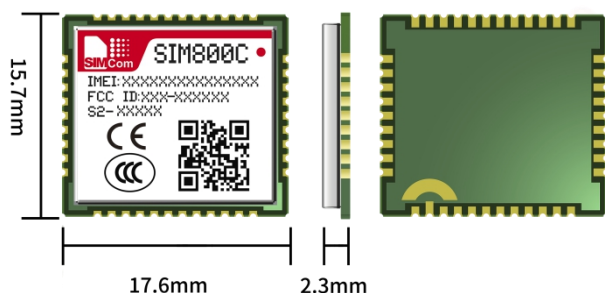


R800C

SIMCom GSM/GPRS Module

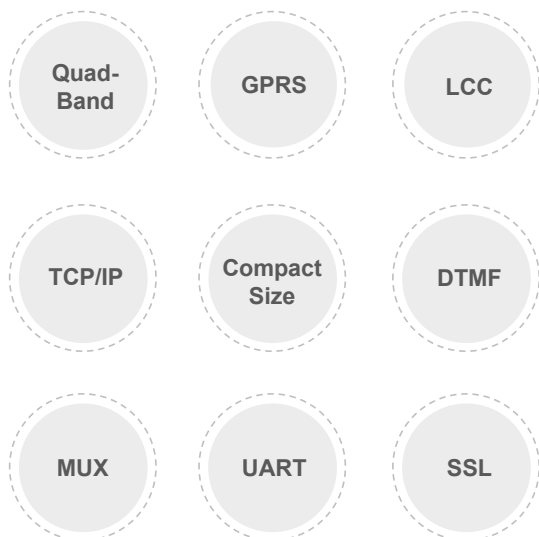


Product Description

The R800C is a Quad-Band GSM/GPRS module in a LCC type which supports GPRS up to 85.6kbps data transfer. It has strong extension capability with abundant interfaces including UART, USB2.0, GPIO etc. The module provides much flexibility and ease of integration for customer's applications.

The R800C adopts LCC form factor and is compatible with SIM800C, which greatly facilitates more compatible product design for the customer needs.

Due to the unique combination of performance, security and flexibility, the module is ideally suited for many applications, such as smart meter, security, remote diagnostics etc.



Key Benefits

- ◆ Small size dual-band GSM/GPRS module
- ◆ LCC form factor, compatible with SIM800C
- ◆ Low Power consumption
- ◆ Embedded TCP/UDP protocols

General Features

Frequency Bands	850/900/1800/1900MHz
GPRS multi-slot class	12/10
Dimensions	17.6*15.7*2.3mm
Weight	1.3±0.1g
Supply Voltage	3.4V ~ 4.4V
Operation temperature	-40°C ~ +85°C
Compliant GSM phase 2/2+	Class 4 (2W @ 850/900MHz) Class 1 (1W @ 1800/1900MHz)
Control Via AT Commands(3GPP TS 27.007, 27.005 & SIMCom enhanced AT Commands)	
Low Power consumption	

Specifications for GPRS Data

GPRS class 12: Uplink/Downlink up to	85.6Kbps
PBCCH support	
Coding schemes CS 1, 2, 3, 4	
PPP-stack	
USSD	

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/MQTT/NTP	
LBS*	
SSL/TLS*	
TTS*	
EAT*	

Interfaces

Analog audio interface	
UART	
(U)SIM card(1.8V/3V)	
RTC	
ADC	
GPIO	
Antenna: GSM	

Certifications

3C/SRRC/NAL	
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Note

*: optional

FCC Caution.

§ 15.19 Labelling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

§ 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Body-worn Operation

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with mini mum distance 20cm between the radiator & your body

C.Appendix A

A1.Requirement of FCC KDB 996369 D03 for module certification:

1.1List of applicable FCC rules:

The module complies with FCC Part 22,24

1.2Summarize the specific operational use conditions:

SLM320 use the independent GPS chip , includes a fully integrated global navigation satellite system solution that supports GPS, GLONASS, BeiDou. It supports standard NMEA-0183 protocol.

1.3Limited module procedures:

The module does not have a standard antenna, which belong to Limited module Standard requires: Clear and specific instructions describing the conditions, limitations and procedures for third - parties to use and/or integrate the module into a host device (see Comprehensive integration instructions below).

Resolve: Supply example as follows:

Installation Notes:

- 1) R800C Module Power supply range is DC 3.5V~4.2V, when you use R800C Module design product, the power supply cannot exceed this range.
- 2) When connect R800C Module to the host device, the host device must be power off.
- 3) Make sure the module pins correctly installed.
- 4) Make sure that the module does not allow users to replace or demolition.
- 5)All types of antennas that can be used with a transmitter: External antenna with maximum gain not Exceeding1.87dBi.

1.4Trace antenna designs: Not applicable.

1.5RF exposure considerations:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with mini mum distance 20cm between the radiator & your body.

1.6Antennas:

The module does not have a standard antenna.

1.7Label and compliance information

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Body-worn Operation

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body The host product Labeling Requirements:

NOTICE: The host product must make sure that FCC labeling requirements are met. This includes clearly visible exterior label on the outside of the final product housing that displays the contents shown in below:

Contains FCC ID:2AJYU-8SF0001

1.8Information on test modes and additional testing requirements:

When setting up the configuration, if the pairing and call box options for testing do not work, the tester needs to coordinate with the module manufacturer to access the test mode software.

1.9Additional testing, Part 15 Subpart B disclaimer:

The modular transmitter is only FCC authorized for the specific rule parts (FCC Part 22,24,) list on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

1.10Information on test modes and additional testing requirements:

When testing, testers need to refer to the user manual, and the sample power supply needs to use a special adapter power supply