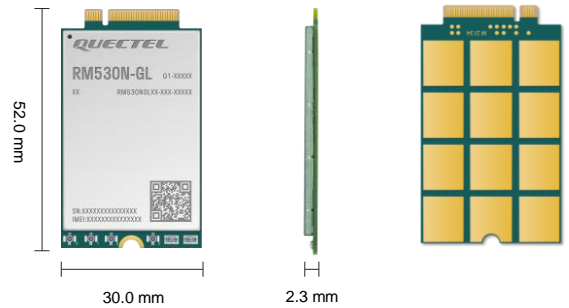




# Quectel RM530N-GL

## 5G Sub-6 GHz & mmWave M.2 Module



Quectel RM530N-GL is a 5G module that is specially optimized for IoT/eMBB applications. Adopting 3GPP Release 16, it supports both 5G NSA and SA modes. Designed in an M.2 form factor, RM530N-GL is compatible with Quectel 5G Sub-6-only module RM520N series, which facilitates customers' compatible design for Sub-6 + mmWave device and Sub-6-only device.

RM530N-GL is an industrial-grade module for industrial and commercial applications only.

The global version RM530N-GL nearly covers all of the main operators worldwide. The module supports Qualcomm® IZat™ location technology Gen9C Lite (GPS, GLONASS, BDS, Galileo and QZSS). The integrated GNSS receiver greatly simplifies the product design, and also provides quicker, more accurate and more dependable positioning capability.

A rich set of Internet protocols, industry-standard interfaces and abundant functionality (USB and PCIe drivers for operating systems Windows 7/8/8.1/10/11, Linux and Android) extend the applicability of the module to a wide range of IoT and eMBB applications such as industrial router, home gateway, CPE, industrial and consumer laptop, industrial PDA, rugged tablet PC, video transmission and digital signage.



## Key Features

- ✓ 5G/4G/3G multi-mode module with M.2 form factor, optimized for IoT and eMBB applications
- ✓ Worldwide 5G and LTE-A coverage
- ✓ Both NSA and SA modes supported
- ✓ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- ✓ Feature refinements: DFOTA\* and VoLTE (optional)



5G NR Sub-6 & mmWave Bands



DL: LTE Cat 19  
UL: LTE Cat 18



DL: max. 42 Mbps  
UL: max. 5.76 Mbps



Embedded Abundant Protocols



M.2 Form Factor



Multi-constellation GNSS (Optional)



USB 3.1/PCIe 3.0 Super Speed Interface



Voice over LTE (Optional)



Quectel Enhanced AT Commands

# Quectel RM530N-GL

5G Sub-6 & mmWave		RM530N-GL
Region/Operator	Global	
Dimensions (mm)	30.0 × 52.0 × 2.3	
Weight (g)	Approx. 8.7	
Supply Voltage Range (V)	3.135–4.4, typical 3.7	
Power Consumption	TBD @ Power down TBD @ Sleep TBD @ USB 2.0, Idle TBD @ USB 3.0, Idle	
Temperature Range		
Operation Temperature	-30 °C to +75 °C	
Extended Temperature	-40 °C to +85 °C	
Frequency Bands		
5G NR	NSA	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79/ 257 <sup>①</sup> / 258 <sup>①</sup> / 260 <sup>①</sup> / 261 <sup>①</sup>
	SA	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79
LTE	LTE-FDD	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 29/ 30/ 32/ 66/ 71
	LTE-TDD	B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48
	LAA	B46
UMTS	WCDMA	B1/ 2/ 4/ 5/ 8/ 19
GNSS (Optional)		GPS/ GLONASS/ BDS/ Galileo/ QZSS
Certification		
Carrier/ Regulatory	TBD	
Others	RoHS	
Data Rate (Max.) <sup>②</sup>		
5G SA Sub-6	DL: 2.4 Gbps; UL: 900 Mbps	
5G NSA Sub-6	DL: 3.4 Gbps; UL: 550 Mbps	
5G NSA mmWave	DL: 4.0 Gbps; UL: 1.4 Gbps	
LTE	DL: 1.6 Gbps; UL: 200 Mbps	
UMTS	DL: 42 Mbps; UL: 5.76 Mbps	
Interface		
(U)SIM	× 2	
USB 2.0	× 1	
USB 3.0/3.1	× 1	
PCIe 3.0	× 1	
Antenna	× 6 (Sub-6&GNSS × 4; mmWave × 2)	
Audio		
Digital Audio & VoLTE	○	
Enhanced Features		
eSIM*	○	
DTMF*	●	
DFOTA*	●	
(U)SIM Card Detection	●	

#### NOTE:

- ①: Work with mmWave antennas.
- ②: The presented data rates are theoretical only, and the actual value depends on network conditions.
- : Supported; ○: Optional.
- \*: Under development/in progress.