



289.00 EUR

incl. 19% VAT, plus [shipping](#)

- Full-size M.2 !
- 5G / LTE !
- Sub6 Network !
- Extended temperature range !

- 5G NR Sub-6GHz module
- M.2 form factor (30x52x2,3mm)
- SA data rates: 2.4Gbps (DL) / 900Mbps (UL)
- NSA data rates: 3.4Gbps (DL) / 550Mbps (UL)
- Worldwide 5G and LTE-A coverage
- Multi-constellation GNSS receiver available for applications requiring fast and accurate positioning in any environment
- Extended temperature range of -40°C to +85°C

The RM520N is a series of 5G IoT modules specially optimized for IoT/eMBB applications, designed in an M.2 form factor in accordance with the 3GPP Release 16 specification, which supports both 5G NSA and SA modes. The RM520N is compatible with Quectel's 5G module series RM50xQ, LTE-A Cat 6 module EM06, Cat 12 module series EM12/EM12xR/EM120K, and Cat 16 module EM160R-GL, facilitating migration from LTE-A to 5G.

The RM520N is an industrial-grade module for industrial and commercial applications only. It covers nearly all the mainstream carriers worldwide and supports Qualcomm® IZat location technology Gen9C Lite (GPS, GLONASS, BDS and Galileo). The integrated GNSS receiver greatly simplifies the product design and provides quicker, more accurate and dependable positioning capability.

Thanks to a rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB and PCIe drivers for Windows 10, Linux, and Android) the module can be adopted in a wide range of eMBB and IoT applications including industrial routers, home gateways, STB, industrial laptops, consumer laptops, industrial PDAs, rugged tablet PCs, video transmission, and digital

signage.

|                           |                                                                                                                                                                                                                                                                                                                   |  |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Region                    | Global                                                                                                                                                                                                                                                                                                            |  |
| PRIMARY TECHNOLOGY        | 5G ( Sub-6 GHz/mmWave )                                                                                                                                                                                                                                                                                           |  |
| Control via AT commands   | 3GPP TS27.007 and Quectel Enhanced AT Commands                                                                                                                                                                                                                                                                    |  |
| FORM FACTOR               | M.2 3052 / 52.0 × 30.0 × 2.3 / 8.7g weight                                                                                                                                                                                                                                                                        |  |
| 5G BANDS (Global)         | 5G NR: 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-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; WCDMA: B1/2/4/5/8/19                                                                                   |  |
| Operating temperature     | -30°C - 75°C<br>Extended: -40 ~ +85°C                                                                                                                                                                                                                                                                             |  |
| Data transmission (Max. ) | 5G SA Sub-6: 2.4 Gbps (DL)/900 Mbps (UL)<br>5G NSA Sub-6: 3.4 Gbps (DL)/550 Mbps (UL)<br><br>LTE: LTE-FDD: 1.6 Gbps (DL)/200 Mbps (UL)<br>UMTS (Mbps): WCDMA: 42 (DL)/5.76 (UL)<br>Protocols: TCP/UDP/FTP/HTTP/HTTPS/PING/SMS                                                                                     |  |
| Interfaces                | (U)SIM: x2<br>USB: 2.0/3.0/3.1<br>PCIe: 3.0<br>Antenna: Sub-6/GNSS x 4 (RM520N-CN/RM520N-GL)                                                                                                                                                                                                                      |  |
| Enhanced features         | NIMO: Sub-6: DL 4 × 4 , UL 2 × 2 mmWave: DL 2 × 2, UL 2 × 2<br>DTMF: Dual-tone Multi-frequency<br>DFOTA: Delta Firmware over the Air<br>GNSS: GPS/GLONASS/BDS/Galileo/QZSS                                                                                                                                        |  |
| Electrical features       | 3.135 V ~ 4.4 V, typ. 3.7 V<br>-<br>195µA@Power off<br>4.7mA@Sleep<br>40mA@USB2.0, Idle<br>60.mA@USB3.0, Idle                                                                                                                                                                                                     |  |
| Soft ware features        | USB serial driver: Windows 8.1/10/11, Linux 2.6~6.7, Android 4.x ~ 13<br>GNSS / RIL driver: Android 4.x ~ 13<br>NDIS driver: Windows 8.1/10/11<br>MBIM driver: Windows 8.1/10/11, Linux 3.18~6.7<br>Gobinet driver: Linux 2.6~6.7<br>QMI WWAN driver: Linux 3.4~6.7<br>PCIe driver: Windows 10/11, Linux 3.10~6.7 |  |
| Certifications            | T-Mobile/Verizon/AT&T/NTT DOCOMO/Deutsche Telekom/Telefónica/Telstra/KT/GCF/PTCRB/CE/<br>Anatel/CCC/RCM/IC/FCC/JATE/TELEC/KC/NCC/SRRC                                                                                                                                                                             |  |