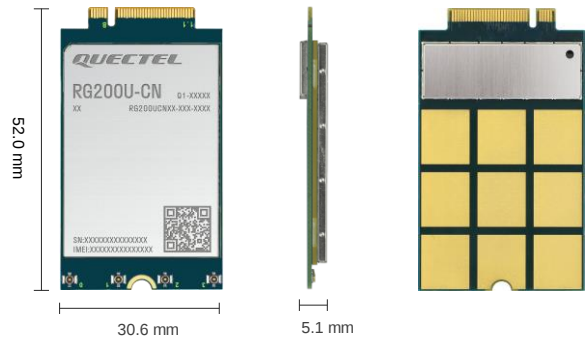


Quectel RG200U-CN M.2

IoT/eMBB-Optimized 5G Sub-6 GHz M.2 Module



Quectel RG200U-CN M.2 is a 5G Sub-6 GHz module optimized specially for IoT and eMBB applications. Adopting the 3GPP Rel-15 technology, it supports both 5G NSA and SA modes, and it is backward compatible with the 4G/3G network.

RG200U-CN M.2 is an industrial-grade module for industrial and commercial applications only.

RG200U-CN M.2 provides rich built-in network protocols, integrates multiple industry standard interfaces, and supports multiple drivers and software functions (such as USB/ PCIe drivers for Windows, Linux and Android operating systems). It has greatly expanded its application scope in IoT and eMBB. RG200U-CN M.2 can be widely used in vertical industries such as smart energy, Internet of Vehicles, industrial Internet, telemedicine, smart education, high-definition video, smart city, and home entertainment.



Key Features

- ✓ 5G/LTE-A multi-mode module with M.2 form factor, optimized for IoT and eMBB applications
- ✓ Worldwide 5G and LTE-A coverage
- ✓ 5G NSA and SA modes
- ✓ High performance and cost-effective
- ✓ Feature refinements: DFOTA, VoLTE and VoNR

 5G ^{NR} 5G NR Sub-6 GHz Band	 4G LTE Max. 600 Mbps (DL) Max. 150 Mbps (UL)	 3G HSPA+ Max. 42.2 Mbps (DL) Max. 11 Mbps (UL)
 Embedded Abundant Protocols	 M.2 M.2 Form Factor	 AT Quectel Enhanced AT Commands
 USB 3.0 High Speed Interface	 VoNR 5G Voice over NR	 PCIe PCIe 2.0 Interface

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5G Sub-6		RG200U-CN M.2
Region/Operator		EMEA/ APAC
Dimensions (mm)		52.0 × 30.6 × 5.1
Weight (g)		12.3
Temperature Range		
Operating Temperature		-30 °C to +75 °C
Extended Temperature		-40 °C to +85 °C
Frequency Bands		
5G	5G NR	3GPP Release 15 NSA/SA operation, Sub-6 GHz
	5G NR NSA	n78/ 79
	5G NR SA	n1/ 5/ 8/ 28/ 41/ 77/ 78/ 79
	MIMO	DL 4 × 4 MIMO: n1/ 41/ 77/ 78/ 79 DL 2 × 2 MIMO: n5/ 8/ 28 UL 2 × 2 MIMO: n77/ 78/ 79
	LTE Category	DL Cat 12, UL Cat 13
LTE	LTE-FDD	B1/ 3/ 5/ 8
	LTE-TDD	B34/ 38/ 39/ 40/ 41
	DL 2 × 2 MIMO	B1/ 3/ 5/ 8/ 34/ 38/ 39/40/ 41
	UMTS WCDMA	B1/ 8
Certifications		
Regulatory		China: SRRC/ NAL/ CCC
Carrier		China: China Telecom*/ China Mobile*/ China Unicom*
Others		RoHS/ WHQL
Data Rates (Max.) ①		
5G SA Sub-6		2 Gbps (DL)/ 1 Gbps (UL)
5G NSA Sub-6		2.2 Gbps (DL)/ 575 Mbps (UL)
LTE		600 Mbps (DL)/ 150 Mbps (UL)
WCDMA		42.2 Mbps (DL)/ 11 Mbps (UL)
Interfaces		
(U)SIM		× 2
USB 2.0		× 1
USB 3.0		× 1
PCIe 2.0		× 1
SPI		× 1
UART		× 1
I2S		× 1
I2C		× 1
PCM		× 1
Antennas		× 4
Voice		
Voice (Optional)		Digital Audio, VoLTE and VoNR
Enhanced Features		
DFOTA		●
(U)SIM Card Detection		●
5G Network Slicing		●
Drivers		
USB Serial Driver		Windows 8.1/10/11 Linux 2.6–6.7 Android 4.x–13.x
RIL Driver		Android 4.x–13.x
PCIe Driver		Linux 3.10–6.7
USB RNDIS Driver		Windows 8.1/10/11 Linux 2.6–6.7
USB ECM Driver		Linux 2.6–6.7
USB NCM Driver		Linux 2.6–6.7
Electrical Features		
Supply Voltage Range		3.3–4.4 V, typ. 3.7 V
Power Consumption		150 μA @ Power off 4 mA @ Sleep 59 mA @ USB 2.0, idle 74 mA @ USB 3.0, idle

NOTE:
1. ① : Theoretical only. The actual values depend on network conditions.
2. *: Under development/ planning/ in progress.
3. ●: Supported.

