



# GSM/GPRS Module

## SIM900R

**SIMCom presents an ultra compact and reliable wireless module. The SIM900R is a complete Dual-band GSM/GPRS module in a SMT type, allowing you to benefit from small dimensions and cost-effective solutions.**

Featuring an industry-standard interface, the SIM900R delivers GSM/GPRS 900/1800MHz 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, SIM900R can fit the space requirements in your applications, especially for slim and compact demand of design.

## Smart Machine Smart Decision

### General features

- Dual-Band 900/ 1800 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @900 MHz)
  - Class 1 (1 W @ 1800MHz)
- 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: -20° C to +60 ° 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

- CSD up to 14.4 kbps
- 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

### Customized features

- FOTA
- MMS
- Embedded AT

### Specifications for Voice

- Tricodec
  - 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
- Two Serial interfaces
- Antenna pad
- I2C
- GPIO
- PWM
- ADC

### Compatibility

- AT cellular command interface

### Certifications:

- ROHS
- CE
- REACH

More about SIMCom SIM900R  
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