Quectel EG21-GL

IoT/M2M-optimized LTE Cat 1 Module

29.0 mm

EG21-GL

QX-XXXXX
XX   EG21GLXX-XXX-XXXXX

SN:XXXXXXXXXXXXXX
IMEI:XXXXXXXXXXXXXX

32.0 mm   2.4 mm
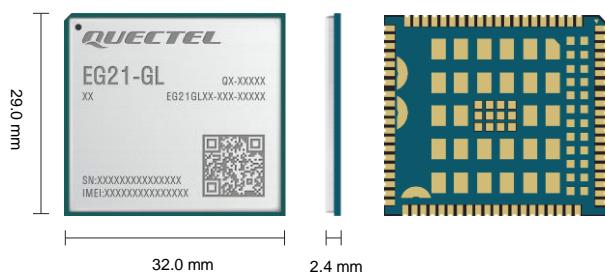
Quectel EG21-GL is an LTE Cat 1 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel-11 LTE technology, it delivers maximum data rates up to 10 Mbps downlink and 5 Mbps uplink. Designed in the compact and unified form factor, EG21-GL is compatible with Quectel UMTS/HSPA+ UC200A-GL module and multi-mode LTE Standard EC2x series (EC25 series, EC21 series and EC20-CE)/EC200A series/EG25-G/EG25-GL/EG21-G modules, which allow for flexible migration among them in design and use.

EG21-GL is backward-compatible with existing EDGE and GSM/GPRS networks, ensuring that it can be connected even in remote areas devoid of 4G or 3G coverage.

EG21-GL supports Qualcomm® IZat™ location technology Gen8C Lite (GPS, GLONASS, BDS, Galileo and QZSS). The integrated GNSS greatly simplifies product design, and provides quicker, more accurate and dependable positioning.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 8/8.1/10/11, Linux, Android) extend the applicability of the module to a wide range of M2M and IoT applications such as smart metering, wearable devices, environmental monitoring, asset tracking, fleet management, smart safety, and alarm systems.

Key Features

✔ LTE Cat 1 module optimized for M2M and IoT applications

✔ Worldwide LTE, UMTS/HSPA(+) and GSM/GPRS/EDGE coverage

✔ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment

✔ Feature refinements: supports DFOTA and DTMF

LTE Cat 1 Max. 10 Mbps (DL) Max. 5 Mbps (UL)	Max. 42 Mbps (DL) Max. 5.76 Mbps (UL)	LGA Package
USB Drivers	Quectel Enhanced AT Commands	USB 2.0 High Speed Interface
Embedded Abundant Protocols	Multi-constellation GNSS (optional)	

LTE Cat 1	EG21-GL
Region/Operator	Global
Dimensions (mm)	29.0 × 32.0 × 2.4
Weight (g)	Approx. 4.9
Temperature Range	
Operating Temperature	-35 °C to +75 °C
Extended Temperature	-40 °C to +85 °C
Frequency Bands	
LTE-FDD	B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66
LTE-TDD	B34/38/39/40/41
WCDMA	B1/2/4/5/6/8/19
TD-SCDMA	-
GSM/EDGE	B2/3/5/8
GNSS(Optional)	GPS/GLONASS/BDS/Galileo/QZSS
Certifications	
Carrier	**America**: AT&T/Verizon*
Regulatory	**Global**: GCF **Europe**: CE **North America**: PTCRB **America**: FCC **The UK**: UKCA **Canada**: IC **Brazil**: Anatel **China**: SRRC/NAL/CCC **South Korea**: KC* **Taiwan, China**: NCC **Japan**: JATE/TELEC **Australia/New Zealand**: RCM
Others	WHQL
Max. Data Rates	
LTE-FDD (Mbps)	10 (DL)/5 (UL)
LTE-TDD (Mbps)	8.96 (DL)/3.1 (UL)
DC-HSPA+ (Mbps)	42 (DL)/5.76 (UL)
WCDMA (kbps)	384 (DL)/384 (UL)
EDGE (kbps)	296 (DL)/236.8 (UL)
GPRS (kbps)	107 (DL)/85.6 (UL)
Interfaces	
(U)SIM	× 2
UART	× 2　(Main & Debug UART)
USB 2.0	× 1
SDIO	× 1
Digital Audio (PCM)	× 1
ADC	× 2
Voice	
Speech Codec Modes	HR/FR/EFR/AMR/AMR-WB
Echo Arithmetic	Echo Cancellation/Noise Suppression
VoLTE (Optional)	Digital Audio and VoLTE (Voice over LTE)
Enhanced Features	
DTMF	●
DFOTA	●
QMI/RmNet	●
Audio Playback/Audio Recording	Optional
QuecOpen®	-
QuecFile®	●
(U)SIM Card Detection	●

NOTE:

1. * : In progress.
2. ●: Supported.

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LTE Cat 1	EG21-GL
Software Features	
Protocols	TCP/UDP/PPP/FTP/HTTP/NTP/PING/QMI/NITZ/SMTP/MQTT/CMUX/HTTPS/FTPS/SMTPS/SSL/MMS/FILE
Drivers	
USB Serial Driver	Windows 8/8.1/10/11 Linux 2.6–6.5 Android 4.x–13.x
GNSS Driver	Android 4.x–13.x
RIL Driver	Android 4.x–13.x
USB NDIS Driver	Windows 8/8.1/10/11
USB GobiNet Driver	Linux 2.6–6.5
USB QMI_WWAN Driver	Linux 3.4–6.5
Electrical Features	
Supply Voltage Range	3.3–4.3 V, typ. 3.8 V
Power Consumption (Typ.)	12 µA @ Power off 1.3 mA @ Sleep 15.4 mA @ Idle

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