File No.	File version	confidential

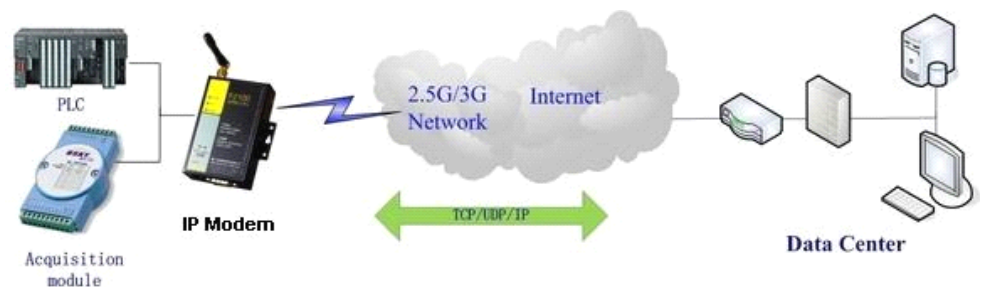# F2003 GSM IP MODEM TECHNICAL SPECIFICATION

General

F2003 GSM IP MODEM is a kind of cellular terminal device that provides SMS and CSD function by public GSM 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..

Product Feature --

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)
◆ Housing: iron, providing IP30 protection.
◆ Power range: DC 5~35V

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 port: 15KV ESD protection

◆ SIM/UIM port: 15KV ESD protection
◆ Power port: reverse-voltage and overvoltage protection
◆ Antenna port: lightning protection(optional)

Standard and Convenience
◆ Support standard RS232 and RS485(or RS422) port that can connect to serial devices directly
◆ Support intellectual mode, enter into communication state automatically when powered
◆ Support several work modes
◆ Convenient configuration and maintenance interface

High-performance
- ◆ Support transparent SMS data transfer
- ◆ Send SMS to up to 5 mobile numbers at the same time

- ◆ Support server and client functions
- ◆ Support CSD function

Product Specification --

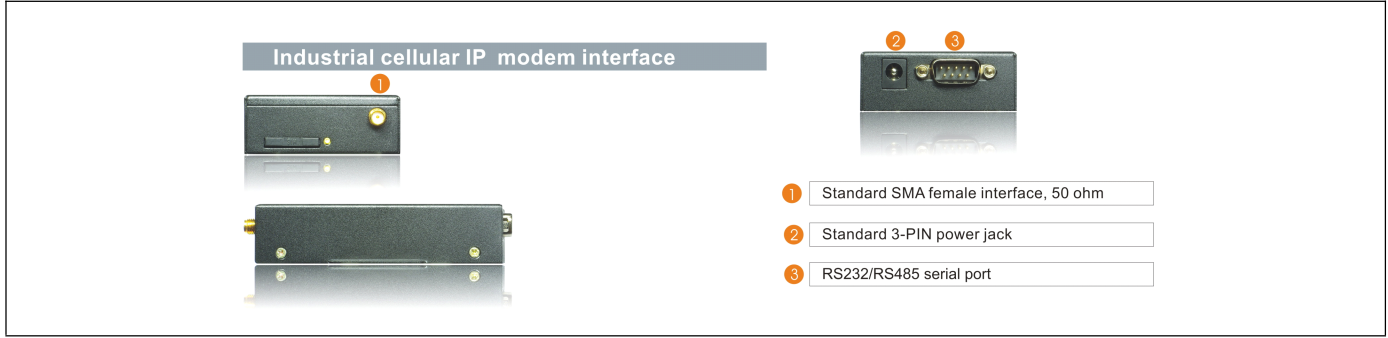**Cellular Specification**

Item	Content
Cellular Module	Industrial cellular module
Standard and Band	EGSM900/GSM1800MHz, GSM850/900/1800/1900MHz(optional) Compliant to GSM phase 2/2+
Bandwidth	14.4Kbps CSD
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 RS232 port and 1 RS485(orRS422) port, 15KV ESD protection 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", "ACT", "Online"
Antenna	Standard SMA female interface, 50 ohm, lighting protection(optional)
SIM/UIM	Standard user card interface, support 1.8V/3V SIM/UIM card,15KV ESD protection built-in
Power	Standard 3-PIN power jack, reverse-voltage and over voltage protection

Industrial cellular IP modem interface

1	Standard SMA female interface, 50 ohm
2	Standard 3-PIN power jack
3	RS232/RS485 serial port

Power supply

Item	Content
Standard Power	DC 12V/0.5A
Power range	DC 5~35V
Consumption	<250mA (12V)

Physical Characteristics

Item	Content
Housing	Iron, providing IP30 protection
Dimensions	91x58.5x22 mm
Weight	205g

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% (unfreezing)