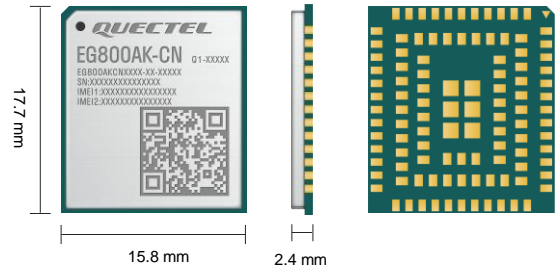


Quectel EG800AK-CN

IoT/ M2M-optimized LTE Cat 1bis Module



This document is only applicable to the EG800AK-CN industrial-grade module.

EG800AK-CN is an LTE Cat 1bis 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. Designed in the compact and unified form factor, EG800AK-CN is compatible with LTE Standard EC800E-CN, EC800G-CN, EC800M-CN, EC800K-CN, EG800W-CN, EG800K series and EG810M series modules in package.

EG800AK-CN 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 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 tracker, POS, IPC, data card, smart safety and industrial PDA.



Key Features

- ✓ Ultra-small size, designed for M2M and IoT applications, especially for small-size terminals
- ✓ Support DFOTA
- ✓ Support Wi-Fi Scan (Optional)
- ✓ Support GNSS (Optional) *
- ✓ Super cost-effective



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



LGA Package



Embedded
Abundant Protocols



USB 2.0 High Speed
Interface



USB Drivers



DFOTA



Quectel Enhanced
AT Commands



GNSS (Optional)

Quectel EG800AK-CN

LTE Cat 1bis		EG800AK-CN
Region/ Operator	China/ India	
Package	LGA	
Dimensions (mm)	17.7 × 15.8 × 2.4	
Weight (g)	Approx. 1.35	
Temperature Range		
Operating Temperature	-35 °C to +75 °C	
Extended Temperature	-40 °C to +85 °C	
Frequency Bands		
LTE-FDD	B1/ 3/ 5/ 8	
LTE-TDD	B34/ 38/ 39/ 40/ 41	
GNSS (Optional)*	GPS/ BDS/ GLONASS/ Galileo	
Certifications		
Carrier	China: China Mobile	
Regulatory/ Conformance	China: SRRC/ NAL/ CCC	
Others	WHQL	
Max. Data Rates		
LTE-FDD (Mbps)	10 (DL)/ 5 (UL)	
LTE-TDD (Mbps)	8.96 (DL)/ 3.1 (UL)	
Interfaces		
USIM	× 2 (USIM1: 1.8/ 3.0 V; USIM2: 1.8 V)	
UART	× 3 (main UART, debug UART and auxiliary UART ^①)	
USB 2.0	× 1	
ADC	× 2	
NET_STATUS	× 1	
STATUS	× 1	
I2C ^①	× 1 (QuecOpen [®] solution: × 2)	
LCM ^②	× 1	
SPI ^②	× 1	
Matrix Keypad (3× 4) ^②	× 1	
USB_BOOT	× 1	
RESET_N	× 1	
PWRKEY	× 1	
LTE/ Wi-Fi Scan Antenna	× 1	
GNSS Antenna (Optional)	× 1	
Enhanced Features		
DFOTA	●	
Wi-Fi Scan	○	
QuecOpen [®]	●	
QuecPython [®]	●	
USIM1 Card Detection	●	
Software Features		
Protocols	TCP/ UDP/ PPP ^③ / NTP/ NITZ/ FTP ^③ / HTTP ^③ / PING/ HTTPS ^③ / FTPS ^③ / SSL/ FILE ^③ / MQTT	
Drivers	RIL	Android 4.x–14.x
	USB RNDIS	Windows 10/ 11
		Linux 2.6–6.7
	USB ECM	Linux 2.6–6.7
USB Serial	Windows 10/ 11	
	Linux 2.6–6.7	
		Android 4.x–14.x
Electrical Features		
Supply Voltage Range	3.4–4.3 V DC, typ. 3.8 V	
Power Consumption (Typical)	5.58 μA @ Power off	
	0.40 mA @ Sleep	
	8.845 mA @ Idle	

NOTE:

- ①: The interface is under development in standard solution. While in QuecOpen[®] solution, the interface has been supported.
- ②: Only supported by QuecOpen[®] solution.
- ③: The protocol is optional.
- : Supported.
- : Optional.