

Private 5G Market by Component (Base Station, Radio Access Network, Core Network, Antennas, Software-Defined Network, Network Management, Network Security), Spectrum (Licensed, Shared), Services, Frequency Band, Deployment Mode - Global Forecast to 2028

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Report description:

The global private 5G market is expected to be valued at USD 2.0 billion in 2023 and is projected to reach USD 11.8 billion by 2028; it is expected to grow at a CAGR of 42.3% from 2023 to 2028. the integration of IoT devices across industries necessitates a connectivity solution that can handle the demands of reliable, low-latency, and high-bandwidth communication. Private 5G networks provide the required infrastructure to support the proliferation of IoT devices on a large scale, enabling businesses to leverage the potential of IoT for improved operational efficiency, data-driven insights, and innovation.

"Software component segment to account for second highest CAGR of private 5G market"

Software components allow Private 5G networks to adapt quickly to changing requirements and conditions. This agility is essential for industries that need to rapidly deploy and reconfigure network services to accommodate varying demands and use cases. Software components play a vital role in implementing robust security measures within Private 5G networks. They enable features such as encryption, authentication, and access control, ensuring data privacy and network integrity. The growth of the software component in the Private 5G market is driven by its ability to provide customization, agility, innovation, security, and cost-efficiency.

"Manufacturing vertical to account for the second largest market share of private 5G market."

The manufacturing sector is undergoing a significant transformation with Industry 4.0, which emphasizes automation, data exchange, and IoT integration. Private 5G networks provide the high-speed, low-latency connectivity required to implement these advanced technologies and optimize manufacturing processes. The growth of the Private 5G market in the manufacturing vertical

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is driven by the need for advanced connectivity solutions to support IoT integration, smart manufacturing, automation, and other transformative technologies. Private 5G networks enable manufacturers to optimize their operations, enhance product quality, and remain competitive in an increasingly digital and interconnected manufacturing landscape.

"Europe to have the second highest CAGR for private 5G market"

European industries and businesses are undergoing significant digital transformation efforts. Private 5G networks play a pivotal role in enabling this transformation by providing the connectivity needed to support advanced technologies like IoT, automation, and data analytics. Europe has a strong manufacturing base and is a leader in Industry 4.0 initiatives. Private 5G networks are essential for driving smart manufacturing, process optimization, and the integration of robotics and automation across various industrial sectors. The proliferation of IoT devices and the development of smart cities have fueled the demand for reliable and high-speed connectivity. Private 5G networks offer the necessary infrastructure to support these applications, enhancing efficiency, sustainability, and quality of life.

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

- By Company Type: Tier 1 - 10%, Tier 2 - 55%, and Tier 3 - 35%

- By Designation: C-level Executives - 45%, Directors - 25%, and Others - 30%

- By Region: North America - 55%, Europe - 20%, Asia Pacific - 15%, RoW - 10%

The key players operating in the private 5G market are Huawei Technologies Co., Ltd. (China), Telefonaktiebolaget LM Ericsson (Sweden), Nokia (Finland), Samsung Electronics Co., Ltd. (South Korea), ZTE Corporation (China).

The research report categorizes the Private 5G Market, By Component (Hardware, Software, Services), Spectrum (Licensed, Unlicensed/Shared), Frequency Band (Sub-6 GHz, mmWave), Organization Size (Small and Medium-Sized Businesses, Enterprises), Deployment Type (On-Premise, Cloud), Use Case (IoT, Sports Analytics, AR/VR, Smart Infrastructure, Others), Vertical (BFSI, Manufacturing, Energy & Utilities, Retail & E-commerce, Healthcare, Infrastructure, Transportation & Logistics, Aerospace & Defense, Media & Entertainment, IT & Telecommunication), and Region (North America, Europe, Asia Pacific, and RoW). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the private 5G market. A detailed analysis of the key industry players has been done to provide insights into their business overviews, products, key strategies; Contracts, partnerships, agreements. new product & service launches, mergers and acquisitions, and recent developments associated with the private 5G market. Competitive analysis of upcoming startups in the private 5G market ecosystem is covered in this report.

Research Coverage:

Key Benefits of Buying the Report

- Analysis of key drivers (Emergence of Industry 4.0, Increasing demand for IoT (Internet of Things), Rising adoption of cloud computing, The increasing demand for security and privacy in enterprise networks), restraints (Lack of standardization, Limited availability of spectrum), opportunities (The increasing demand for high-performance applications, Remote monitoring and surveillance, 5G for enterprise connectivity), and challenges (High Initial Deployment Cost, Integration with legacy systems) influencing the growth of the private 5G market.

- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the private 5G market

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- Market Development: Comprehensive information about lucrative markets the report analyses the private 5G market across varied regions.
- Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the private 5G market
- Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Huawei Technologies Co., Ltd. (China), Telefonaktiebolaget LM Ericsson (Sweden), Nokia (Finland), Samsung Electronics Co., Ltd. (South Korea), ZTE Corporation (China) among others in the private 5G market.

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