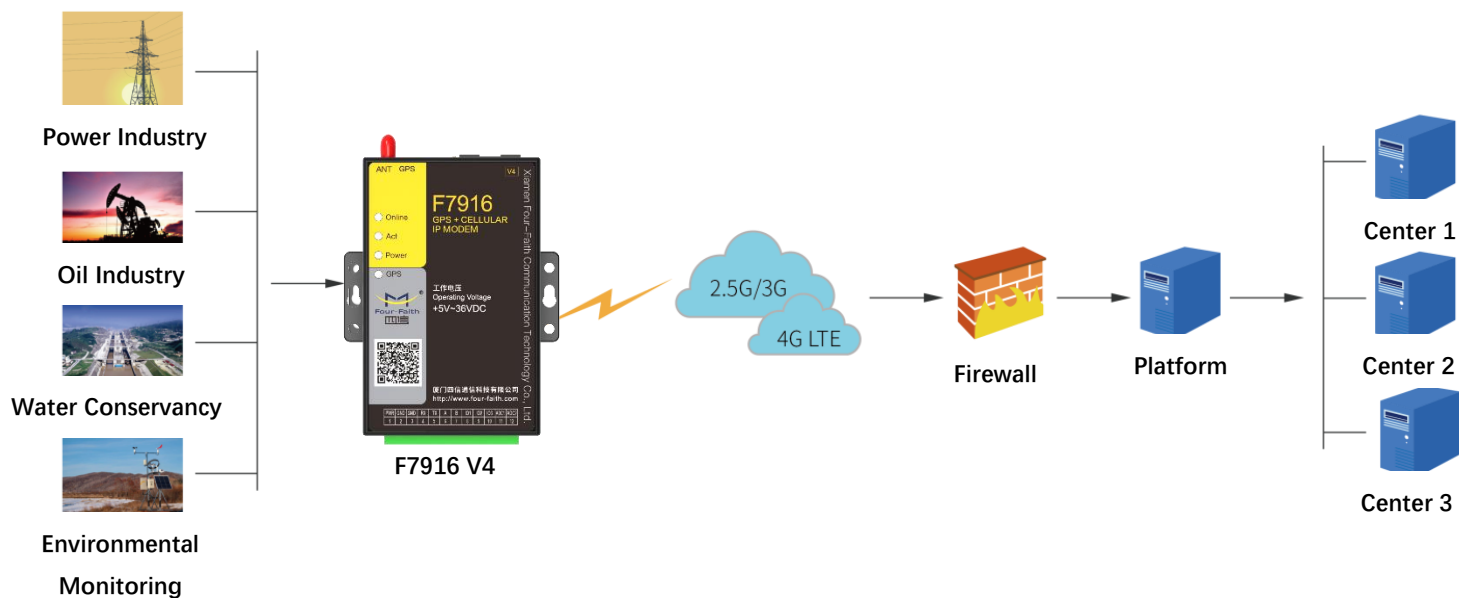
Interfaces	
Items	Contents
Serial	1 x RS232 + 1 x RS485, with 15KV ESD protection Data bit: 5, 6, 7, 8 Stop bit: 1, 1.5, 2 Check : None, Even, Odd Baud rate: 1200~230400 bits/s
Indicator	Power, Online, System
Antenna	SMA interface, Resistance= 50Ω
SIM/UIM	Standard sim card slot with 1.8V/3V SIM/UIM, with 15KV ESD protection
Power	Terminal
Power Supply	
Items	Contents
Standard	DC 12V/0.5A
Range	DC 5~36V
Consumption	
Status	Contents
Communication	20~80mA @12VDC
Standby	15~30 mA @12VDC
Physical Properties	
Items	Contents
Shell	Metal casing, IP30
Size	91x58.5x22 mm (Antenna not included)
Weight	205g
Other	
Items	Contents
Working Temperature	-35~+75°C
Storage Temperature	-40~+85°C
Humidity	95% (Non condensation)

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Topology



Order Information

Models	Description
F7916 V4	GPS+LTE IP MODEM