



Qualcomm® 315 5G IoT Modem

A comprehensive modem solution designed to support the IoT ecosystem in building dedicated 5G devices for industrial IoT industry.

The Qualcomm 315 5G IoT modem with premium gigabit class performance, lower-power and thermal-efficient capabilities is designed for industrial and enterprise applications for industry segments including: automation, construction, energy, mining, manufacturing, precision agricultural, public venues, retail and more.

Highlights

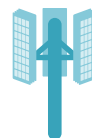
Reduced chipset footprint with highly integrated RF front-end

Designed to enable up to 50% smaller modules than existing 5G modules, Qualcomm 315 can fit into modules with the same form factor and pin-to-pin compatibility with current LTE legacy modules hence providing for a seamless transition from LTE to 5G. Device OEMs can upgrade their LTE solutions to 5G by swapping modules with minimal or no changes needed to existing hardware, minimizing development efforts and cost, and greatly expediting time to commercialization.



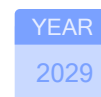
Virtually any band, any region

Supports global 5G NR sub-6GHz bands and operates in stand-alone (SA) only mode, with the capability to switch to LTE as needed, and can be deployed over private or public 5G networks, leveraging network slicing or in isolation.



Extended life software and hardware support

Long term support with a minimum of 8 years extended life hardware and software support through 2029.





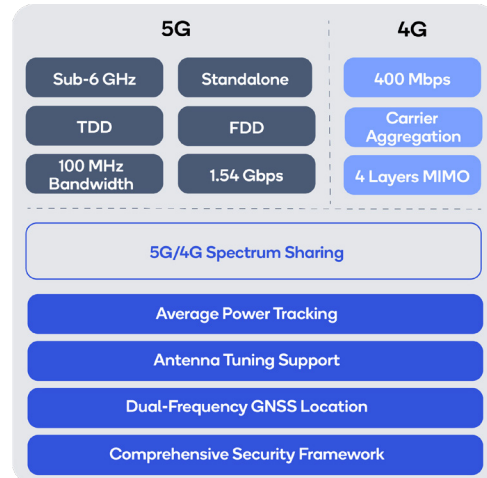
Qualcomm 315 5G IoT Modem Target Applications

- Automation
- Energy
- Construction
- Manufacturing
- Mining
- Precision Agriculture
- Public Venues
- Retail

Features

- Integrated 5G standalone and 4G modem
- Supports virtually any available sub-6GHz spectrum band
- 5G/4G spectrum sharing
- Integrated dual-frequency GNSS receiver
- Embedded ethernet MAC
- Extended ambient operating temperature

Block Diagram



Specifications

5G Technology	3GPP Rel.15 5G NR
5G Peak Download Speed	1.54 Gbps
5G Peak Upload Speed	330 Mbps
5G Spectrum	5G/4G spectrum sharing, sub-6 GHz
5G Modes	SA (standalone), TDD & FDD
5G RF	Adaptive antenna tuning, power tracking
5G Sub-6 GHz Specs	100 MHz bandwidth, 4x4 MIMO DL, 64 QAM DL/UL
LTE Technology	Rel.15 Cat.13 DL, Cat.5 UL
LTE Peak Download Speed	400 Mbps
LTE Peak Upload Speed	75 Mbps
LTE Modes	TDD & FDD
LTE RF	700 MHz to 3.6 GHz
GNSS	Dual-frequency, multi-constellation GNSS receiver
5G and LTE RFFE	Antenna tuners, average power trackers, Tx and Rx modules

To learn more visit: [qualcomm.com](https://www.qualcomm.com)

