

CMIOT ML302 Dual-mode LTE Module



Highlights



Max10Mbps (DL)
Max 5Mbps (UL)



CMIOT OneNET
Open Platform



Abundant
Protocols



CMIOT Enhanced
AT Commands



USB Drivers



USB 2.0



LCC+LGA 168 Pin



LBS Service

Key Features



CAT1bis LTE coverage



Minimal SMT space for space-constrained
products and extend operating temperature



Support VoLTE

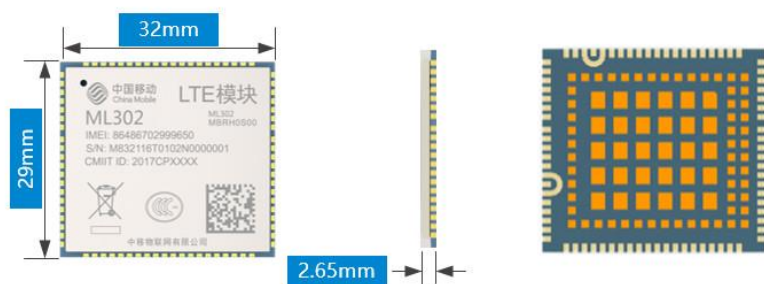


OneNET Provides comprehensive IOT cloud
service for customers

Overview

- ✧ **ML302** is the new generation of CMIOT's LTE module. **ML302** provides TDD/FDD coverage based on LCC+LGA interface. Adopting the Cat 1 LTE technology, **ML302** delivers 10Mbps downlink and 5Mbps uplink data rates.
- ✧ **ML302** supports Multi-input multi-output (MIMO) technology, a cutting-edge antenna technology transmitting multiple data streams on multiple transmitters to multiple receivers. The antennas on each end of the communication circuits are combined to minimize errors and optimize data rate.
- ✧ **ML302** provides an easier, more convenient and higher efficient access to cloud for customers with embedded OneNET protocol. Besides, **ML302** integrates LBS to provide customers with convenient and reliable location-based service.
- ✧ Rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB drivers for Windows XP, Windows7, Windows8, Windows10, Linux, Android) allow **ML302** to apply to a wide range of M2M applications such as CPE, router, data card, rugged tablet, security and industry PDA.

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General Features

Frequency Bands	LTE-TDD: B34/B38/B39/B40/B41 LTE-FDD: B1/B3/B5/B8
Bandwidth	1.4/3/5/10/15/20MHz
Antenna	MAIN ANTENNA
Supply Voltage	3.3V-4.3V 3.8V Type
Operation Temperature	-40 °C ~ +85 °C
Storage Temperature	-40 °C ~ +85 °C
Dimensions	32.0mm× 29.0mm× 2.65mm
Package	LCC+LGA
AT commands	3GPP TS27.007 and CMIOT enhanced AT Commands
Approval	CCC/SRRC/CTA

Special Features

USB Drivers	WindowsXP/Windows7/Windows8 /Windows 10/Linux/Android
Internet Protocol	RNDIS/ECM/PPP TCP/IP HTTP/MQTT/EDP
Cloud Service	OneNET
Location Service	LBS

Interfaces

Power	VBAT/VDDEXT
USB 2.0	High Speed, 480Mbps
USIM	1.8V/3.0V
UART	4-Line UART0 2-Line UART1 2-Line UART2
Audio	PCM
ADC	ADC×2, 0-1.25V
Peripheral Interface	Keypad 5×5 GPIO×5 I2C
Clock	MCLK: 26MHz
System Control	PWR_KEY/RESET/WAKEUP /USB_BOOT/FIGHT_MOD
LED	NET STATUS/MOD STATUS
Antenna	MAIN Antenna

Specifications

LTE-TDD	Max Uplink 5Mbps Max Downlink 10Mbps
LTE-FDD	Max Uplink 5Mbps Max Downlink 10Mbps