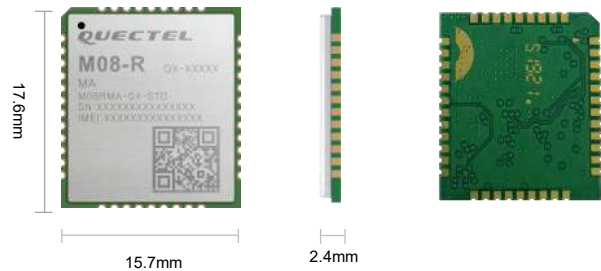


Quectel M08-R

Ultra-compact Quad-band GSM/GPRS Module



Quectel M08-R is a cost-effective and ultra-compact quad-band GSM/GPRS module. The module measures just 17.6mm x 15.7mm x 2.4mm, which is perfectly suited for applications with demanding size, cost and quality requirements.

Available in industry standard form factor in leadless chip carrier (LCC) package, M08-R is easy to solder and its SMT pads allow fully automated assembly with standard pick & place and reflow soldering, which enable cost-efficient and high-volume production as well as fast time-to-market.

The comprehensive set of interfaces, compact form factor, ultra-low power consumption and wide temperature range extend the applicability of M08-R to a wide range of M2M applications such as wearable devices, industrial PDA, personal tracking, wireless POS, smart metering, telematics, etc.



Key Benefits

- ✓ Ultra-compact quad-band GSM/GPRS module
- ✓ Easy to solder with LCC form factor
- ✓ Power consumption as low as 1.3mA
- ✓ Support voice, QuecFOTA®, DFOTA and QuecLocator®
- ✓ Embedded powerful Internet service protocols, multiple sockets & IP addresses
- ✓ Fast time-to-market: simple product design, evaluation tools and timely technical support to minimize design-in time and development efforts



Quad-band



Extended Temperature Range: -40°C ~ +85°C



LCC Package



GPRS Multi-slot Class 12



Ultra-compact Size



Embedded Internet Services Protocols



Quectel Enhanced AT Commands



Audio Function

GSM/GPRS		M08-R	
Frequency Bands	850/900/1800/1900MHz		
Dimensions (mm)	(17.6±0.15) × (15.7±0.15) × (2.4±0.20)		
Temperature Range			
Operation Temperature	-35°C ~ +75°C		
Extended Temperature	-40°C ~ +85°C		
Certifications			
Regulatory	CE*		
Others	RoHS Compliant		
Data			
GPRS Class 12	Max. 85.6kbps (Downlink) Max. 85.6kbps (Uplink)		
Coding Schemes	CS-1, CS-2, CS-3, CS-4		
USSD	●		
Non-transparent Mode	●		
SMS			
Point-to-point MO and MT	●		
Text and PDU Mode	●		
Interfaces			
(U)SIM	× 1, 1.8V/3.0V		
UART	× 3, Main Port, Debug Port and Auxiliary Port		
Analog Audio	× 2, 1 Output Channel and 1 Input Channel		
RTC	× 1		
Antenna Pad	× 1 GSM Antenna Pad		
voice			
Speech Codec Modes	HR/ FR/ EFR/ AMR		
Echo Arithmetic	Echo Cancellation/ Echo Suppression/ Noise Reduction		
Enhanced Features			
QuecFOTA®	●		
DFOTA	●		
QuecCell	●		
QuecFile	●		
OpenCPU	●		
QuecLocator®	●		
CMUX	●		
Audio Play/Audio Recording	●		
General Features			
GPRS Multi-slot Class	Class 12		
GPRS Mobile Station	Class B		
Weight	Approx. 1.18g		
Package	LCC		
Software Features			
Protocols	TCP/ UDP/ PPP/ HTTP/ NTP/ PING/ TTS/ FTP/ SSL/ MQTT/ HTTPS/ IPv6*		
AT commands	GSM 07.07, 07.05 and other Enhanced AT commands		
Electrical & Sensitivity			
Output Power	Class 4 (2W) @GSM850/EGSM900MHz Class 1 (1W) @DCS1800/PCS1900MHz		
Consumption	1.3mA ^① @DRX=5 1.2mA ^① @DRX=9		
Sensitivity	GSM850: -108dBm EGSM900: -108dBm DCS1800: -107dBm PCS1900: -107dBm		
Supply Voltage	3.45V~4.25V, Typ. 4.0V		

Notes:

- * means under development
- means supported.
- ① means average value, for reference only.