

# Digital Radar Market by Type (Active and Passive), Dimension (2D, 3D and 4D), Application (Safety, Security and Surveillance), Vertical (Automotive, Aerospace, Military and Defense) and Region - Global Forecast to 2029

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## Abstracts

The digital radar market is projected to grow from USD 5.9 billion in 2024 and is expected to reach USD 13.7 billion by 2029, growing at a CAGR of 18.2% from 2024 to 2029. The automobile market is largely driven by innovation, safety improvements as well as integration of sophisticated systems such as Advanced Driver Assistance Systems. For instance, object detection, tracking features and general situational understanding are significantly upgraded through the use of 4D digital radar technology.

“The 4D segment in the digital radar market to witness higher growth rate during the forecast period.”

The 4D segment to witness high growth rate in the digital radar market due to its superior capabilities and wide-ranging applications of the 4D radar segment. 4D radar adds time as the fourth dimension, which makes it more precise and gives a better spatial awareness when compared with traditional radar systems that only have range data, angles, and velocity. The technology of imaging at a high resolution makes it possible to detect, track, and classify objects in complex environments with greater success, which is especially important for self-driving cars, smart traffic management or advanced driver-assistance systems (ADAS).

“Market for security & surveillance in the digital radar market to hold the largest market share during the forecast period.”

The security & surveillance application holds the largest market share due to its vital function in military & defense strategies. In current military operations, modern digital radar systems are essential since they detect, track and identify targets from far off with adverse weather effects taken into consideration. A significant trend is how more technology is now being used to improve both quality and efficiency within digital radars. New solutions employing advanced technologies like digital beamforming, the GaN (Gallium Nitride) Semiconductors, and Frequency Modulated Continuous Wave (FMCW) Radar surpass traditional radar in terms of effectiveness or efficiency.

“The US is expected to hold the largest market size in the North American region during the forecast period.”

During the forecast period, the US is predicted to dominate in the North American region owing to the presence of major defense companies such as Lockheed Martin Corporation (US), and RTX (US). They have developed sophisticated radar technologies for a number of applications, such as military & defense, and aviation, among others. The US government makes large investments in the modernization and research of defense in order to increase the market for digital radar. Moreover, the US automotive industry is adding radar technology to boost safety features like accident avoidance systems and adaptive cruise control.

By Company Type: Tier 1 – 20%, Tier 2 – 35%, and Tier 3 – 45%

By Designation: C-level Executives – 20%, Directors –30%, and Others – 50%

By Region: North America –40%, Europe – 20%, Asia Pacific– 30%, and RoW – 10%

Prominent players profiled in this report include Lockheed Martin Corporation (US), Thales (France), Indra (Spain), Leonardo S.p.A. (Italy), Bharat Electronics Limited (India), Advanced Micro Devices, Inc. (US), Magna International Inc. (Canada), NXP Semiconductors (Netherlands), Saab AB (Sweden), and Uhnder (US). Israel Aerospace Industries (Israel), BAE Systems (UK), Elbit Systems Ltd. (Israel), Vayyar (Israel), Arbe (Israel), Einstein Radar Systems (US), Oculii (US), Spartan Radar, Inc. (US), Cubtek Inc. (Taiwan), ASELSAN A.S. (Turkiye), Teledyne FLIR LLC (US), Echodyne Corp (US) Bitsensing (South Korea), RFISee (Israel), Gapwaves AB (Sweden) are among a few other key companies in the digital radar market.

## Report Coverage

The report defines, describes, and forecasts the digital radar market based on type, dimension, application, vertical, and region. It provides detailed information regarding drivers, restraints, opportunities, and challenges influencing the growth of the digital radar market. It also analyzes competitive developments such as acquisitions, product launches, expansions, and actions carried out by the key players to grow in the market.

## Reasons to Buy This Report

The report will help the market leaders/new entrants in the market with information on the closest approximations of the revenue for the overall digital radar market and the subsegments. The report will help stakeholders understand the competitive landscape and gain more insight to position their business better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key drivers, restraints, opportunities, and challenges.

The report will provide insights into the following pointers:

Analysis of key drivers (Increased adoption of digital radar in autonomous vehicles) restraints (High development cost)

opportunities (Increasing adoption of digital radar in traffic monitoring), and challenges (Electromagnetic jamming and interface issue) of the digital radar market.

**Product development /Innovation:** Detailed insights on upcoming technologies, research & development activities, and new product launches in the digital radar market.

**Market Development:** Comprehensive information about lucrative markets; the report analyses the digital radar market across various regions.

**Market Diversification:** Exhaustive information about new products launched, untapped geographies, recent developments, and investments in the digital radar market.

**Competitive Assessment:** In-depth assessment of market share, growth strategies, and offering of leading players like Lockheed Martin Corporation

(US), Thales (France), Indra (Spain), Leonardo S.p.A. (Italy), Bharat Electronics Limited (India) among others in the digital radar market.

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