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 $29 \times 29 \times 3.6$ mm, ultra low power consumption and extended temperature range.

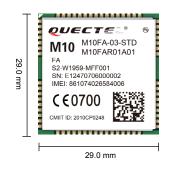
With surface mounted technology, the low profile and small size of LCC package make M10 easily embedded into the low-volume applications and ensure the reliable connectivity with the applications. This kind of package is ideally suited for large-scale manufacturing which has the strict requirements for cost and efficiency.

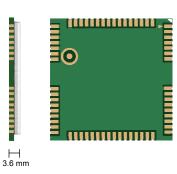
Built-in unique QuecFOTA[™] technology allows M10 to update the firmware remotely. Additional features such as integrated TCP/IP protocol stack, serial multiplexer and enhanced AT commands guarantee fast and reliable transmission of data, voice, SMS via GSM/GPRS network and extend the functionality of 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 M10 Quad-band GSM/GPRS Module





General Features

Quad-band 850/900/1800/1900MHz

GPRS Multi-slot Class 12, 1~12 configurable

GPRS Mobile Station Class B

 Compliant to GSM
 Class 4

 Phase 2/2+
 (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 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 3\

Analog Audio Interfaces

RTC Backup

SD Card Interface

Serial Port and Debug Port

Antenna Pad

GPIOs

3V/1.8V

Two channels

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

Certifications

CE FCC GCF ICASA PTCRB TELCEL IC NCC UCRF Rogers ANETEL

Specifications for SMS via GSM /GPRS

Point-to-point MO and MT SMS Cell Broadcast

Text and PDU Mode

