+357 96 030922
info@marketpublishers.com

5G in Defense Market ? Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Communication Infrastructure (Small Cell, Macro Cell, Radio Access Network) By Core Network Technology (Software-defined Networking, Fog Computing, Mobile Edge Computing, Network Functions Virtualizations) By Network Type (Enhanced Mobile Broadband {eMBB}, Ultra-Reliable Low-Latency Communications {URLLC}, Massive Machine Type Communications {MMTC}) By Chipset (Application-Specific Integrated Circuit (ASIC) Chipset, Radio Frequency Integrated Circuit (RFIC) Chipset, Millimeter Wave (mmWave) Chipset) By Platform (Land, Naval, Airborne) By Operational Frequency (High, Low, Medium) By End Use (Aircraft, Airport, Homeland Security) By Region & Competition, 2021-2031F

https://marketpublishers.com/r/53E0A18DB5F5EN.html
Date: January 2026
Pages: 181
Price: US$ 4,500.00 (Single User License)
ID: 53E0A18DB5F5EN

Abstracts

The Global 5G in Defense Market is projected to expand from USD 2.26 Billion in 2025 to USD 6.79 Billion by 2031, registering a CAGR of 20.12%. This market entails the application of fifth-generation cellular technology to deliver secure, low-latency, and high-speed connectivity for military uses, such as tactical command centers, smart logistics, and autonomous systems. The market is primarily driven by the urgent need for real-

+357 96 030922
info@marketpublishers.com

time data processing to improve situational awareness and the demand for massive machine-type communications to sustain the growing internet of military things. Data from the GSMA indicates that global 5G connections exceeded 1.5 billion in 2024, highlighting the rapid maturity of the commercial ecosystem that defense agencies are utilizing to fast-track the integration of these advanced capabilities into their operations.

A major hurdle that may restrict market growth is the complexity surrounding spectrum allocation and coexistence. The risk of signal interference between commercial 5G networks and legacy military avionics or radar systems frequently requires strict geographic limitations and exhaustive testing protocols. These necessary measures often decelerate the pace of widespread deployment and hinder interoperability efforts.

Market Driver

Rising government expenditures on defense digital modernization are fundamentally transforming the sector, with nations dedicating significant funds to integrate commercial wireless technologies into military infrastructure. Defense agencies are prioritizing contract vehicles that facilitate the rapid acquisition of 5G capabilities, ensuring that tactical edge networks can sustain data-intensive applications such as artificial intelligence and unmanned systems. This financial commitment is illustrated by major procurement initiatives replacing legacy systems; for example, GovCon Wire reported in November 2024 that Verizon secured a spot on the U.S. Navy?s Spiral 4 contract, valued at a $2.7 billion ceiling, to provide wireless services and devices over the next decade. Similarly, RCR Wireless noted in September 2025 that Future Technologies won over $50 million in DoD contracts to deploy private 5G networks for base modernization.

Concurrently, a strategic pivot toward network-centric warfare capabilities is driving market demand, as military doctrines increasingly depend on connecting sensors, shooters, and decision-makers in real-time across multi-domain environments. This operational imperative requires 5G networks that guarantee interoperability among allied forces and provide the low latency needed for situational awareness in contested areas. The practical application of this shift is being validated through large-scale multinational exercises; according to Defence Industry Europe in May 2025, Nokia successfully tested its 5G AirScale radio and standalone core technology during the Joint Viking 2025 exercise in Norway. Involving over 10,000 troops from nine nations, this event demonstrated the critical role of 5G in coordinating complex joint operations.

Market Challenge

+357 96 030922
info@marketpublishers.com

The difficulties associated with spectrum allocation and coexistence pose a significant barrier to the growth of the Global 5G in Defense Market. Since commercial 5G networks often operate within frequency bands that are adjacent to or overlap with those used by legacy military systems, such as radar and avionics, there is a substantial risk of harmful electromagnetic interference. This technical conflict forces defense agencies to conduct rigorous compatibility assessments and establish extensive geographic exclusion zones where 5G deployment is restricted. These mandatory precautions delay the operational readiness of high-speed connectivity in tactical settings and stall the integration of autonomous systems that require continuous coverage.

