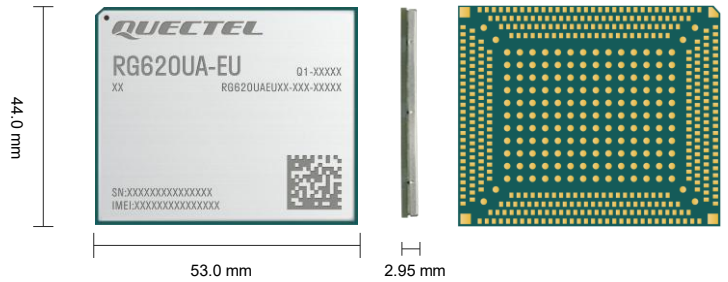




Quectel RG620UA-EU

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



Quectel RG620UA-EU is a 5G Sub-6 GHz LGA modules optimized specially for IoT and eMBB applications. By adopting the 3GPP Rel-16 technology, the module supports both 5G NSA and SA modes.

RG620UA-EU is an industrial-grade module for industrial and commercial applications only.

RG620UA-EU has built-in rich network protocols, integration of multiple industrial standard interfaces, and supports of multiple driver and software functions, and is integrated with network hardware accelerator and VPN hardware accelerator, which extend the applicability of the module to a wide range of IoT and eMBB applications such as 5G wireless router, CPE, MHS, business router, home gateway, etc.



Key Features

- ✓ 5G Sub-6 GHz LGA module with 4G , optimized for IoT and eMBB applications
- ✓ Worldwide 5G, LTE-A and WCDMA coverage
- ✓ Supports 5G NSA and SA modes
- ✓ Supports 5G 2CC Carrier Aggregation
- ✓ High performance and cost-effective



Max. 5.47 Gbps (DL)
Max. 1.25 Gbps (UL)



Max. 1.6 Gbps (DL)
Max. 211 Mbps (UL)



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



Embedded Abundant
Protocols



LGA
Form Factor



USB 3.1/ PCIe 3.0
Superspeed Interface



VoLTE (Optional)



Quectel
Enhanced API



VoNR (Optional)

Quectel RG620UA-EU

5G Sub-6		RG620UA-EU
Region/ Operator	EMEA/ APAC	
Dimensions (mm)	44 × 53 × 2.95	
Weight (g)	15.3	
Temperature Range		
Operating Temperature	-20 °C to +65 °C	
Extended Temperature	TBD	
Frequency Bands		
5G	5G NR	3GPP Release 16 NSA/ SA operation, Sub-6 GHz
	5G NR NSA	n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 71*/75*/ 76*/ 77/ 78/ 79*
	5G NR SA	n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 71*/75*/ 76*/ 77/ 78/ 79*
	5G DL CA	Supports 2CC CA
	MIMO	DL 4 × 4: n1/ 3/ 7/ 28/ 38/ 40/ 41/ 75*/ 76*/ 77/ 78/ 79* UL 2 × 2: n40/ 41/ 77/ 78/ 79*
LTE	LTE Category	DL Cat 19, UL Cat 18
	LTE-FDD	B1/ 3/ 5/ 7/ 8/ 20/ 28/ 32/ 71*
	LTE-TDD	B38/ 40/ 41/ 42/ 43
	LTE DL CA	Supports 5CC CA
	MIMO	DL 4 × 4 LTE-FDD: B1/ 3/ 7/ 28/ 32 DL 4 × 4 LTE-TDD: B38/ 40/ 41/ 42/ 43
WCDMA	B1/ 5/ 8	
Certifications		
Carrier	TBD	
Regulatory	Global: GCF*	
	Europe: CE*	
	Australia/ New Zealand: RCM*	
Others	RoHS	
Data Rate ^①		
5G SA Sub-6 GHz	4.67 Gbps (DL)/ 1.25 Gbps (UL)	
5G NSA Sub-6 GHz	5.47 Gbps (DL)/ 825 Mbps (UL)	
LTE	1.6 Gbps (DL)/ 211 Mbps (UL)	
WCDMA	42.2 Mbps (DL)/ 11 Mbps (UL)	
Interfaces		
Antenna ^②	× 4	
(U)SIM	× 2 (Dual SIM Single Standby)	
UART	× 3	
USB 2.0/ 3.1	× 1	
SGMII/ RGMII	× 1	
PCIe 3.0	× 2	
SDIO 3.0	× 1	
SPI	× 2	
I2S/ PCM	× 2	
I2C	× 2	
ADC	× 3	
Audio		
Voice (Optional)	Digital Audio and VoLTE/ VoNR	
Enhanced Features		
DTMF	●	
DFOTA	●	
(U)SIM Detection	●	
5G Network Slice	●	
5G LAN	●	
URLLC	●	
Electrical & RF Features		
Supply Voltage Range	3.3–4.3 V, typ. 3.8 V 60 μA @ Power off	
Power Consumption	3.5 mA @ Sleep	
	60 mA @ idle, USB3.0 Active	
	45 mA @ idle, USB2.0 Active	

- Note:
- : Supported.
 - *: Under planning/ ongoing.
 - TBD: To Be Determined.
 - ①: Theoretical only. The actual values depend on network conditions.
 - ②: Default: 4-Antenna; Optional: 8-Antenna.