

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



GSM/GPRS

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 latest 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.

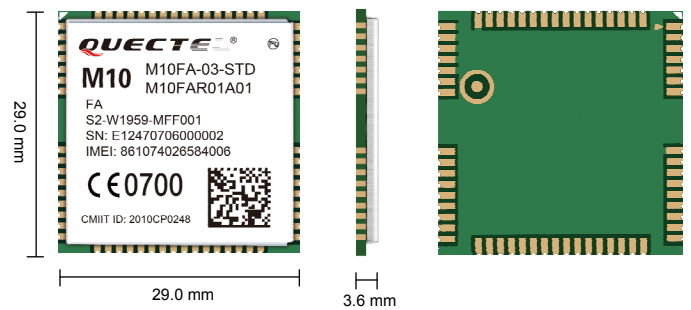
Featuring an industry-standard interface and extremely low power consumption, M10 is quite suitable for a wide range of M2M applications such as VTS, Industry PDA, Personal Tracking, Wireless POS, Smart Metering and many other M2M applications.

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

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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 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 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	

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