



# GSM/GPRS Module



## SIM900

**SIMCom presents an ultra compact and reliable wireless module-SIM900. This is a complete Quad-band GSM/GPRS module in a SMT type and designed with a very powerful single-chip processor integrating AMR926EJ-S core, allowing you to benefit from small dimensions and cost-effective solutions.**

Featuring an industry-standard interface, the SIM900 delivers GSM/GPRS 850/900/1800/1900MHz performance for voice, SMS, Data, and Fax in a small form factor and with low power consumption. With a tiny configuration of 24mm x 24mm x 3 mm, SIM900 can fit almost all the space requirements in your M2M applications, especially for slim and compact demands of design.

### Smart Machine Smart Decision

#### General features

- Quad-Band 850/ 900/ 1800/ 1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @850/ 900 MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- SAIC (Single Antenna Interference Cancellation) support
- Dimensions: 24\* 24 \* 3 mm
- Weight: 3.4g
- Control via AT commands (GSM 07.07 ,07.05 and SIMCOM enhanced AT Commands)
- SIM application toolkit
- Supply voltage range : 3.2 ... 4.8V
- Low power consumption: 1.0mA(sleep mode&BS-PA-MFRMS=9 )
- Operation temperature: -40° C to +85 ° C

#### Specifications for Fax

- Group 3, class 1

#### Specifications for GPRS Data

- GPRS class 10: max. 85.6 kbps (downlink)
- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- PPP-stack

#### Specifications for CSD Data

- USSD
- Non transparent mode

#### Specifications for SMS via GSM/GPRS

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

#### Software features

- 0710 MUX protocol
- Embedded TCP/UDP protocol
- FTP/HTTP

#### •Special firmware

- Embedded AT
- FOTA
- MMS
- TTS

#### Specifications for Voice

- Tricodex
  - Half rate (HR)
  - Full rate (FR)
  - Enhanced Full rate (EFR)
- AMR
  - Half rate (HR)
  - Full rate (FR)
- Hands-free operation  
( Echo suppression )

#### Interfaces

- Interface to external SIM 3V/ 1.8V
- Analog audio interface
- RTC backup
- SPI interface (option)
- Serial interface
- Antenna pad
- I2C
- GPIO
- PWM
- ADC

#### Compatibility

- AT cellular command interface

#### Certifications:

- CE
- FCC
- ROHS
- PTCRB
- GCF
- IC
- ICASA
- REACH
- ATEX
- PFOS

#### Carrier Approvals:

- NCC
- Anatel
- Rogers
- Orange
- AT&T
- Vodafone

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