Quectel M85

Quad-band GSM/GPRS Module

Quad-band

GPRS Multi-slot Class 12

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

Dual SIM

LCC

Embedded Internet Services Protocols

Serial Port Multiplexer GSM 0710

PCM

Highly Compact Size

SD Card

Temperature Detection

Key Benefits

- Quad-band GSM/GPRS module with a size of 24.5 x 25.3 x 2.6mm
- LCC Package
- Embedded powerful Internet service protocols, multiple Sockets & IP addresses
- eCall/ Era-Glonass
- SMTPS
- QuecFOTA™
- Dual SIM Single Standby
- Jamming Detection
- DTMF
- QuecLocator
- QuecCell

M85 is a powerful functional Quad-band GSM/GPRS module in LCC castellation packaging. It integrates advanced eCall/Era-Glonass, UFS, recording and audio playing function into a compact form factor of 24.5× 25.3 × 2.6mm, which fully meets developers' comprehensive requirements for large space storage and extends the functionality of the application at no additional cost.
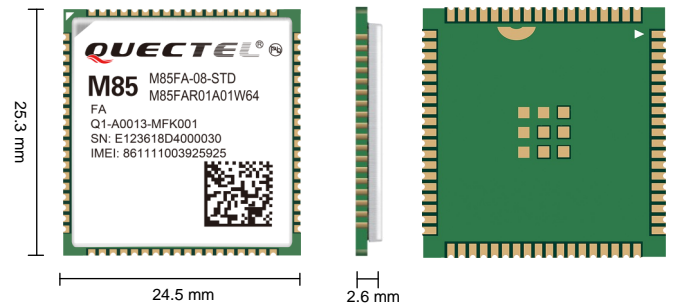
M85 adopts surface mounted technology, making it the ideal solution for durable and rugged designs, and reducing BOM cost and size on the customer's application. And its low profile and small size of LCC package ensures M85 easily embedded into the low-volume applications and ensures the reliable connectivity 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 M85 to update the firmware remotely. Additional features such as integrated TCP/IP protocol stack, serial multiplexer, enhance AT commands, jamming detection and antenna diagnosis guarantee reliable SMS, data, voice, multi-media transmission via GSM/GPRS network.

QUECTEL

Wireless Module Expert

Quectel M85
Quad-band
GSM/GPRS Module

25.3 mm
24.5 mm
2.6 mm

M85 M85FA-08-STD M85FAR01A01W64
FA
Q1-A0013-MFK001
SN: E123618D4000030
IMEI: 861111003925925

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	24.5 x 25.3 x 2.6mm
Weight	Approx. 3.3g
Control via AT commands	GSM 07.07, 07.05 and other enhanced AT Commands
SIM Application Toolkit	

Specifications for Data

GPRS Class 12	Max. 85.6kbps (uplink & downlink)
PBCCH Support	
Coding Schemes	CS 1, 2, 3, 4
USSD	
Non Transparent Mode	
Protocols	PPP/TCP/UDP/FTP/MMS/HTTP/SMTP/SMPTS/ POP3
Driver	CMUX RIL driver for Android, WinCE

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	Dual SIM 3V/1.8V
ADC	1 Input
UART	3 Interfaces
Analog Audio Chanel	2 Inputs, 3 Outputs Embedded Class-AB amplifier in one channel
SD Card interface	Up to 32GB SD card supported
RTC Backup	
PCM	
Antenna Pad	

Specifications for SMS via GSM/GPRS

Point-to-point MO and MT

SMS Cell Broadcast

Text and PDU Mode