

# Quectel M95

## Quad-band GSM/GPRS Module

GSM/GPRS



Quad-band



GPRS Multi-slot  
Class 12



Extended Temperature  
Range -40°C to +85°C



Highly Compact Size



LCC Type



Embedded Internet  
Services Protocols



Serial Port  
Multiplexer GSM 0710



PCM



M95 is one of the smallest Quad-band GSM/GPRS modules in LCC castellation packaging in the market. It adopts the latest MTK chip-set and features compact size of 19.9 × 23.6 × 2.65mm, ultra low power consumption and extended temperature range.

With surface mounted technology, the low profile and small size of LCC package make M95 easily embedded into the low-volume applications and ensure the reliable connectivity with the applications. This kind of package is ideally suited for large-scale manufacturing which has the strict requirements for cost and efficiency.

Built-in unique QuecFOTA™ technology allows M95 to update the firmware remotely. Additional features such as integrated TCP/IP protocol stack, serial multiplexer and enhanced AT commands guarantee fast and reliable transmission of data, voice, SMS via GSM/GPRS network and extend the functionality of the application at no additional cost.

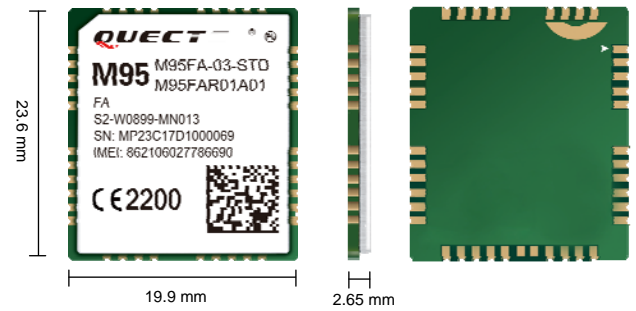
Its tiny size and ultra low power consumption makes M95 a very cost effective and feature-rich platform that is quite suitable for a wide range of M2M applications such as VTS, Industry PDA, Personal Tracking, Wireless POS, Smart Metering and many other M2M applications.

### Key benefits

- ☞ One of the smallest Quad-band GSM/GPRS modules
- ☞ Easier soldering process with LCC package
- ☞ Embedded Class-AB amplifier
- ☞ Power consumption as low as 1.3mA
- ☞ Embedded powerful Internet service protocols, multiple Sockets & IP addresses
- ☞ eCall
- ☞ QuecFOTA™
- ☞ Jamming detection
- ☞ DTMF
- ☞ Queclocator

# Quectel M95

## Quad-band GSM/GPRS Module



### General Features

<b>Quad-band</b>	850/900/1800/1900MHz
<b>GPRS Multi-slot Class</b>	12, 1~12 configurable
<b>GPRS Mobile Station</b>	Class B
<b>Compliant to GSM Phase 2/2+</b>	Class 4 (2W @ 850/ 900MHz) Class 1 (1W @ 1800/1900MHz)
<b>Supply Voltage Range</b>	3.3~4.6V 4.0V nominal
<b>Low Power Consumption</b>	1.3mA @ DRX=5 1.2mA @ DRX=9
<b>Operation Temperature</b>	-40 °C to +85 °C
<b>Dimensions</b>	19.9 x 23.6 x 2.65mm
<b>Weight</b>	Approx. 3.0g
<b>Control via AT commands</b>	GSM 07.07, 07.05 and other enhanced AT Commands

### Specifications for Voice

<b>Speech Codec Modes</b>	Half Rate (HR) Full Rate (FR) Enhanced Full Rate (EFR) Adaptive Multi-Rate (AMR)
<b>Echo Arithmetic</b>	Echo Cancellation Echo Suppression Noise Reduction

### Interfaces

<b>SIM/ USIM</b>	Dual SIM 3V/ 1.8V
<b>UART</b>	2 Interfaces
<b>Analog Audio Channel</b>	2 Embedded Class-AB amplifier in one channel
<b>PCM</b>	
<b>RTC Backup</b>	
<b>Antenna Pad</b>	

### Specifications for Data

<b>GPRS Class 12</b>	Max. 85.6 kbps (uplink & downlink)
<b>PBCCH Support</b>	
<b>Coding Schemes</b>	CS 1, 2, 3, 4
<b>USSD</b>	
<b>Non Transparent Mode</b>	
<b>Protocols</b>	PPP/TCP/UDP/FTP/HTTP/SMTP/SSL/MUX

### Certificates

CE FCC GCF PTCRB NCC ANATEL IC ICASA UCRF A-Tick  
Vodafone Rogers

### Specifications for SMS via GSM/GPRS

Point-to-point MO and MT  
SMS Cell Broadcast  
Text and PDU Mode