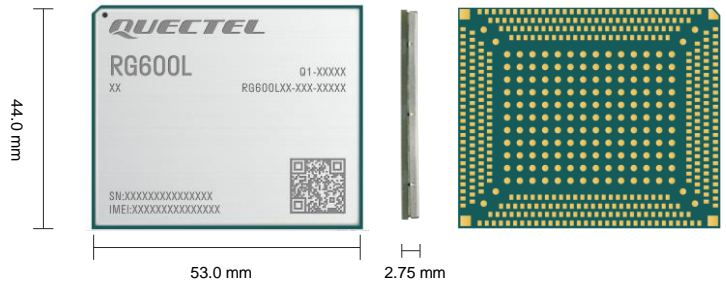




# Quectel RG600L-EU(AA,AB) IoT/eMBB-Optimized 5G Sub-6 GHz LGA Module



Quectel RG600L-EU(AA,AB) is a 5G Sub-6 GHz LGA modules optimized specially for IoT and eMBB applications. By adopting the 3GPP Rel-15 technology, the module supports both 5G NSA and SA modes.

RG600L-EU(AA,AB) is an industrial-grade module for industrial and commercial applications only.

RG600L-EU(AA,AB) 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 modules to a wide range of IoT and eMBB applications such as 5G wireless router, CPE, MiFi, business router, home gateway, etc.



## Key Features

- ✓ 5G Sub-6 GHz LGA module with 4G (LTE Cat 19), optimized for IoT and eMBB applications
- ✓ Worldwide 5G, LTE-A and WCDMA coverage
- ✓ Supports 5G NSA and SA modes
- ✓ Supports 5G 2CC Carrier Aggregation
- ✓ Spectrum multiplexing and significantly increased network capacity enabled with TM9



Max. 4.67 Gbps (DL)  
Max. 1.25 Gbps (UL)



Max. 1.6 Gbps (DL)  
Max. 200 Mbps (UL)



Max. 42 Mbps (DL)  
Max. 5.76 Mbps (UL)



Embedded Abundant  
Protocols



LGA  
Form Factor



USB 3.0/ PCIe 3.0  
Superspeed  
Interface



VoLTE/VoNR  
(Optional)



