# Quectel M10
## Quad-band GSM/GPRS Module

**Quad-band**

**GPRS Multi-slot Class 12**

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

**Serial Port Multiplexer GSM 0710**

**LCC Type**

**Embedded Internet Services Protocols**

**Quectel Enhanced AT Commands**

**RoHS Compliant**

## Key Benefits

- Quad-band GSM/GPRS module with compact size of 29.0 x 29.0 x 3.6mm
- Easier soldering process with LCC package
- Power consumption as low as 1.3mA
- QuecFOTA™
- Jamming detection
- Embedded powerful internet service protocols, multiple Sockets &IP addresses

M10 is a Quad-band GSM/GPRS module in an LCC type which can be embedded in customer applications, offering the highest reliability and robustness. It adopts the laestest MTK chipset and features compact size of 29× 29 × 3.6mm, ultra low power consumption and extended temperature range.
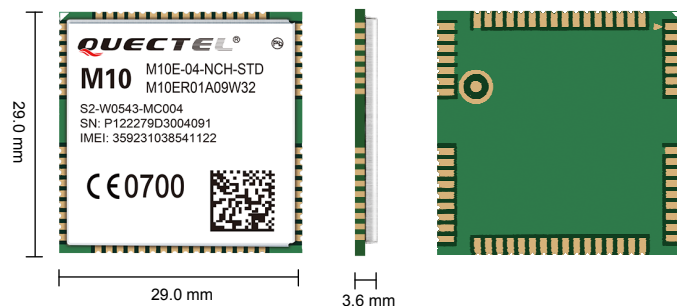
With surface mounted technology, the low profile and small size of LCC package make M10 easily embedded into the low-volume applications and ensure the reliable connectivity with the applications. This kind of package is ideally suited for large-scale manufacturing which has the strict requirements for cost and efficiency.

Built-in unique QuecFOTA™ technology allows M10 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.

Featuring an industry-standard interface and extremely low power consumption, M10 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.

**QUECTEL**
Wireless Module Expert

# Quectel M10
## Quad-band
## GSM/GPRS Module



M10E-04-NCH-STD
M10ER01A09W32
S2-W0543-MC004
SN: P122279D3004091
IMEI: 359231038541122
CE0700

29.0 mm

29.0 mm

3.6 mm

## General Features

| | |
|---|---|
| **Quad-band** | 850/900/1800/1900MHz |
| **GPRS Multi-slot Class** | 12, 1~12 configurable |
| **GPRS Mobile Station** | Class B |
| **Compliant to GSM Phase 2/2+** | Class 4 (2W @ 850/ 900 MHz) Class 1 (1W @ 1800/1900MHz) |
| **Supply Voltage Range** | 3.3~4.6V   4.0V nominal |
| **Low Power Consumption** | 1.3mA @ DRX=5 1.2mA @ DRX=9 |
| **Operation Temperature** | -40 °C to +85 °C |
| **Dimensions** | 29.0 × 29.0 × 3.6mm |
| **Weight** | Approx. 6.0g |
| **Mux Driver** | GSM 07.10 |
| **Control via AT commands** | GSM 07.07 ,07.05 and other enhanced AT Commands |
| **SIM Application Toolkit** | |

## Specifications for Fax & Data

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

## Specifications for SMS via GSM /GPRS

**Point-to-point MO and MT**

**SMS Cell Broadcast**

**Text and PDU Mode**

## Specifications for Voice

| | |
|---|---|
| **Speech Codec Modes** | Half Rate (HR) Full Rate (FR) Enhanced Full Rate (EFR) AMR Half Rate AMR Full Rate |
| **Echo Arithmetic** | Echo Cancellation Echo Suppression Noise Reduction |
| **Hands-free Operation** | |

## Interfaces

| | |
|---|---|
| **External SIM** | 3V/1.8V |
| **Analog Audio Interfaces** | Two channels |
| **RTC Backup** | |
| **SD Card Interface** | |
| **Serial Port and Debug Port** | |
| **Antenna Pad** | |
| **GPIOs** | |

## Certifications

| CE | FCC | GCF | ICASA | PTCRB | TELCEL |
|---|---|---|---|---|---|
| IC | NCC | UCRF | Rogers | ANETEL | |