

Quectel EG950A Series

IoT/ M2M-optimized LTE Cat 4 Module



Quectel EG950A is a series of LTE Cat 4 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel-9 LTE technology, it delivers maximum data rates up to 150 Mbps downlink and 50 Mbps uplink. EG950A series is compatible with Quectel multi-mode LTE Standard EG91 and EG95 series modules.

EG950A series consists of three models: EG950A-EL, EG950A-LA and EG950A-ENL, covering the frequency band of different countries and regions; EG950A series adopts the laser engraving process to ensure more good-looking appearance, strong metallic texture, better heat dissipation, durable label information, which makes it more suitable for automation requirements.

A rich set of network protocols, industry-standard interfaces, a variety of drivers and abundant functionalities (USB serial drivers for Windows 8.1/ 10/ 11, Linux, Android and other operating systems) extend the applicability of the module to a wide range of M2M applications, such as IPC, CPE and gateway.



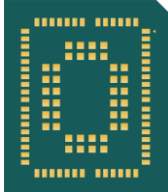
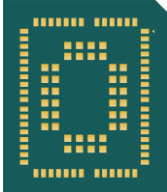
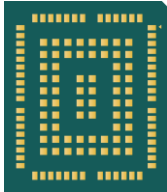
Key Features

- ✓ LTE Cat 4 module optimized for M2M and IoT applications
- ✓ Worldwide LTE, UMTS/ HSPA+ coverage
- ✓ Support Firmware Upgrade Over-The-Air (DFOTA)
- ✓ MIMO technology meeting demands for data rate and link reliability in wireless communication systems
- ✓ Super cost-effective
- ✓ Support 450 MHz (Optional)
- ✓ Support 410 MHz (Optional)

 LTE Cat 4 Max. 150 Mbps (DL) Max. 50 Mbps (UL)	 Max. 21 Mbps (DL) Max. 5.76 Mbps (UL)	 LGA Package
 Embedded Abundant Protocols	 DFOTA	 USB 2.0 High Speed Interface
 USB Drivers	 Quectel Enhanced AT Commands	 450 MHz (Optional)
 410 MHz (Optional)		

Version: 1.3 | Status: Released

Quectel EG950A Series

LTE Cat 4	EG950A-EL	EG950A-LA	EG950A-ENL*
Region/ Operator	Europe/ APAC/ New Zealand/ Latin America	Australia	Europe/ APAC/ Australia/ New Zealand/ Latin America
Dimensions (mm)	29.0 × 25.0 × 2.4	29.0 × 25.0 × 2.4	29.0 × 25.0 × 2.4
Weight (g)	Approx. 3.74	Approx. 3.74	TBD
Pin Assignment			
Temperature Range			
Operating Temperature Range	-35 °C to +75 °C	-35 °C to +75 °C	-35 °C to +75 °C
Extended Temperature Range	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Frequency Bands			
LTE-FDD	B1/ 3/ 5/ 7/ 8/ 20/ 28	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 28/ 66	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 20/ 28/ 31/ 66/ 72/ 87
LTE-TDD	-	-	B38/ 40/ 41
WCDMA	B1/ 5/ 8	B1/ 2/ 4/ 5/ 8	B1/ 2/ 4/ 5/ 8
GNSS (Optional)	GPS/ GLONASS/ BDS/ QZSS	-	-
Certifications			
Regulatory	Europe: CE Australia/ New Zealand: RCM The UK: UKCA	America: FCC Brazil: Anatel	Europe: CE*
Others	-	-	-
Max. Data Rates			
LTE-FDD (Mbps)	150 (DL)/ 50 (UL)	150 (DL)/ 50 (UL)	150 (DL)/ 50 (UL)
LTE-TDD (Mbps)	-	-	130 (DL)/ 30 (UL)
HSPA+ (Mbps)	21 (DL)/ 5.76 (UL)	21 (DL)/ 5.76 (UL)	21 (DL)/ 5.76 (UL)
WCDMA (kbps)	384 (DL)/ 384 (UL)	384 (DL)/ 384 (UL)	384 (DL)/ 384 (UL)
Interfaces			
(U)SIM	× 1	× 1	× 1
UART	× 2 (main and debug UART)	× 2 (main and debug UART)	× 2 (main and debug UART)
USB 2.0	× 1	× 1	× 1
Audio Digital (PCM)	× 1	× 1	× 1
NET_STATUS	× 1	× 1	× 1
ADC	× 2	× 2	× 2
SDIO (for SD Card)	× 1	× 1	× 1
RESET_N	× 1	× 1	× 1
PWRKEY	× 1	× 1	× 1
Analog audio	-	-	Input: × 1 (Microphone) Output: × 1 (Earpiece)
SPI	× 1	× 1	× 1
I2C	× 1	× 1	× 1
Antenna	× 3 (main, Rx-diversity and GNSS antennas)	× 2 (main and Rx-diversity antennas)	× 2 (main and Rx-diversity antennas)
Voice			
Speech Codec Modes	HR/ FR/ EFR/ AMR/ AMR-WB	HR/ FR/ EFR/ AMR/ AMR-WB	HR/ FR/ EFR/ AMR/ AMR-WB
Echo Algorithm	Echo Cancellation/ Noise Suppression	Echo Cancellation/ Noise Suppression	Echo Cancellation/ Noise Suppression
Voice	Digital Voice and VoLTE	Digital Voice and VoLTE	Digital Voice and VoLTE
Enhanced Features			
DFOTA	●	●	●
Audio Playback/ Audio Recording	●	●	●
QuecFile®	●	●	●
(U)SIM Card Detection	●	●	●
Software Features			
Protocols	TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/SSL HTTP/ PING/ CMUX/ HTTPS/ FTPS/ FILE/ MQTT/ MMS/ SMTP/ SMTPS	TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/SSL HTTP/ PING/ CMUX/ HTTPS/ FTPS/ FILE/ MQTT/ MMS/ SMTP/ SMTPS	TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ SSL HTTP/ PING/ CMUX/ HTTPS/ FTPS/ FILE/ MQTT/ MMS/ SMTP/ SMTPS

NOTE:
1. *: Under development/ in progress.
2. ●: Supported.



Quectel EG950A Series

LTE Cat 4		EG950A-EL	EG950A-LA	EG950A-ENL*
Drivers	RIL	Android 4.x–13.x	Android 4.x–13.x	Android 4.x–13.x
	USB Serial	Windows 8.1/ 10/ 11	Windows 8.1/ 10/ 11	Windows 8.1/ 10/ 11
		Linux 2.6–6.7	Linux 2.6–6.7	Linux 2.6–6.7
	USB RNDIS	Android 4.x–13.x	Android 4.x–13.x	Android 4.x–13.x
		Windows 8.1/10/ 11	Windows 8.1/ 10/ 11	Windows 8.1/ 10/ 11
	USB ECM	Linux 2.6–6.7	Linux 2.6–6.7	Linux 2.6–6.7
		GNSS (Optional)	Android 4.x–13.x	-
Electrical Features				
Supply Voltage Range		3.4–4.3 V, typ. 3.8 V	3.4–4.3 V, typ. 3.8 V	3.4–4.3 V, typ. 3.8 V
Power Consumption (Typical)		9.65 µA @ Power off	9.53 µA @ Power off	TBD
		1.82 mA @ LTE sleep (PF = 128)	2.14 mA @ LTE sleep (PF = 128)	
		1.74 mA @ LTE sleep (PF = 256)	1.90 mA @ LTE sleep (PF = 256)	
		19.07 mA @ Idle	18.89 mA @ Idle	

NOTE:
1. *: Under development.
2. TBD: To be determined.

