



## SIM508/SIM548

SIM508/548 module is a Tri-Band/Quad-Band GSM/GPRS-enabled module that is also equipped with A-GPS technology.

The compact design of the SIM508/548 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.

The combination of both technologies can fit almost all the space requirement in your application, such as PDA phone, GPS hand-held device and other mobile device, it allows vehicles and people to be tracked seamlessly at any location and anytime.

### Physical features:

- Overall dimensions: 34mm x 55mm x 3.0mm
- Weight: approx.12g
- Normal operation temperature:  
-20°C to +55°C
- Restricted operation temperature:  
-30°C to -20°C and +55°C to +80°C
- Storage temperature:  
-40°C to +85°C

### GSM/GPRS specifications:

- Tri-Band 900/1800/1900MHz or Quad-Band 850/900/1800/1900MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+  
-Class 4(2W @ GSM 900MHz)  
-Class 1(1W @ GSM 1800/GSM1900MHz)
- Control via AT commands (GSM 07.07 and 07.05 and SIMCom enhanced AT commands)
- SIM application tool kit
- Low power consumption
- Supply voltage range: 3.4V - 4.5V

### Specifications for GPS:

- Receiver 20 channels, L1 1575.42MHz, C/A code 1,023MHz chip rate
- Accuracy Position 10 m CEP  
without SA/Velocity 0.1m/s  
without SA/Time 1μs synchronized to GPS time
- DGPS accuracy 1 to 5m, typical, 0.05m/s, typical
- 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
- Operating voltage 3.3V DC ±5%
- Low power consumption about 160mW at 3.3V (Full power)
- Protocols  
NMEA-0183  
SiRF binary  
RTCM SC-104
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ±0.5ppm
- Memory: On-chip 4Mbit FLASH and 1Mbit SRAM