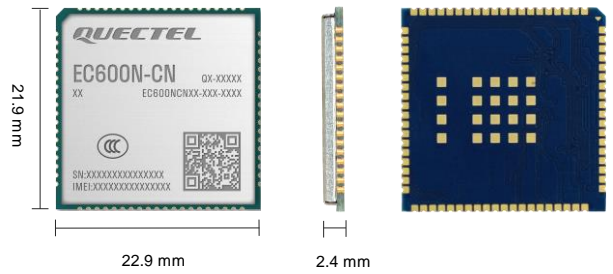


Quectel EC600N-CN

IoT/M2M-optimized LTE Cat 1 Module



Quectel EC600N-CN is an LTE Cat 1 wireless communication module specially designed for M2M and IoT fields. It delivers maximum data rates up to 10 Mbps downlink and 5 Mbps uplink. It has an ultra-small size and high cost performance. At the same time, EC600N-CN is compatible with Quectel EC600S-CN module in package.

EC600N-CN adopts the laser engraving process, which brings the advantages of better appearance, strong metal texture, better heat dissipation, information not easily erased, and more suitable for automation needs.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB virtual serial port drivers for Windows 7/8/8.1/10, Linux, Android and other operating systems) extend the applicability of the module to a wide range of M2M and IoT applications, such as OTT, CPE, POS, data cards, security, and industrial PDAs.



Key Features

- ✓ Ultra-small size, designed for M2M and IoT applications, especially for small-size terminals
- ✓ Support remote DFOTA, reduce later operation and maintenance costs
- ✓ Support Wi-Fi scan
- ✓ Super cost-effective



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



LCC Package



Embedded Multiple
Network Protocols



USB 2.0
High-speed interface



USB Driver



VoLTE



Quectel Enhanced
AT Command



DFOTA

Quectel EC600N-CN

LTE Cat 1	EC600N-CN
Region/Operator	China/India
Package	LCC
Dimensions (mm)	21.9 × 22.9 × 2.4
Weight	Approx. 2.0 g
Temperature Range	
Operating Temperature	-35 °C to +75 °C
Extended Temperature	-40 °C to +85 °C
Frequency Bands	
LTE-FDD	B1/B3/B5/B8
LTE-TDD	B34/B38/B39/B40/B41
GSM/EDGE (Optional)	B3/B8
Certifications	
Carrier	China: China Telecom/China Mobile
Regulatory	China: SRRC/NAL/CCC
Others	WHQL
Data Rate	
LTE-FDD (Mbps)	10 (DL)/5 (UL)
LTE-TDD (Mbps)	7.5 (DL)/1 (UL)
EDGE (kbps)	236.8 (DL)/236.8 (UL)
GPRS (kbps)	85.6 (DL)/85.6 (UL)
Interfaces	
(U)SIM	× 2 ((U)SIM1 and (U)SIM2*), 1.8/3.0 V
UART	× 2
USB 2.0	× 1
PCM (Digital Audio)	× 1
I2C	× 1
Analog Audio	× 1, Microphone and Receiver
Antenna	× 1, Main Antenna
Voice	
Speech Codec Modes	MP3/AMR/WAV
Voice	Digital Audio/Analog Audio/VoLTE (Voice over LTE)
Enhanced Features	
DTMF	●
DFOTA	●
Audio Playback/Audio Recording	●
QuecLocator®	●
QuecFile®	●
(U)SIM Detection ^①	●
Drivers	
RIL Driver	Android 4.x–11.x
RNDIS Driver	Windows 7/8/8.1/10 Linux 2.6–5.14
ECM Driver	Linux 2.6–5.14
USB Serial Driver	Windows 7/8/8.1/10 Linux 2.6–5.14, Android 4.x–11.x
Electrical Features	
Supply Voltage Range	3.4–4.5 V, typ. 3.8 V
Power Consumption (Typical)	20 µA @ Power off
	1.28 mA @ Sleep (LTE PF = 128)
	1.16 mA @ Sleep (LTE PF = 256)
	17.09 mA @ Idle (PF = 64 USB disconnected) 29.16 mA @ Idle (PF = 64 USB connected)

NOTE:

- ①: Only (U)SIM1 supports (U)SIM card hot-plug detection.
- *: under development.
- : supported.