

Product Features

Design for Industrial Application

- ◆ High-powered industrial cellular module
- ◆ High-powered industrial 32 bits CPU
- ◆ Low power consumption design, to reduce the power dissipation in the most way
- ◆ Embedded Real-Time Clock (RTC) circuit
- ◆ Power range: DC 5~36V
- ◆ Operating temperature:-40~75°C
- ◆ Metal shell, IP30.Metal enclosure is safely isolated with system , especially suitable for industrial control field applications

Stability and Reliability

- ◆ Support hardware and software WDT
- ◆ Support auto recovery mechanism, including online detect, auto redial when offline to make it always online
- ◆ RS232/RS485/RS422 ports:15KV ESD and surge protection
- ◆ Power port: reverse-voltage and overvoltage protection
- ◆ SIM/UM port: 15KV ESD protection

Standard and Convenience

- ◆ Support standard RS232/RS485 ports that can connect to serial devices directly
- ◆ Support intellectual mode, enter into communication state automatically when power is on

Provide management software for remote management

- ◆ Support a variety of working modes which make it easy and flexible to use
- ◆ Convenient configuration and maintenance interface
- ◆ Support the serial update,remote update, can export the serial log
- ◆ Wall mounted , easy installation, fast fixing, conveniently and quickly

High-performance

- ◆ Support TCP server and support 4 TCP client connection (optional)
- ◆ Support protocol conversion between ModBus and RTU/TCP (optional)
- ◆ Support dual data center backup transmission and multiple data center synchronous transmission (5 data centers)
- ◆ Support multi data centers and it can support 1-5 data centers at the same time
- ◆ Support protocol conversion between 101 and 104 (optional)
- ◆ Support standard TCP/UDP protocol, support data transfer transparently
- ◆ Support Beidou/GPS positioning function
- ◆ Support login security authentication
- ◆ Multiple indicator lights that can indicate a variety of system states
- ◆ Support read device status in real-time by serial ports, such as IMEI, SIM card status,IP address, signal value and so on.

Product Specification-----

Wireless parameters

Item	Content
F2814-DG FDD-LTE IP MODEM	
Standard and Band	LTE FDD 2600/2100/1800/900/800MHz, 700/1700/2100MHz (Optional) DC-HSPA+/HSPA+/HSDPA/HSUPA/UMTS 850/900/2100MHz ,800/850/1900/2100MHz (Optional) EDGE/GPRS/GSM 850/900/1800/1900MHz GPRS CLASS 10 EDGE CLASS 12
Bandwidth	LTE FDD: Download speed 100Mbps, Upload speed 50Mbps DC-HSPA+: Download speed 42Mbps, Upload speed 5.76 Mbps HSPA+: Download speed 21Mbps, Upload speed 5.76 Mbps HSDPA: Download speed 7.2Mbps HSUPA: Upload speed 5.76Mbps UMTS: 384Kbps
TX power	<23dBm
RX sensitivity	<-93.3dBm

GPS/BDS Parameters

Item	Content
Receiver type	32 Channel GPS/BDS L1,1575.42MHz;B1,1561.098MHz
Data update rate	1 Hz
Accuracy	GPS&BDS<2.5m CPE50% (Open space) GPS ONLY 3m CPE50% (Open space) BDS ONLY 5m CPE50% (Open space)
Catch	Cold start: 32S Warm start: 1S Restart: 1S
Sensitivity	Standby: -160dBm Cold start: -148dBm
Timing accuracy	20ns

Interface type

Item	Content
SDI	Num.of ports: 2 Port 1: RS232 Port 2: RS232 (Standard) / RS485 (Optional) Serial port type : Terminal type Stop bits: 1 、 2 Parity: none, even, odd, Baud rate: 300~115200bps
Antenna	Standard SMA negative head antenna interface, 50 ohm

SIM/UIM	Standard clamshell socket interface, support 1.8V/3V SIM/UIM card, 15KV ESD protection
Indicator	Power、Module、SIM、Status

Power supply

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

Consumption

Item	Content	
Communication	120mA@12VDC	255mA@5VDC
Standby	41 mA@12VDC	85 mA@5VDC
Dormant state	3mA@12VDC	6mA@5VDC

Physical Characteristics

Item	Content
Housing	Metal, IP30
Dimension	110x85x32mm (Except antenna)
Weight	About 290 g

Other parameters

Item	Content
Working temperature	-40~+75°C (-40~+167°F)
Storage temperature	-40~+85°C (-40~+185°F)
Relative humidity	95% ((unfreezing)

Ordering Information

Model No.	Description
F2814-DKG	FDD LTE IP MODEM