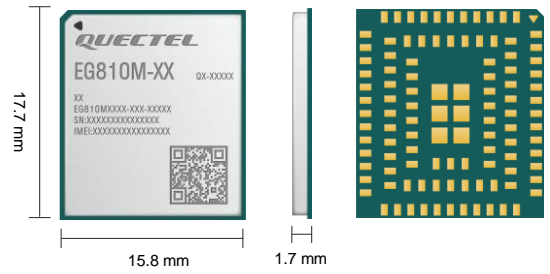


# Quectel EG810M-EU

## IoT/ M2M-optimized LTE Cat 1 Module



EG810M-EU is an LTE Cat 1 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, EG810M-EU is compatible with LTE Standard EG800K series module in package.

EG810M-EU 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 7/ 8/ 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, and its ultra-thin design (1.7 mm in thickness) is also very suitable for thickness-critical products such as ear-hook walkie-talkies, student cards, and watches.



### 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
- ✓ Super cost-effective



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



LGA Package



Embedded  
Abundant Protocols



USB 2.0 High Speed  
Interface



Wi-Fi Scan



VoLTE



Quectel Enhanced  
AT Commands



DFOTA



USB Drivers

# Quectel EG810M-EU

| LTE Cat 1                        | EG810M-EU   |
|----------------------------------|---|
| Region/ Operator                 | Europe  |
| Package                          | LGA   |
| Dimensions (mm)                  | 17.7 × 15.8 × 1.7                                 |
| Weight (g)                       | Approx. 0.98                                      |
| <b>Temperature Range</b>         |   |
| Operating Temperature            | -35 °C to +75 °C                                  |
| Extended Temperature             | -40 °C to +85 °C                                  |
| <b>Frequency Bands</b>           |   |
| LTE-FDD                          | B1/ 3/ 5/ 7/ 8/ 20/ 28                            |
| LTE-TDD                          | -   |
| <b>Certifications</b>            |   |
| Regulatory                       | Europe: CE<br>Australia/ New Zealand: RCM         |
| Others                           | WHQL  |
| <b>Data Rates</b>                |   |
| LTE-FDD (Mbps)                   | 10 (DL)/ 5 (UL)                                   |
| LTE-TDD (Mbps)                   | -   |
| <b>Interfaces</b>                |   |
| USIM                             | × 2, 1.8/ 3.0 V <sup>①</sup>                      |
| UART                             | × 3 (main, debug and auxiliary <sup>②</sup> )     |
| USB 2.0                          | × 1   |
| Analog Audio (Optional)          | Input: × 1 (Microphone)<br>Output: × 1 (Earpiece) |
| PCM (Digital Audio) (Optional)   | × 1   |
| ADC                              | × 2   |
| NET_STATUS                       | × 1   |
| STATUS                           | × 1   |
| I2C (Optional)                   | × 1 (QuecOpen <sup>®</sup> solution: × 2)         |
| LCM <sup>②</sup>                 | × 1   |
| PWM <sup>②</sup>                 | × 4   |
| Camera <sup>②</sup>              | × 1   |
| Matrix Keypad (3×3) <sup>②</sup> | × 1   |
| SPI <sup>②</sup>                 | × 3   |
| USB_BOOT                         | × 1   |
| RESET_N                          | × 1   |
| PWRKEY                           | × 1   |
| Main Antenna                     | × 1   |
| <b>Audio</b>                     |   |
| Speech codec mode                | MP3/ AMR/ WAV                                     |
| Voice                            | Digital Audio, Analog Audio, VoLTE                |
| <b>Enhanced Features</b>         |   |
| DFOTA                            | ●   |
| DTMF                             | ○   |
| Audio Playback/ Audio Recording  | ○   |
| Wi-Fi Scan                       | ●   |
| QuecOpen <sup>®</sup>            | ○   |
| QuecPython <sup>®</sup>          | ○   |
| QuecFile <sup>®</sup>            | ●   |
| USIM Card Detection              | ●   |

NOTE:

- ①: Only USIM 1 supports USIM card detection.
- ②: Only supported by QuecOpen<sup>®</sup> solution.
- : Supported.
- : Optional.

# Quectel EG810M-EU

LTE Cat 1

EG810M-EU

## Software Features

|                   |                                   |   |
|-------------------|-----------------------------------|---|
| <b>Protocol</b>   |                                   | TCP/UDP/PPP/NTP/NITZ/FTP/HTTP/PING/HTTPS/FTPS/SSL/FILE/MQTT/CMUX*/MMS*/SMTP*/SMTPS* |
| <b>Drivers</b>    | <b>RIL</b>                        | Android 4.x–13.x  |
|                   | <b>USB RNDIS</b>                  | Windows 7/8/8.1/10/11   |
|                   |                                   | Linux 2.6–6.5   |
|                   | <b>USB ECM</b>                    | Linux 2.6–6.5   |
| <b>USB Serial</b> | Windows 7/8/8.1/10/11             |   |
|                   | Linux 2.6–6.5<br>Android 4.x–13.x |   |

## Electrical Characteristics

|                                    |                                   |
|------------------------------------|-----------------------------------|
| <b>Power Supply</b>                | 3.4–4.3 V, typ. 3.8 V             |
| <b>Power Consumption (Typical)</b> | 17.6 $\mu$ A @ Power off          |
|                                    | 0.73 mA @ LTE Sleep               |
|                                    | 19.2 mA @ Idle (USB connected)    |
|                                    | 29.3 mA @ Idle (USB disconnected) |

NOTE:

\*: In progress.