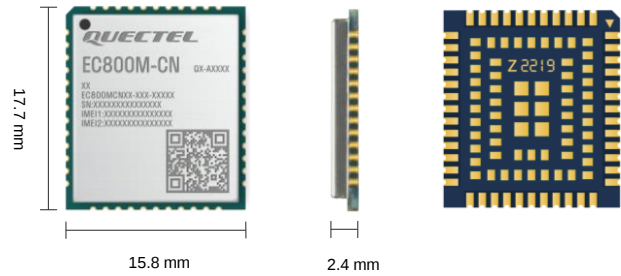


Quectel EC800M-CN

IoT/ M2M-optimized LTE Cat 1 Module



EC800M-CN is a cost-effective LTE Cat 1 wireless communication module specially designed by Quectel for M2M and IoT fields. It delivers a maximum downlink rate of 10 Mbps and a maximum uplink rate of 5 Mbps. Designed in the compact and unified form factor, EC800M-CN is compatible with LTE Standard EC800E-CN, EC800G-CN, EC800N-CN , EC800K-CN and EG800K series module in package.

EC800M-CN adopts the laser engraving process to get a more fashionable appearance, strong metallic texture, better heat dissipation, durable label information, which makes it more suitable for automation requirements.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 7/8/ 8.1/ 10/ 11, Linux, Android) extend the applicability of the module to a wide range of M2M and IoT applications such as cloud trumpet, tracker, POS, IPC, data card, smart safety and industrial PDA.



Key Features

- ✓ Ultra-small size, designed for M2M and IoT applications, especially for small-size terminals
- ✓ Support remote DFOTA, reducing later operation and maintenance costs
- ✓ Dual SIM Single Standby Single Pass (Optional)
- ✓ Support GNSS (Optional)
- ✓ Support Wi-Fi Scan
- ✓ Super cost-effective

 LTE Cat 1 Max. 10 Mbps (DL) Max. 5 Mbps (UL)	 LCC Package	 Embedded Abundant Protocols
 USB 2.0 High Speed Interface	 GNSS (Optional)	 VoLTE (Optional)
 Quectel Enhanced AT Commands	 DFOTA	 Dual SIM Single Standby Single Pass (Optional)

Quectel EC800M-CN

LTE Cat 1		EC800M-CN
Region/ Operator		China/ India
Package		LCC
Dimensions		17.7 mm × 15.8 mm × 2.4 mm
Weight		Approx. 1.4 g
Temperature Range		
Operating Temperature Range		-35 °C to +75 °C
Extended Temperature Range		-40 °C to +85 °C
Frequency Bands		
LTE-FDD		B1/ 3/ 5/ 8
LTE-TDD		B34/ 38/ 39/ 40/ 41
GNSS (Optional)		GPS/ BDS/ GLONASS/ Galileo
Certifications		
Carrier		China: China Telecom/ China Mobile
Regulatory		China: SRRC/ NAL/ CCC
Others		WHQL
Data Rates		
LTE-FDD (Mbps)		10 (DL)/ 5 (UL)
LTE-TDD (Mbps)		8.96 (DL)/ 3.1 (UL)
Interfaces		
USIM ^①		× 2, 1.8/ 3.0 V
UART		× 3 (Main, Debug and Auxiliary*)
USB 2.0		× 1
Analog Audio (Optional)		Input: × 1 (Microphone) Output: × 1 (Earpiece)
PCM (Digital Audio) (Optional)		× 1
ADC		× 2
NET_STATUS		× 1
STATUS		× 1
I2C		× 1 (QuecOpen®solution: × 2)
LCM ^②		× 1
Camera ^②		× 1
Matrix Keyboard (5 × 5) ^②		× 1
USB_BOOT		× 1
RESET_N		× 1
PWRKEY		× 1
Antennas		× 2 (Main Antenna and GNSS Antenna (Optional))
Audio (Optional)		
Speech Codec Modes		MP3/ AMR/ WAV
Audio		Digital Audio, Analog Audio and VoLTE (Voice over LTE)
Enhanced Features		
DFOTA		Supported
DTMF		Optional
Audio Playback/ Audio Recording		Optional
QuecOpen®		Optional
QuecFile®		Supported
(U)SIM1 Card Detection		Supported
Software Features		
Protocols		TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ CMUX*/ HTTPS/ FTPS/ SSL/ FILE/ MQTT/ MMS*/ SMTP*/ SMTPS*
Drivers	RIL	Android 4.x~13.x
	USB RNDIS	Windows 7/ 8/ 8.1/ 10/ 11 Linux 2.6~6.5
	USB ECM	Linux 2.6~6.5
	USB Serial	Windows 7/ 8/ 8.1/ 10/ 11 Linux 2.6~6.5
	GNSS (Optional)	Android 4.x~13.x
		Android 4.x~13.x
Electrical Features		
Supply Voltage Range		3.4~4.3 V, typ. 3.8 V 38 μA @ Power off 1.34 mA@ LTE Sleep (PF = 128)
Power Consumption (Typical)		1.24 mA @ LTE Sleep (PF = 256) 17.3 mA @ Idle (PF = 64 USB disconnected) 30.3 mA @ Idle (PF = 64 USB connected)

NOTE:
1. *: Under development.
2. ①: USIM 2 is optional.
3. ②: Only supported by QuecOpen® solution.
4. ●: Supported.
5. ○: Optional.

