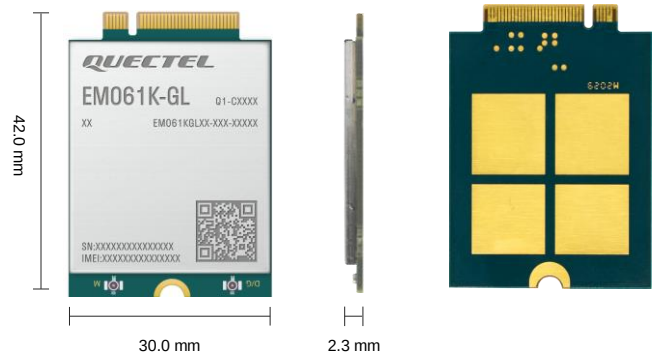




Quectel EM061K-GL

LTE-A Cat 6 M.2 Module



Quectel EM061K-GL is an LTE Advanced Category 6 module. Adopting the 3GPP Release 12 technology, the module supports a theoretical peak data rate of 300 Mbps in the downlink and a theoretical peak data rate of 50 Mbps in the uplink. Designed in M.2 form factor, the module is compatible with Quectel LTE-A Cat 6 module EM06 Series, Cat 12 modules EM12-G/ EM120K-GL/ EM121R-GL/ EM120R-GL, Cat 16 module EM160R-GL, and 5G modules RM500Q/ RM502Q Series, which facilitates customers' migration between different modules.

EM061K-GL is designed for the global market and nearly covers all the mainstream carriers worldwide. The module supports Qualcomm® IZat™ location technology gpsOne 9HT (GPS, GLONASS, BDS and Galileo). The integrated GNSS greatly simplifies product design, and provides quicker, more accurate and more dependable positioning capability.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB drivers for Windows, Linux, Android/ optional built-in eSIM) extend the applicability of the module to a wide range of applications such as industrial routers, home gateways, set-top boxes, industrial laptops, consumer laptops, industrial PDAs, rugged tablet PCs, and digital signage, etc.



Key Features

- ✓ LTE-A Cat 6 module with M.2 form factor
- ✓ Support DL 2 Carrier Aggregation and 64QAM
- ✓ Worldwide LTE-A and UMTS/ HSPA+ coverage
- ✓ Built-in eSIM (optional), DSSA
- ✓ Low power mode
- ✓ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- ✓ MIMO technology meets demands for data rate and link reliability in modem wireless communication systems

 Cat 6 Max. 300 Mbps (DL) Max. 50 Mbps (UL)	 Max. 42 Mbps (DL) Max. 5.76 Mbps (UL)	 M.2 Form Factor
 Embedded Abundant Protocols	 USB 2.0 Interface	 Multi-constellation GNSS
 Quectel Enhanced AT Commands		

Quectel EM061K-GL

LTE Cat 6		EM061K-GL
Region/ Operator		Global
Package		M.2 Package, Key-B
Dimensions (mm)		30.0 × 42.0 × 2.3
Weight (g)		6.2
Temperature Range		
Operation Temperature		-25 °C to +75 °C
Extended Temperature		-40 °C to +85 °C
Frequency Bands		
LTE	LTE-FDD	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 29 ^① / 30/ 32 ^① / 66/ 71
	LTE-TDD	B34/ 38/ 39/ 40/ 41
	DL 2CA	Intra-band and Inter-band
	DL 64QAM/ UL 16QAM	●
UMTS	WCDMA	B1/ 2/ 3/ 4/ 5/ 6/ 8/ 19
GNSS		GPS/ GLONASS/ BDS/ Galileo
Certifications		
Regulatory		NCC*/ ANATEL*/ SRRC*/ NAL*/ CCC*/ CE*/ FCC*/ IC*/ RCM*/ PTCRB*/ GCF*/ UKCA*/ KC*/ JATE*/ TELEC*/ NBTC*/ IMDA*/ ICASA*
Carrier	Europe: Vodafone*/ Swisscom*/ EE*/ Deutsche Telekom*/ Telefonica*	
	America: Verizon*/ AT&T*/ T-Mobile*	
	China: China Mobile*/ China Unicom*	
	Japan: NTT DOCOMO*/ Softbank*/ KDDI*/ Rakuten*	
Others		WHQL/ RoHS Compliant
Data Rate (Max.)		
LTE		DL 300 Mbps; UL 50 Mbps
	DC-HSDPA	DL 42 Mbps
UMTS	HSUPA	UL 5.76 Mbps
	WCDMA	DL 384 kbps; UL 384 kbps
Interfaces		
(U)SIM Interfaces (1.8/ 3.0 V)		× 2
USB 2.0		× 1
Control and Indication Interfaces*		× 6 (Airplane mode control, GNSS control, wake-up control, RF status indication, etc.)
Antenna Tuner Control Interfaces*		× 2
Configuration Pins		× 4
Antenna Interfaces		× 2 (Main, Rx-diversity/ GNSS)
Enhanced Features		
MIMO: DL 2 × 2		●
eSIM		●
DSSA: Dual SIM, Single Active		●
Embedded GNSS		●
Electrical Features		
Supply Voltage Range		3.135–4.4 V, typ. 3.7 V
Power Consumption (USB Mode)		Power down: 0.062 mA; Sleep: 2.71 mA; Idle: 16.75 mA

- Note:
- ①: LTE-FDD B29/ 32 support Rx only and are only for secondary component carrier.
 - *: Under development/ In progress.
 - : Supported.