Quectel CC200A-LB

Satellite Communication Module

37.0 mm · **38.0 mm** · **3.35 mm**
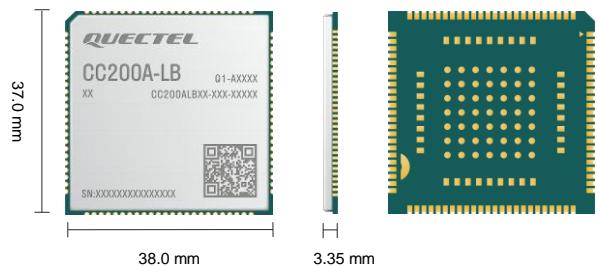
Quectel CC200A-LB is a satellite communication module designed to provide communications in remote areas without cellular network coverage. It provides reliable global connectivity over the IsatData Pro (IDP) satellite service and features two-way communication, low latency, and nearly-real-time reporting capabilities.

The module adopts LCC + LGA package and supports AT command set, which is very easy for customers to integrate and use them.

Quectel CC200A-LB supports a wide range of industrial asset-tracking applications in poor network conditions where the network connectivity is scarce or unavailable, such as transportation, maritime, heavy equipment, mining, oil & gas, and agriculture.

Key Features

- ✓ Global coverage over the Inmarsat GEO constellation
- ✓ Two-way communication by IDP service network
- ✓ Simple AT commands
- ✓ About 20 seconds to transmit 100-byte messages in IDP network
- ✓ Integrated multi-constellation GNSS to realize fast and accurate positioning in different environments

Global Coverage	Satellite Communication	LCC + LGA Package
Multi-Constellation GNSS	Simple AT Commands	Low Latency

Version: 1.1 | Status: Released

Satellite Communication	CC200A-LB
Region	Global
Satellite Service	• Inmarsat GEO • Two-way communication • IsatData Pro (IDP)
Dimensions (mm)	37.0 × 38.0 × 3.35
Temperature Range	
Operating Temperature	-35 °C to +75 °C
Extended Temperature	-40 °C to +85 °C
Frequency Band	
Satellite Band	L-Band
Frequency (MHz)	• Tx: 1626.5–1660.5, 1668–1675 • Rx: 1518–1559
GNSS	GPS L1/ GLONASS L1/ Galileo E1/ BDS B1
Certifications	
Regulatory	FCC/ IC/ CE/ RCM
Satellite	Inmarsat Type Approval
Data Transmission	
Max. From-Mobile Message Size	IDP: 6.4 KBytes
Max. To-Mobile Message Size	IDP: 10 KBytes
Typical Latency	IDP: About 20 seconds for 100 Bytes
GNSS Performance	
TTFF	• Cold start: 27 s • Warm start: 24 s • Hot start: 2 s
Accuracy	Autonomous: 2 m
Interfaces	
(U)SIM	-
UART	× 2
I2C	-
ADC	× 2
GPIO	× 2
RESET(RESET_N)	× 1
SPI	-
PWM	-
EVENT_IND	× 1
PSM_EINT	-
I2S	-
NET_STATUS	× 1
WAKEUP_IN	× 1
Antenna	× 1
Electrical Features	
Supply Voltage (V)	Voltage Range: 5.5–6.5, typical: 6.0
Power Consumption (Typical)	• Satellite data reception: 162.6 mA • Satellite data transmission: 1.69 A • GNSS Mode: 35.95 mA • Deep Sleep Mode: 190 µA

Note:
- : Not supported.

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