

File No.	File version	confidential

# F2403 WCDMA/HSDPA/HSUPA IP MODEM TECHNICAL SPECIFICATION

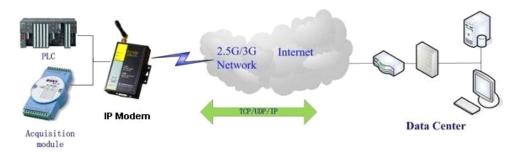


#### General

F2403 WCDMA/HSDPA/HSUPA IP MODEM is a kind of cellular terminal device that provides data transfer function by public WCDMA/HSDPA/HSUPA 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
- 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

## **Product Specification**

## **Cellular Specification**

Item	Content
Cellular Module	Industrial cellular module
Standard and Band	UMTS/WCDMA/HSDPA/HSUPA 850/1900/2100MHz, 850/900/1900/2100MHz(optional)
	GSM850/900/1800/1900MHz
	GPRS/EDGE CLASS 12
Bandwidth	HSUPA:5.76Mbps(Upload speed)/ HSDPA:7.2Mbps(Download speed)/UMTS:384Kbps (DL/UL)
TX power	<24dBm
RX sensitivity	<-109dBm

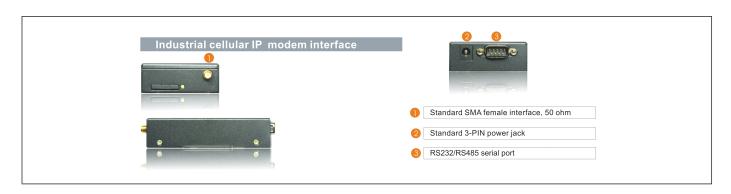
#### **Hardware System**

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
Power	Standard 3-PIN power jack, reverse-voltage and over voltage protection





#### **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	-25~+65°C (-13~+149°F)
Temperature	
Extended	-30~+75°C (-22~+167°F)
Operating	
Temperature	
Storage	-40~+85°C (-40~+185°F)
Temperature	
Operating Humidity	95% (unfreezing)