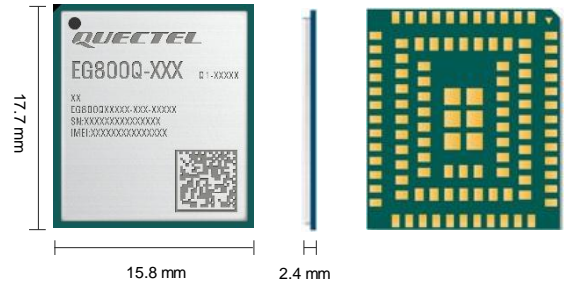




# Quectel EG800Q Series

## 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*
<b>Region/ Operator</b>	Europe	North America	India	North America	Global
<b>Package</b>	LGA	LGA	LGA	LGA	LGA
<b>Dimensions (mm)</b>	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
<b>Weight (g)</b>	Approx. 2.0	Approx. 2.0	Approx. 2.0	Approx. 2.0	Approx. 2.0
<b>Temperature Range</b>					
<b>Operating Temperature</b>	-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
<b>Extended Temperature</b>	-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
<b>Frequency Bands</b>					
<b>LTE-FDD</b>	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
<b>LTE-TDD</b>	-	-	B40/ 41	-	B34/ 38/ 39/ 40/ 41
<b>Certifications</b>					
<b>Carrier</b>	<b>Europe:</b> Deutsche Telekom <b>Australia:</b> Spark <b>New Zealand:</b> One NZ	<b>America:</b> Verizon/ AT&T/ T-Mobile	-	<b>America:</b> T-Mobile <b>Canada:</b> Rogers*	<b>America:</b> T-Mobile*/ Verizon* <b>Canada:</b> Rogers* <b>Japan:</b> KDDI* <b>Global:</b> GCF* <b>Europe:</b> CE* <b>North America:</b> PTCRB*
<b>Regulatory/ Conformance</b>	<b>Europe:</b> CE <b>The UK:</b> UKCA <b>Brazil:</b> Anatel <b>Australia/ New Zealand:</b> RCM	<b>Global:</b> GCF <b>North America:</b> PTCRB <b>America:</b> FCC <b>Canada:</b> IC	-	<b>North America:</b> PTCRB <b>America:</b> FCC <b>Canada:</b> IC	<b>America:</b> FCC* <b>Canada:</b> IC* <b>Brazil:</b> Anatel* <b>China:</b> CCC* <b>South Korea:</b> KC* <b>Japan:</b> JATE*/ TELECOM* <b>Australia/ New Zealand:</b> RCM*
<b>Others</b>	WHQL	WHQL	WHQL	WHQL	WHQL
<b>Max. Data Rates</b>					
<b>LTE-FDD (Mbps)</b>	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)
<b>LTE-TDD (Mbps)</b>	-	-	8.96 (DL)/ 3.1 (UL)	-	8.96 (DL)/ 3.1 (UL)
<b>Interfaces</b>					
<b>USB 2.0</b>	× 1	× 1	× 1	× 1	× 1
<b>Digital Audio (PCM)*</b>	× 1	× 1	× 1	× 1	× 1
<b>USIM</b>	× 1	× 1	× 1	× 1	× 1
<b>NET_STATUS</b>	× 1	× 1	× 1	× 1	× 1
<b>UART</b>	× 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*)
<b>ADC</b>	× 2	× 2	× 2	× 2	× 2
<b>RESET_N</b>	× 1	× 1	× 1	× 1	× 1
<b>PWRKEY</b>	× 1	× 1	× 1	× 1	× 1
<b>I2C*</b>	× 1	× 1	× 1	× 1	× 1
<b>USB_BOOT</b>	× 1	× 1	× 1	× 1	× 1
<b>GRFC</b>	× 2	× 2	× 2	× 2	× 2
<b>Main/ Wi-Fi Scan Antenna</b>	× 1	× 1	× 1	× 1	× 1
<b>Enhanced Features</b>					
<b>DFOTA</b>	●	●	●	●	●
<b>Wi-Fi Scan</b>	●	●	●	●	●
<b>USIM Card Detection</b>	●	●	●	●	●

NOTE:

- \*: Under development/ planning/ in progress.
- : Supported.

# Quectel EG800Q Series

LTE Cat 1bis	EG800Q-EU	EG800Q-NA	EG800Q-IN	EG800Q-NAD	EG800Q-GL*
<b>Software Features</b>					
<b>Protocols</b>	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/SMTSPS/MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/SMTSPS/MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/SMTSPS/MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/SMTSPS/MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ CMUX/ SSL/ MQTT/ FTPS/ PPP/ FILE/ SMTP/SMTSPS/MMS*
<b>Drivers</b>	<b>RIL</b>	Android 4.x–16.x	Android 4.x–16.x	Android 4.x–16.x	Android 4.x–16.x
	<b>USB</b>	Windows 10/ 11	Windows 10/ 11	Windows 10/ 11	Windows 10/ 11
	<b>RNDIS</b>	Linux 2.6–6.17	Linux 2.6–6.17	Linux 2.6–6.17	Linux 2.6–6.17
	<b>USB ECM</b>	Linux 2.6–6.17	Linux 2.6–6.17	Linux 2.6–6.17	Linux 2.6–6.17
	<b>USB Serial</b>	Windows 10/ 11 Linux 2.6–6.17 Android 4.x–14.x	Windows 10/ 11 Linux 2.6–6.17 Android 4.x–14.x	Windows 10/ 11 Linux 2.6–6.17 Android 4.x–14.x	Windows 10/ 11 Linux 2.6–6.17 Android 4.x–14.x
<b>Electrical Characteristics</b>					
<b>Power Supply</b>	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	3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V
<b>Power Consumption (Typical)</b>	55 $\mu$ A @ 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 $\mu$ A @ 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 $\mu$ A @ 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)	50 $\mu$ A @ Power off 0.06 mA @ Sleep Mode (AT+CFUN=0, USB disconnected) 0.14 mA @ Sleep Mode (AT+CFUN=4, USB disconnected) 4.77 mA @ Idle Mode (PF=64, USB disconnected) 24.98 mA @ Idle Mode (PF=64, USB connected)	0.95 $\mu$ A @ Power off 0.54 mA @ Sleep Mode (AT+CFUN=0, USB disconnected) 0.13 mA @ Sleep Mode (AT+CFUN=4, USB disconnected) 3.88 mA @ Idle Mode (PF=64, USB disconnected) 24.89 mA @ Idle Mode (PF=64, USB connected)

NOTE:

\*: Under development/ planning/ in progress.