

mmWave 5G Market by Component (Hardware, Solutions, Services), Use Case (eMBB, mMTC, URLLC, FWA), Application, Bandwidth, End User (Aerospace and Defense, Telecom, Automotive and Transportation, Public Safety) and Region - Global Forecast to 2027

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Abstracts

The global mmWave 5G market size is expected to grow from USD 2.5 billion in 2022 to USD 4.9 billion by 2027, at a Compound Annual Growth Rate (CAGR) of 14.7% during the forecast period. The rapidly growing demand for wireless data bandwidth continues to expand and develop the experience of mobile data users. It has put a strain on network use of available spectrums. To overcome this rising demand cellular industry is looking into other frequency bands that can be utilized in development of 5G wireless technologies driving the mmWave market growth.

The rapidly growing demand for wireless data bandwidth continues to expand and develop the experience of mobile data users. It has put a strain on network use of available spectrums. To overcome this rising demand cellular industry is looking into other frequency bands that can be utilized in the development of new 5G wireless technologies driving the mmWave market growth.

Ultra-reliable and low-latency communication (URLLC) use case is estimated to account higher CAGR during the forecast period

URLLC is an essential feature required to support dense sensor grids of IoT endpoints; for a number of unique use cases in the areas of energy transmission, transportation, manufacturing, and healthcare, it is a primary enabler. URLLC is used for safety and

mission-related applications, such as autonomous driving, industrial automation and robotics, drone-based delivery, and remote medical assistance. URLLC-centered applications need a throughout delivery of data with consistency, security, and minimum latency supported by mmWave technology. URLLC aids in automating factory processes and power systems as manufacturing companies automate industrial control by developing networks in production plants driving the growth of mmWave 5G market.

Industry 4.0 application is expected account for the largest market share during 2022

The Smart industry processes and networking of machines led by the advancements in 5G are referred to as industry 4.0. This means automation of industries that requires real-time communication between machines that will produce petabytes of data. The qualities of 5G, such as low latency, ultra-high reliability, and high bandwidth will lead industry 4.0 toward smart warehouses and distribution centers. Industry 4.0 anticipates the growing trend toward automation and data exchange in technology and processes within the manufacturing industry.

Among regions, APAC to hold higher CAGR during the forecast period

The growth of the mmWave 5G market in APAC is highly driven by the technological advancement across the region. China is anticipated to be the leading country for mmWave 5G market growth in Asia Pacific, followed by South Korea. According to GlobalData Asia Pacific is expected to be the leading region in 5G technology adoption with 1.14 billion subscribers, accounting for 65% of global 5G subscription by 2024. Asia Pacific mmWave technology industry is on an up-surge trend owing to the government approvals of mmWave bands trials and planning for future advancements.

Breakdown of primaries

In-depth interviews were conducted with Chief Executive Officers (CEOs), innovation and technology directors, system integrators, and executives from various key organizations operating in the mmWave 5G market.

By Company: Tier I: 62%, Tier II: 23%, and Tier III: 15%

By Designation: C-Level Executives: 38%, Directors: 30%, and others: 32%

By Region: North America: 40%, Europe: 15%, Asia Pacific: 35%, Middle East and Africa: 5%, Latin America: 5%

The report includes the study of key players offering mmWave 5G hardware, solutions and services. It profiles major vendors in the global mmWave 5G market. The major vendors in the global mmWave 5G market include NXP Semiconductors (Netherlands), Airspan Networks (US), AT&T (US), Fastweb (Italy), SoftBank (Japan), Corning (US), Nokia (Finland), Mavenir (US), NTT DOCOMO (Japan), AMD (California), Huawei (China), Qualcomm (US), Ericsson (Sweden), Verizon Communications Inc. (US), Rakuten Mobile (Japan), Singtel (Singapore), Samsung (South Korea), Fujitsu (Japan), Renesas Electronics Corporation (Japan), Keysight Technologies (US), Movandi (US), JMA Wireless (US), Sivers Semiconductors (Sweden), ALCAN systems (Germany), Verana Networks (US), Pivotal Commware (US), Pharrowtech (Belgium).

Research Coverage

The market study covers the mmWave 5G market across segments. It aims at estimating the market size and the growth potential of this market across different segments, such as component, use case, application, bandwidth, end user and region. It includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key Benefits of Buying the Report

The report would provide the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall mmWave 5G market and its subsegments. It would help stakeholders understand the competitive landscape and gain more insights better to position their business and plan suitable go-to-market strategies. It also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

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*Details on Business overview, Products/Solutions/Services offered, Recent developments & MnM View might not be captured in case of unlisted companies.

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