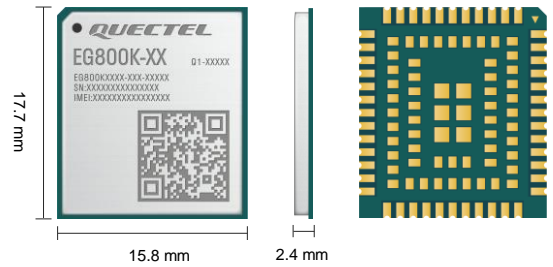


Quectel EG800K Series

IoT/ M2M-optimized LTE Cat 1 bis Module



EG800K Series is an LTE Cat 1 bis wireless communication module specially designed by Quectel for M2M and IoT applications. It supports maximum data rates of 10 Mbps downlink and 5 Mbps uplink and has an ultra-high cost performance. Designed in the compact and unified form factor, EG800K Series is compatible with LTE Standard EC800M-CN, EC800K-CN and EG810M series modules in package.

EG800K Series consists of three models: EG800K-CN, EG800K-EU and EG800K-LA, covering the frequency band of different countries and regions; EG800K series 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, a variety of drivers and abundant functionalities (USB serial drivers for Windows 8.1/ 10/ 11, Linux, Android and other operating systems) 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
- ✓ Support Wi-Fi Scan (Optional)
- ✓ Support GNSS (Optional)
- ✓ Super cost-effective



LTE Cat 1 bis
Max. 10 Mbps (DL)
Max. 5 Mbps (UL)



LGA Package



Embedded
Abundant Protocols



USB 2.0 High Speed
Interface



GNSS (Optional)



USB Drivers



Quectel Enhanced
AT Commands



DFOTA

Quectel EG800K Series

LTE Cat 1 bis	EG800K-CN	EG800K-EU	EG800K-LA
Region/ Operator	China/ India	Europe/ Australia/ New Zealand	Latin America
Package	LGA	LGA	LGA
Dimensions	17.7 mm × 15.8 mm × 2.4 mm	17.7 mm × 15.8 mm × 2.4 mm	17.7 mm × 15.8 mm × 2.4 mm
Weight	Approx. 1.37 g	Approx. 1.40 g	Approx. 1.36 g
Temperature Range			
Operating Temperature	-35 °C to +75 °C	-35 °C to +75 °C	-35 °C ~ +75 °C
Extended Temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C ~ +85 °C
Frequency Bands			
LTE-FDD	B1/ 3/ 5/ 8	B1/ 3/ 5/ 7/ 8/ 20/ 28	B2/ 3/ 4/ 5/ 7/ 8/ 28/ 66
LTE-TDD	B34/ B38/ B39/ B40/ B41	-	-
GNSS	GPS/ BDS/ GLONASS	-	-
Certifications			
Regulatory	China: SRRC/ NAL/ CCC	Europe: CE Australia/ New Zealand: RCM	America: FCC Brazil: Anatel*
Others	WHQL	WHQL	WHQL
Max. Data Rates			
LTE-FDD (Mbps)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)
LTE-TDD (Mbps)	8.96 (DL)/ 3.1 (UL)	-	-
Interfaces			
USIM	× 1, 1.8/ 3.0 V	× 1, 1.8/ 3.0 V	× 1, 1.8/ 3.0 V
UART	× 2 (main, debug)	× 3 (main, debug and auxiliary*)	× 3 (main, debug and auxiliary*)
USB 2.0	× 1	× 1	× 1
ADC	× 2	× 2	× 2
NET_STATUS	× 1	× 1	× 1
STATUS	× 1	× 1	× 1
I2C*	× 1	× 1	× 1
USB_BOOT	× 1	× 1	× 1
RESET_N	× 1	× 1	× 1
PWRKEY	× 1	× 1	× 1
GNSS Antenna	× 1	-	-
LTE/ Wi-Fi Scan Antenna	× 1	× 1	× 1
Enhanced Features			
DFOTA	●	●	●
Wi-Fi Scan	○	○	○
QuecFile®	●	●	●
USIM Card Detection	●	●	●
Software Features			
Protocols^①	TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ FTPS/ FILE/ SSL/ MQTT	TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ FTPS/ FILE/ SSL/ MQTT	TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ FTPS/ FILE/ SSL/ MQTT
RIL	Android 4.x–13.x	Android 4.x–13.x	Android 4.x–13.x
USB RNDIS	Windows 8.1/ 10/ 11 Linux 2.6–6.7	Windows 8.1/ 10/ 11 Linux 2.6–6.7	Windows 8.1/ 10/ 11 Linux 2.6–6.7
Drivers	USB ECM Linux 2.6~6.7	Linux 2.6–6.7	Linux 2.6–6.5
USB Serial	Windows 8.1/ 10/ 11 Linux 2.6–6.7 Android 4.x–13.x	Windows 8.1/ 10/ 11 Linux 2.6–6.7 Android 4.x–13.x	Windows 8.1/ 10/ 11 Linux 2.6–6.7 Android 4.x–13.x
Electrical Characteristics			
Power Supply	3.4–4.3 V, typ. 3.8 V	3.4–4.3 V, typ. 3.8 V	3.4–4.3 V, typ. 3.8 V
Power Consumption (Typical)	6.15 μA @ Power off 0.82 mA @ LTE-FDD Sleep (PF = 128) 0.72 mA @ LTE-FDD Sleep (PF = 256) 7.98 mA @ LTE-TDD Idle (PF = 64, USB disconnected) 19.46 mA @ LTE-TDD Idle (PF = 64, USB connected)	7.47 μA @ Power off 0.64 mA @ LTE-FDD Sleep (PF = 128) 0.56 mA @ LTE-FDD Sleep (PF = 256) 7.82 mA @ LTE-FDD Idle (PF = 64, USB disconnected) 19.66 mA @ LTE-FDD Idle (PF = 64, USB connected)	7.68 μA @ Power off 0.73 mA @ LTE-FDD Sleep (PF = 128) 0.64 mA @ LTE-FDD Sleep (PF = 256) 7.43 mA @ LTE-FDD Idle (PF = 64, USB disconnected) 19 mA @ LTE-FDD Idle (PF = 64, USB connected)

NOTE:

- *: In progress/ Under development.
- : Supported.
- : Optional.
- ①: The PPP, FTP, HTTP, HTTPS, FTPS and FILE protocols are optional.