



# GSM/GPRS+GPS Module



## SIM908

SIM908 module is a complete Quad-Band GSM/GPRS module which combines GPS technology for satellite navigation. The compact design which integrated GPRS and GPS in a SMT package will significantly save both time and costs for customers to develop GPS enabled applications.

Featuring an industry-standard interface and GPS function, it allows variable assets to be tracked seamlessly at any location and anytime with signal coverage.

## Smart Machine Smart Decision

### 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:
  - GPRS: 3.2 ~ 4.8 V
  - GPS: 3.0 ~ 4.5V
- Low power consumption
- Dimensions: 30\*30\*3.2mm
- Weight:
  - SIM908:5.2g
  - SIM908-C:11.1g
- Operation temperature:
  - 40 ° C to +85 ° C

### 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

### Compatibility

- AT cellular command interface

### Specification for GPS

- Receiver type
  - 42-channel
  - GPS L1 C/A code,
  - High-performance STE engine
- Sensitivity
  - Tracking: -160 dBm
  - Cold starts : -143 dBm
- Time-To-First-Fix
  - Cold starts: 30s (typ.)
  - Hot starts: 1s (typ.)
- Accuracy
  - Horizontal position : <2.5m CEP
- Power consumption (GSM engine in idle mode)
  - Acquisition 77mA
  - Tracking 76mA

### Interfaces

- 80-pad with SMT type
- Interface to external SIM 3V/ 1.8V
- Dual analog audio interfaces
- SPI interface
- RTC backup
- Charge interface
- A serial interface and a debug interface for GSM/GPRS
- Debug interface for GPS NMEA information output
- Two separate antenna connectors for GSM/GPRS&GPS

### Certifications

- CE
- ROHS

More about SIMCom SIM908

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