

# F1103 GPRS MODEM

## TECHNICAL SPECIFICATION



F1103 GPRS MODEM is a kind of cellular terminal device that provides SMS, dial-up and CSD function by public GPRS network.

It adopts high-powered industrial cellular module and supports RS232 port that can conveniently connect one device to a cellular network, allowing you to connect to your existing serial device.

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

### Stability and Reliability

- ◆ RS232 port: 15KV ESD protection
- ◆ SIM/UM port: 15KV ESD protection
- ◆ Power port: reverse-voltage and overvoltage protection
- ◆ Antenna port: lightning protection(optional)

### Standard and Convenience

- ◆ Support standard RS232 port that can connect to a serial device directly
- ◆ Provide dial-up software that can make it always online
- ◆ Provide SMS tool software
- ◆ Support standard AT command

### High-performance

- ◆ Support SMS, dial-up and CSD function
- ◆ Support APN/VPDN

## Specifications

### Cellular Specification

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

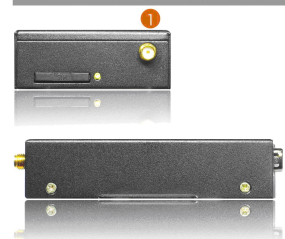
### Interface Type

| Item   | Content                                                                                                                    |
|--------|----------------------------------------------------------------------------------------------------------------------------|
| Serial | 1 RS232 port, 15KV ESD protection<br>Data bits: 5, 6, 7, 8<br>Stop bits: 1, 1.5, 2<br>Parity: none, even, odd, space, mark |

|           |                                                                       |
|-----------|-----------------------------------------------------------------------|
|           | Baud rate: 110~230400 bps                                             |
| Indicator | "Power", "ACT", "Online"                                              |
| Antenna   | Standard SMA female interface, 50 ohm, lightning protection(optional) |
| SIM/UIM   | Standard 3V/1.8V user card interface, 15KV ESD protection             |
| Power     | Standard 3-PIN power jack, reverse-voltage and overvoltage protection |

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

Industrial cellular modem interface



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

### Power Input

| Item           | Content      |
|----------------|--------------|
| Standard Power | DC 12V/1.5A  |
| Power Range    | DC 5~35V     |
| Consumption    | <200mA (12V) |

### Physical Characteristics

| Item       | Content                         |
|------------|---------------------------------|
| Housing    | Iron, providing IP30 protection |
| Dimensions | 91x58.5x22 mm                   |
| Weight     | 195g                            |

### Environmental Limits

| Item | Content |
|------|---------|
|------|---------|