Quectel  
Enhanced API

Version: 1.0.0 | Status: Preliminary

# Quectel RG600L-EU(AA,AB)

5G Sub-6	RG600L-EU(AA)	RG600L-EU(AB)
<b>Region/Operator</b>	EMEA/ Oceania/ Brazil	EMEA/ Oceania/ Brazil
<b>Dimensions (mm)</b>	44 × 53 × 2.95	44 × 53 × 2.95
<b>Temperature Range</b>		
<b>Operating Temperature</b>	-30 °C to +70 °C	-30 °C to +70 °C
<b>Extended Temperature</b>	-40 °C to +85 °C	-40 °C to +85 °C
<b>Frequency Bands</b>		
<b>5G NR NSA</b>	n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 75/ 76/ 77/ 78	n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 71/ 77/ 78
<b>5G NR SA</b>	n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 75/ 76/ 77/ 78	n1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 71/77/ 78
<b>5G DL CA</b>	Supports 2CC CA	Supports 2CC CA
<b>5G DL 4 × 4 MIMO</b>	n1/ 3/ 7/ 28/ 38/ 40/ 41/ 75/ 76/ 77/ 78	n1/ 3/ 7/ 28/ 38/ 40/ 41/ 77/ 78
<b>5G UL 2 × 2 MIMO</b>	n38/ 40/ 41/ 77/ 78	n38/ 40/ 41/ 77/ 78
<b>LTE-FDD</b>	B1/ 3/ 5/ 7/ 8/ 20/ 28/ 32	B1/ 3/ 5/ 7/ 8/ 20/ 28/ 71
<b>LTE-TDD</b>	B38/ 40/ 41/ 42/ 43	B38/ 40/ 41/ 42/ 43
<b>LTE-LAA</b>	-	-
<b>LTE DL 4 × 4 MIMO LTE-FDD</b>	B1/ 3/ 7/ 28/ 32	B1/ 3/ 7/ 28
<b>LTE DL 4 × 4 MIMO LTE-TDD</b>	B38/ 40/ 41/ 42/ 43	B38/ 40/ 41/ 42/ 43
<b>LTE DL CA</b>	Supports 5CC CA	Supports 5CC CA
<b>WCDMA</b>	B1/ 5/ 8	B1/ 5/ 8
<b>GNSS</b>	-	-
<b>Certifications</b>		
<b>Carrier</b>	TBD	TBD
<b>Regulatory</b>	<b>Global:</b> GCF <b>Europe:</b> CE <b>Australia/ New Zealand:</b> RCM	<b>Global:</b> GCF <b>Europe:</b> CE <b>Australia/ New Zealand:</b> RCM
<b>Others</b>	RoHS	RoHS
<b>Data Rate</b>		
<b>5G SA Sub-6 GHz</b>	4.67 Gbps (DL)/ 1.25 Gbps (UL)	4.67 Gbps (DL)/ 1.25 Gbps (UL)
<b>5G NSA Sub-6 GHz</b>	4.67 Gbps (DL)/ 836 Mbps (UL)	4.67 Gbps (DL)/ 836 Mbps (UL)
<b>LTE</b>	1.6 Gbps (DL)/ 200 Mbps (UL)	1.6 Gbps (DL)/ 200 Mbps (UL)
<b>HSPA+</b>	42Mbps (DL)/ 5.76Mbps (UL)	42Mbps (DL)/ 5.76 Mbps (UL)
<b>UMTS</b>	384Kbps (DL)/ 384Kbps (UL)	384Kbps (DL)/ 384 Kbps (UL)
<b>Interfaces</b>		
<b>Antenna</b>	Cellular: × 8	Cellular: × 8
<b>(U)SIM</b>	× 2 (Dual SIM Single Standby)	× 2 (Dual SIM Single Standby)
<b>UART</b>	× 3 (including 1 Bluetooth UART)	× 3 (including 1 Bluetooth UART)
<b>USB 2.0/ 3.0/ 3.1</b>	× 1	× 1
<b>SGMII</b>	× 2	× 2
<b>PCIe 3.0</b>	× 2	× 2
<b>SPI</b>	× 2	× 2
<b>I2S/ PCM</b>	× 2	× 2
<b>I2C</b>	× 1	× 1
<b>ADC</b>	× 3	× 3
<b>DBI-C</b>	× 1	× 1
<b>Audio</b>		
<b>Voice</b>	Digital Audio and VoLTE/ VoNR (Optional)	Digital Audio and VoLTE/ VoNR (Optional)
<b>Enhanced Features</b>		
<b>DTMF</b>	●	●
<b>FOTA</b>	●	●
<b>(U)SIM Detection</b>	●	●
<b>Electrical &amp; RF Features</b>		
<b>Supply Voltage Range</b>	3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V
<b>Power Consumption</b>	TBD	TBD
<b>Output Power</b>	Class 2 (26 dBm +2/-3 dB) 5G NR n41/ 77/ 78 LTE:B41/ 42 / 43 Class 3 (23 dBm ±2 dB) for 5G NR, other bands Class 3 (23 dBm ±2 dB) for LTE, other bands Class 2 (26dBm ±2 dB) EN-DC Class 3 (24dBm +1/-3 dB) for WCDMA	Class 2 (26 dBm +2/-3 dB) 5G NR n41/ 77/ 78 LTE:B41/ 42 / 43 Class 3 (23 dBm ±2 dB) for5G NR, other bands Class 3 (23 dBm ±2 dB) for LTE, other bands Class 2 (26dBm ±2 dB) EN-DC Class 3 (24dBm +1/-3 dB) for WCDMA

Note:

\*: Ongoing/planning. TBD: To Be Determined.