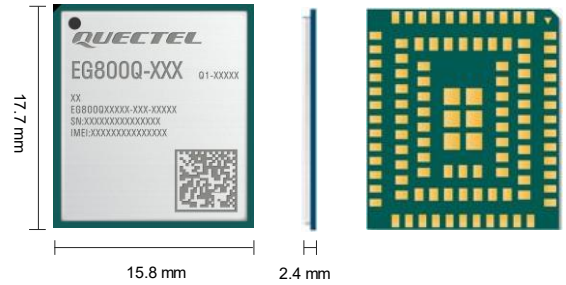




Quectel EG800Q Series

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 5 variants: EG800Q-EU, EG800Q-NA, EG800Q-IN, EG800Q-NAD, and EG800Q-GL*. 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-NA	EG800Q-IN	EG800Q-NAD	EG800Q-GL
Region/ Operator	Europe	North America	India	North America	Global
Package	LGA	LGA	LGA	LGA	LGA
Dimensions (mm)	17.7 × 15.8 × 2.4	17.7 × 15.8 × 2.4	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	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	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	-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	B2/ 4/ 5/ 12/ 13/ 25/ 66/ 71	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 66/ 71
LTE-TDD	-	-	B40/ 41	-	B34/ 38/ 39/ 40/ 41
Certifications					
Carrier	Europe: Deutsche Telekom New Zealand: Spark/ One NZ*	America: Verizon/ AT&T/ T-Mobile	-	America: T-Mobile*	America: KDDI*/ Telstra*/ Rogers*/ T-Mobile*
Regulatory/ Conformance	Europe: CE The UK: UKCA Brazil: Anatel Australia/ New Zealand: RCM	Global: GCF North America: PTCRB America: FCC Canada: IC	-	North America: PTCRB* America: FCC* Canada: IC*	Global: GCF* Europe: CE* North America: PTCRB* America: FCC* Canada: IC* Brazil: Anatel* China: CCC* South Korea: KC* Japan: JATE*/ TELEC* Australia/ New Zealand: RCM*
Others	WHQL	WHQL	WHQL	WHQL	WHQL
Max. Data Rates					
LTE-FDD (Mbps)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)
LTE-TDD (Mbps)	-	-	8.96 (DL)/ 3.1 (UL)	-	8.96 (DL)/ 3.1 (UL)
Interfaces					
USB 2.0	× 1	× 1	× 1	× 1	× 1
Digital Audio (PCM)*	× 1	× 1	× 1	× 1	× 1
USIM	× 1	× 1	× 1	× 1	× 1
NET_STATUS	× 1	× 1	× 1	× 1	× 1
UART	× 3 (Main, Debug and Auxiliary UART*)	× 3 (Main, Debug and Auxiliary UART*)	× 3 (Main, Debug and Auxiliary UART*)	× 3 (Main, Debug and Auxiliary UART*)	× 3 (Main, Debug and Auxiliary UART*)
ADC	× 2	× 2	× 2	× 2	× 2
RESET_N	× 1	× 1	× 1	× 1	× 1
PWRKEY	× 1	× 1	× 1	× 1	× 1
I2C*	× 1	× 1	× 1	× 1	× 1
USB_BOOT	× 1	× 1	× 1	× 1	× 1
GRFC	× 2	× 2	× 2	× 2	× 2
Main/ Wi-Fi Scan Antenna	× 1	× 1	× 1	× 1	× 1
Enhanced Features					
DFOTA	●	●	●	●	●
Wi-Fi Scan	●	●	●	●	●
USIM Card Detection	●	●	●	●	●

Quectel EG800Q Series

LTE Cat 1bis	EG800Q-EU	EG800Q-NA	EG800Q-IN	EG800Q-NAD	EG800Q-GL
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*	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	Android 4.x–14.x	Android 4.x–14.x
	USB	Windows 10/ 11	Windows 10/ 11	Windows 10/ 11	Windows 10/ 11
	RNDIS	Linux 2.6–6.7	Linux 2.6–6.7	Linux 2.6–6.7	Linux 2.6–6.7
	USB ECM	Linux 2.6–6.7	Linux 2.6–6.7	Linux 2.6–6.7	Linux 2.6–6.7
	USB Serial	Windows 10/ 11 Linux 2.6–6.7 Android 4.x–14.x	Windows 10/ 11 Linux 2.6–6.7 Android 4.x–14.x	Windows 10/ 11 Linux 2.6–6.7 Android 4.x–14.x	Windows 10/ 11 Linux 2.6–6.7 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)	TBD	TBD

NOTE:
1. *: Under development/ planning/ in progress.
2. ●: Supported.
3. TBD: To Be Determined.