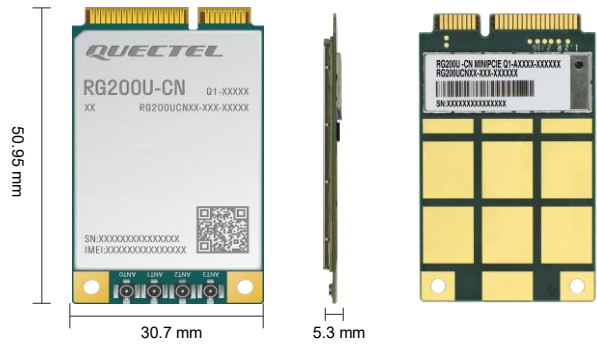




Quectel RG200U-CN Mini PCIe

IoT/eMBB-Optimized
5G Sub-6 GHz LGA Module



Quectel RG200U-CN Mini PCIe is 5G Sub-6 GHz modules optimized specially for IoT/ eMBB applications. Adopting the 3GPP Release 15 technology, it supports both 5G NSA and SA modes and makes it backward compatible with the 4G/ 3G network.

RG200U-CN Mini PCIe is an industrial-grade module for industrial and commercial applications only.

RG200U-CN Mini PCIe provides rich built-in network protocols, integrates multiple industry standard interfaces, and supports multiple drivers and software functions (such as USB drivers for Windows, Linux, and Android operating systems). It has greatly expanded its application scope in IoT and eMBB. RG200U-CN Mini PCIe 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 optimized for IoT/ 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 Sub-6 GHz Band



Max. 600 Mbps (DL)
Max. 150 Mbps (UL)



Max. 42.2 Mbps (DL)
Max. 11 Mbps (UL)



Embedded Abundant Protocols



Mini PCIe Form Factor



Quectel Enhanced AT Commands



USB 3.0 High Speed Interface



Voice over LTE



Voice over NR

Quectel RG200U-CN Mini PCIe

5G Sub-6		RG200U-CN Mini PCIe
Region/ Operator		China
Dimensions (mm)		30.7 × 50.95 × 5.3
Weight (g)		13.4
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 ^① / SA operation, Sub-6 GHz
	5G NR NSA ^①	n78/ 79
	5G NR SA	n1/ 3 ^① / 5/ 8/ 28A/ 28B ^① / 41/ 77 ^① / 78/ 79 ^①
	MIMO	DL 4 × 4 MIMO: n1/ 41/ 77 ^① / 78/ 79 ^① DL 2 × 2 MIMO: n3 ^① / 5/ 8/ 28A/ 28B ^① UL 2 × 2 MIMO ^① : n77/ 78/ 79
LTE	LTE Category	DL Cat 12, UL Cat 13
	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/ Conformance		China: SRRC/ NAL/ CCC
Carrier		China: China Telecom*/ China Mobile*/ China Unicom*
Others		RoHS/ WHQL
Data Rates (Max.) ^②		
5G SA Sub-6		2 Gbps (DL)/ 1 Gbps (UL) ^③
5G NSA Sub-6 ^①		2.2 Gbps (DL)/ 575 Mbps (UL)
LTE		600 Mbps (DL) ^③ / 150 Mbps (UL) ^③
UTMS		42.2 Mbps (DL)/ 11 Mbps (UL)
Interfaces		
(U)SIM		× 2
USB 2.0		× 1
USB 3.0		× 1
UART		× 2
Antennas		× 4
Audio		
Voice (Optional)		Digital Audio, VoLTE and VoNR
Enhanced Features		
DFOTA		●
(U)SIM Card Detection		●
5G Network Slicing		●
Drivers		
USB Serial Driver		Windows 7/ 8/ 10/ 11 Linux 2.6–6.16 Android 4.x–16.x
RIL Driver		Android 4.x–16.x
USB RNDIS Driver		Windows 7/ 8/ 10/ 11 Linux 2.6–6.16
USB ECM Driver		Linux 2.6–6.16
USB NCM Driver		Linux 2.6–6.16
Electrical Features		
Supply Voltage Range		3.3–4.3 V, typ. 3.8 V
Power Consumption		3.5 mA @ Sleep 62 mA @ USB 2.0, idle 73 mA @ USB 3.0, idle

NOTE:

1. ①: Optional for different OC.

2. ②: Theoretical only. The actual values depend on network conditions.

3. ③: Data rates vary depending on the OC.
4. ●: Supported.

5. *: Under development/ planning.