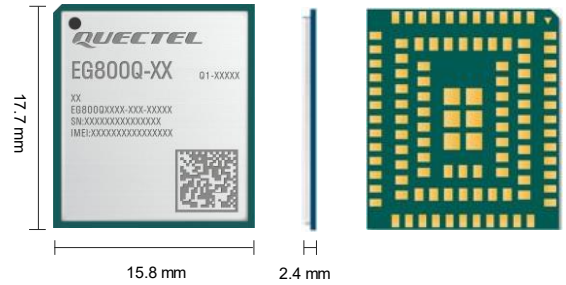




Quectel EG800Q Series

IoT/M2M-optimized
LTE Cat 1bis Module



Quectel EG800Q is a series of LTE Cat 1bis module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel-14 LTE technology and supporting Cat 1bis, it delivers maximum data rates up to 10 Mbps downlink and 5 Mbps uplink. Designed in a compact and unified form factor.

EG800Q series contains 3 variants: EG800Q-EU, EG800Q-NA and EG800Q-IN. A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 10/ 11, Linux and Android) extend the applicability of the module to a wide range of M2M and IoT applications, such as asset management, commercial telematics, payment, RMAC (Remotely Managed Access Control), smart safety and automation, smart metering and smart grid.



Key Features

- ✓ LTE Cat 1bis module optimized for M2M and IoT applications
- ✓ LTE-FDD coverage
- ✓ Supports DFOTA
- ✓ Single antenna
- ✓ LTE module in compact size
- ✓ Supports Wi-Fi Scan



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



Compact Size



LGA Package



Embedded Abundant
Protocols



DFOTA



Quectel Enhanced
AT Commands



USB 2.0 High Speed
Interface

Quectel EG800Q Series

LTE Cat 1bis	EG800Q-EU	EG800Q-EU	EG800Q-IN
Region/ Operator	Europe	North America	India
Package	LGA	LGA	LGA
Dimensions (mm)	17.7 × 15.8 × 2.4	17.7 × 15.8 × 2.4	17.7 × 15.8 × 2.4
Weight (g)	Approx. 2.0	Approx. 2.0	Approx. 2.0
Temperature Range			
Operating Temperature	-35 °C to +75 °C	-35 °C to +75 °C	-35 °C to +75 °C
Extended Temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Frequency Bands			
LTE-FDD	B1/ 3/ 5/ 7/ 8/ 20/ 28	B2/ 4/ 5/ 12/ 13/ 66	B1/ 3/ 5/ 8
LTE-TDD	-	-	B40/ 41
Certifications			
Carrier	Europe: Deutsche Telekom New Zealand: Spark	America: Verizon/ AT&T/ T-Mobile	-
Regulatory/ Conformance	Europe: CE The UK: UKCA Brazil: Anatel Australia/ New Zealand: RCM	Global: GCF North America: PTCRB America: FCC Canada: IC	-
Others	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			
USB 2.0	× 1	× 1	× 1
Digital Audio (PCM)*	× 1	× 1	× 1
USIM	× 1	× 1	× 1
NET_STATUS	× 1	× 1	× 1
UART	× 3 (Main, Debug and Auxiliary UART*)	× 3 (Main, Debug and Auxiliary UART*)	× 3 (Main, Debug and Auxiliary UART*)
ADC	× 2	× 2	× 2
RESET_N	× 1	× 1	× 1
PWRKEY	× 1	× 1	× 1
I2C	× 1	× 1	× 1
USB_BOOT	× 1	× 1	× 1
GRFC	× 2	× 2	× 2
Main/ Wi-Fi Scan Antenna	× 1	× 1	× 1
Enhanced Features			
DFOTA	●	●	●
Wi-Fi Scan	●	●	●
USIM Card Detection	●	●	●
Software Features			
Protocols	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/ SMTPS/ MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/ SMTPS/ MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/ SMTPS/ MMS*
Drivers	RIL	Android 4.x–14.x	Android 4.x–14.x
	USB RNDIS	Windows 10/ 11 Linux 2.6–6.7	Windows 10/ 11 Linux 2.6–6.7
	USB ECM	Linux 2.6–6.7	Linux 2.6–6.7
	USB Serial	Windows 10/ 11 Linux 2.6–6.7	Windows 10/ 11 Linux 2.6–6.7
		Android 4.x–14.x	Android 4.x–14.x
Electrical Characteristics			
Power Supply	3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V
Power Consumption (Typical)	55 µA @ Power off 0.06 mA @ Sleep Mode (AT+CFUN = 0, USB disconnected) 0.15 mA @ Sleep Mode (AT+CFUN = 4, USB disconnected) 4.50 mA @ Idle Mode (PF = 64, USB disconnected) 25.50 mA @ Idle Mode (PF = 64, USB connected)	50 µA @ Power off 0.06 mA @ Sleep Mode (AT+CFUN = 0, USB disconnected) 0.15 mA @ Sleep Mode (AT+CFUN = 4, USB disconnected) 4.50 mA @ Idle Mode (PF = 64, USB disconnected) 25.50 mA @ Idle Mode (PF = 64, USB connected)	1.54 µA @ Power off 0.045 mA @ Sleep Mode (AT+CFUN = 0, USB disconnected) 0.13 mA @ Sleep Mode (AT+CFUN = 4, USB disconnected) 3.90 mA @ Idle Mode (PF = 64, USB disconnected) 24.82 mA @ Idle Mode (PF = 64, USB connected)

NOTE:

1. *: Under development.
2. ●: Supported.