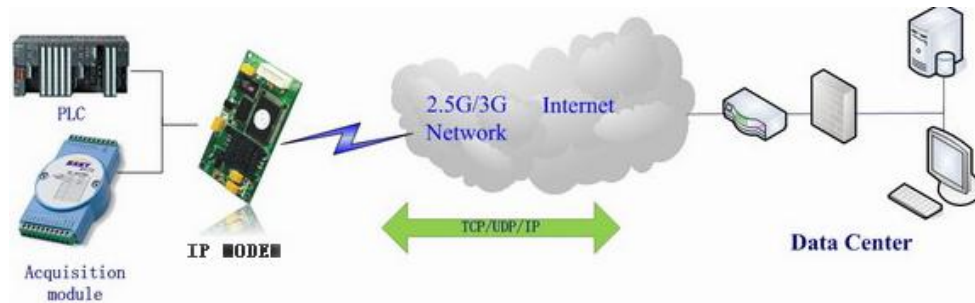# F2113 GPRS IP MODEM
TECHNICAL SPECIFICATION

F2113 GPRS IP MODEM is a kind of cellular terminal device that provides data transfer function by public GPRS network.

It adopts high-powered industrial 16/32 bits CPU and embedded real time operating system. It supports RS232 and RS485 (or RS422) port that can conveniently and transparently connect one device to a cellular network, allowing you to connect to your existing serial devices with only basic configuration.

It has been widely used on M2M fields, such as intelligent transportation, smart grid, industrial automation, telemetry, finance, POS, water supply, environment protection, post, weather, and so on.

Features and Benefits

Design for Industrial Application
◆ High-powered industrial cellular module
◆ High-powered industrial 16/32 bits CPU
◆ Support low-consumption mode, including sleep mode, scheduled online/offline mode, scheduled power-on/power-off mode(optional)

Stability and Reliability
◆ Support hardware and software WDT

◆ Support auto recovery mechanism, including online detect, auto redial when offline to make it always online
◆ SIM/UIM port: 15KV ESD protection
◆ Power port: reverse-voltage and overvoltage protection
◆ Antenna port: lightning protection(optional)

Standard and Convenience
◆ Support standard TTL (3.3V) serial port and can be embedded into user's device directly
◆ Support intellectual mode, enter into communication state automatically when powered
◆ Provide management software for remote management
◆ Support several work modes
◆ Convenient configuration and maintenance interface

High-performance
◆ Support TCP server and support multi TCP client connection(optional)
◆ Support double data centers, one main and another backup
◆ Support multi data centers and it can support 5 data centers at the same time
◆ Support multi online trigger ways, including SMS, ring and data. Support link disconnection when timeout
◆ Support dynamic domain name(DDNS) and IP access to data center
◆ Design with standard TCP/IP protocol stack
◆ Support APN/VPDN

Specifications

Cellular Specification

Item	Content
Cellular Module	Industrial cellular module
Standard and Band	EGSM900/GSM1800MHz, GSM850/900/1800/1900MHz(optional) Compliant to GSM phase 2/2+ GPRS class 10, class 12(optional)
Bandwidth	85.6Kbps
TX power	GSM850/900: <33dBm GSM1800/1900: <30dBm
RX sensitivity	<-107dBm

Hardware System

Item	Content
CPU	Industrial 16/32 bits CPU
FLASH	1MB(Extendable)
SRAM	512KB(Extendable)

Interface Type

Item	Content
Serial	1 TTL(3.3V) serial port (6PIN/2.54mm jack) Data bits: 5, 6 ,7, 8 Stop bits: 1, 1.5, 2 Parity: none, even, odd, space, mark Baud rate: 110~230400 bps
Indicator	"Power", "Online"
Antenna	Standard SMA female interface, 50 ohm, lighting protection(optional)
SIM/UIM	Standard 3V/1.8V user card interface, 15KV ESD protection

Power	6PIN/2.54mm jack, reverse-voltage and overvoltage protection

Power Input

Item	Content
Standard Power	DC 4.2V/500mA
Power Range	DC 3.8~4.6V
Consumption	<250mA (4.2V)

Physical Characteristics

Item	Content
Dimensions	70x40x20 mm
Weight	30g

Environmental Limits

Item	Content
Operating Temperature	-25~+65ºC（-13~+149℉）
Extended Operating Temperature	-30~+75ºC（-22~+167℉）
Storage Temperature	-40~+85ºC（-40~+185℉）
Operating Humidity	95% (Non-condensing)