The considerable resources needed to validate these coexistence capabilities underscore the severity of this impediment. For instance, the National Spectrum Consortium reported in 2024 that a specialized project worth $25 million was awarded to demonstrate spectrum sharing technologies aimed at mitigating interference between 5G signals and military radar systems. This diversion of capital and engineering effort toward testing and mitigation, rather than immediate rollout, illustrates how spectrum challenges enforce a more cautious and extended adoption timeline. Consequently, the market experiences slower growth as stakeholders are compelled to prioritize technical de-confliction over the rapid acquisition of advanced network capabilities.

Market Trends

The integration of Non-Terrestrial Networks and Low-Earth Orbit satellites is gaining traction as a method to extend connectivity beyond terrestrial boundaries. Defense agencies are connecting space-based assets with tactical units to ensure resilient communication in remote environments where ground infrastructure is compromised. This convergence facilitates continuous data transmission across multi-layered networks, which is essential for maintaining operational readiness among forward-deployed forces. Underscoring this demand, Viasat announced in December 2024 that it secured an IDIQ contract with a $568 million ceiling from the General Services Administration to deliver networking and satellite capabilities for U.S. defense forces.

The adoption of Open RAN architectures for vendor interoperability is also reshaping the market by reducing reliance on proprietary hardware. This shift allows defense departments to diversify their supply chains and integrate components from multiple manufacturers, effectively mitigating risks associated with vendor lock-in. By decoupling hardware from software, military organizations can accelerate upgrades and customize

+357 96 030922
info@marketpublishers.com

performance to meet specific mission needs. Validating this trend, the U.S. Department of Defense announced in November 2024 that Hughes Network Systems was awarded a $6.5 million contract to deploy a standalone 5G Open RAN prototype at Fort Bliss for tactical testing.

Key Market Players

Telefonaktiebolaget LM Ericsson

Huawei Technologies Co. Ltd.

Nokia Networks

Thales Group

L3Harris Technologies Inc.

Raytheon Technologies Corporation

Qualcomm Technologies Inc.

Analog Devices Inc.

Intel Corporation

Cisco Systems Inc.

Report Scope

In this report, the Global 5G in Defense Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

5G in Defense Market, By Communication Infrastructure

Small Cell

Macro Cell

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

- Low
- Medium

5G in Defense Market, By End Use

- Aircraft
- Airport
- HomelSecurity

5G in Defense Market, By Region

- North America
  - United States
  - Canada
  - Mexico
- Europe
  - France
  - United Kingdom
  - Italy
  - Germany
  - Spain
- Asia Pacific
  - China

+357 96 030922
info@marketpublishers.com

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global 5G in Defense Market.

Available Customizations:

Global 5G in Defense Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

6. NORTH AMERICA 5G IN DEFENSE MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

7. EUROPE 5G IN DEFENSE MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

8. ASIA PACIFIC 5G IN DEFENSE MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

9. MIDDLE EAST & AFRICA 5G IN DEFENSE MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

10. SOUTH AMERICA 5G IN DEFENSE MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: 5G in Defense Market ? Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Communication Infrastructure (Small Cell, Macro Cell, Radio Access Network) By Core Network Technology (Software-defined Networking, Fog Computing, Mobile Edge Computing, Network Functions Virtualizations) By Network Type (Enhanced Mobile Broadband {eMBB}, Ultra-Reliable Low-Latency Communications {URLLC}, Massive Machine Type Communications {MMTC}) By Chipset (Application-Specific Integrated Circuit (ASIC) Chipset, Radio Frequency Integrated Circuit (RFIC) Chipset, Millimeter Wave (mmWave) Chipset) By Platform (Land, Naval, Airborne) By Operational Frequency (High, Low, Medium) By End Use (Aircraft, Airport, Homeland Security) By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/53E0A18DB5F5EN.html

Price: US$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/53E0A18DB5F5EN.html