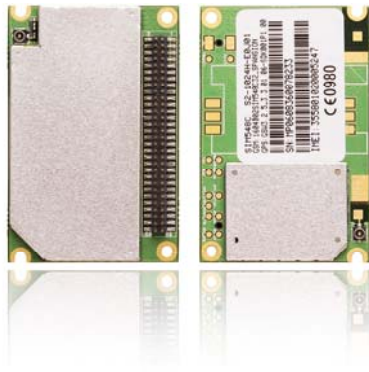


## SIM548C

## GSM/GPRS+GPS Module



SIM548C module is a Quad-Band GSM/GPRS enabled a compact plug-in module that is also equipped with GPS technology for satellite navigation. The compact design of the new SIM548C makes it easy to integrate GSM/GPRS & GPS as an all-in-one solution. You will save significantly both time and cost for the integration of additional hardware components.

Featuring an industry-standard interface and GPS function, the combination of both technologies allows goods, vehicles and people to be tracked seamlessly at any location and anytime.

***We make future wireless***

**Physical features**

- Overall dimensions: 55\*33\*8.2mm
- Weight: approx.16.5g
- Normal operation temperature:  
-30 °C to +80°C

**GSM/GPRS specification****General features**

- Quad-Band 850/900/1800/1900MHz
- GPRS multi-slot class 10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @ 850/900 MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- Control via AT commands (GSM 07.07 ,07.05 and SIMCOM enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Low power consumption

**Specifications for SMS via GSM / GPRS**

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

**Specifications for audio**

- Tricodec
  - Half rate (HR)
  - Full rate (FR)
  - Enhanced Full rate (EFR)
- Hands-free operation
- Echo cancellation

**Specifications for data transfer**

- GPRS class 8/10: max. 85.6 kbps (downlink)
- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- CSD up to 14.4 kbps
- USSD
- Non transparent mode
- PPP-stack
- Integrated TCP/IP stack

**Specifications for fax**

- Group 3, class 1

**Interfaces**

- 60-pin DIP connector
- Multiplexer
- Interface to external SIM 3V/ 1.8V
- Dual analog audio interfaces
- AT commands via GSM/GPRS serial interface
- Embedded SIM card holder
- LCD interface
- RTC backup
- Charge interface
- A serial interface and a debug interface for GSM/GPRS
- Dual serial interface for GPS
- Two separate antenna connectors for GSM/GPRS&GPS, and two antenna pads for GSM/GPRS&GPS

**Compatibility**

- AT cellular command interface

**Specification for GPS**

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023 MHz chip rate
- Accuracy Position 10m CEP  
without SA/Velocity 0.1m/s,  
without SA/Time 1µs synchronized to GPS time
- Date WGS-84
- Acquisition rate (TTFF defined at 95% of first position local station)
  - Hot start<1s, average, open sky
  - Warm start<38s, average, open sky
  - Cold start<42s, average, open sky
- Support AGPS
- Operating voltage 3.3V DC ±5%
- Low power consumption about 200mW at 3.3V
- Protocols
  - NMEA-0183
  - SiRF binary
  - RTCM SC-104
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ±0.5ppm
- Memory: 4 Mb flash and 1Mb SRAM

**More about SIM548C module, Please contact:**

Tel: +86 21 32523300

Fax: +86 21 32523301

Email: simcom@sim.com