

Quectel M80

Quad-band GSM/GPRS Module

GSM/ GPRS



Quad-band



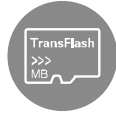
GPRS Multi-slot
Class12



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



Highly Compact Size



SD Card



Embedded Internet
Services Protocols



Serial Port
Multiplexer GSM 0710



PCM



M80 is one of the smallest Quad-band GSM/GPRS modules in LGA castellation packaging with the compact size of 23 × 25 × 2.6mm, ultra low power consumption and extended temperature range.

With the surface mounted technology, the low profile and small size of LGA package makes M80 easily embedded into the low-volume applications and ensures 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 M80 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 SMS, data, voice, multi-media via GSM/GPRS network and extend the functionality of the application without adding cost.

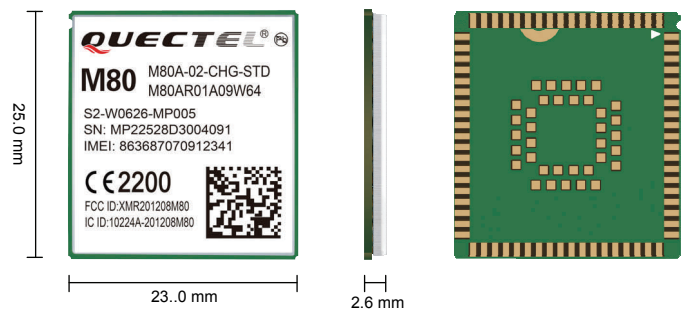
Its tiny size and ultra low power consumption makes M80 a very cost effective and feature-rich platform that is quite suitable for a wide range of M2M applications such as VTS, Personal Tracking, Security, Wireless POS, Industrial PDA, Smart Metering and many other M2M applications.

Key benefits

- ☛ Quad-band GSM/GPRS module with a size of 23.0 x 25.0 x 2.6mm
- ☛ Innovative LGA Package
- ☛ Embedded powerful Internet service protocols, multiple Sockets & IP addresses
- ☛ Based on mature and field-proven platform, backed up by timely support and service, from definition to design and production
- ☛ QuecFOTA™
- ☛ Jamming Detection

Quectel M80

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 with GSM Phase 2/2+	Class 4 (2W @ 850/ 900MHz) 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	23.0 x 25.0 x 2.6mm
Weight	Approx. 3.1g
Control via AT commands	GSM 07.07, 07.05 and other enhanced AT Commands
SIM Application Toolkit	

Specifications for Data

GPRS Class 12	Max.85.6 kbps (uplink & downlink)
PBCCH Support	
Coding Schemes	CS 1, 2, 3, 4
CSD	Up to 14.4 kbps
USSD	
Non Transparent Mode	
Protocols	PPP/TCP/UDP/FTP/MMS/MUX/HTTP/SMTP

Specifications for Voice

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

Interfaces

SIM/ USIM	3V/1.8V
ADC	2 Inputs
UART	3 Interfaces
Analog Audio Chanel	2 Inputs, 3 Outputs Embedded Class-AB amplifier in one channel
SD Card interface	Support up to 32GB SD card
RTC Backup	
PCM	
Antenna Pad	

Certificates

CE IC FCC UCRF ANATEL ICASA

Specifications for SMS via GSM/GPRS

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