

QTM547 mmWave Antenna Module



The 2nd gen Extended Range Qualcomm® QTM547 mmWave Antenna Module allows mobile operators to offer fixed internet broadband services over their 5G network infrastructure. Paired with the Qualcomm® Snapdragon™ X65 5G Modem-RF System, the module delivers a comprehensive modem-to-antenna platform for 5G mmWave CPE designs. It supports Power Class 1 and Power Class 5, plus wide “scan angle” coverage with over 30% improvement from the predecessor. This solution also supports Qualcomm® Dynamic Antenna Steering for the strongest signals and better performance.

Extended range and improved experience



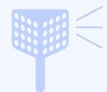
The QTM547 is designed to expand fixed wireless access reach and performance – helping operators to make this new “last mile” broadband option more widely available across urban, suburban and rural environments using their 5G network infrastructure

Truly global 5G solution



With highly flexible configurations, it can be configured to support from 16 to 64 dual polarization antenna elements, achieving up to 48 dBm of peak EIRP and complying with Power Class 1 and 5 devices. This means we’re enabling our customers to rapidly develop a diverse product portfolio that is compatible with the requirements of every major region around the world.

Greater deployment flexibility



The Qualcomm® 547 mmWave antenna module offers over 30% improvement from the previous generation in scanning coverage with its support of “wide scan angle” which provides greater deployment flexibility for mmWave CPE devices.

Accelerate self-installed 5G FWA CPEs



QTM547 supports the Qualcomm Dynamic Antenna Steering technology which will enable the mmWave antenna module to dynamically rotate, allowing it to receive the strongest signals and achieve the best performance. This will help operators and service providers reduce installation cost and accelerate the industry movement toward self-installed, plug and-play fixed wireless access devices.

Features

- Second generation extended-range mmWave antenna module
- Qualcomm Dynamic Antenna Steering Technology
- Support for Wide Scan Angle
- Unmatched carrier aggregation and dual-connectivity support
- Global 5G band support including the new n259
- Highly flexible configurations that support different power class requirements (PC1 and PC5)
- An integrated 5G NR radio transceiver, power management IC, RF front-end components, and phased antenna array
- Support for up to 1000 MHz of bandwidth
- Up to 2x2 MIMO with dual-layer polarization in both downlink and uplink
- Support for beam forming, beam steering, and beam tracking for bi-directional mobile mmWave communication

Specifications

- mmWave Name: Qualcomm® QTM547 mmWave antenna module
- 5G Spectrum: Global mmWave band support including n257, n258, n259, n260, and n261
- 5G mmWave spec: 1000 MHz bandwidth, 8 carriers, 2x2 MIMO
- mmWave Features: Qualcomm Dynamic Antenna Steering, Wide Scan Angle, Dual-layer polarization in downlink and uplink, Beam tracking, Beam steering, Beam forming
- Cellular Technology: 5G NR