+357 96 030922
info@marketpublishers.com

Global Automotive LiDAR Market to Reach USD 113.77 Million by 2032

https://marketpublishers.com/r/G8F33589AB93EN.html
Date: February 2025
Pages: 285
Price: US$ 3,218.00 (Single User License)
ID: G8F33589AB93EN

Abstracts

The Global Automotive LiDAR Market was valued at USD 504.2 million in 2023 and is expected to grow at a CAGR of 9.4% over the forecast period 2024-2032. The automotive industry is undergoing a radical transformation with the integration of advanced driver assistance systems (ADAS) and autonomous vehicle technologies. LiDAR (Light Detection and Ranging) has emerged as a cornerstone for high-precision 3D mapping, real-time object detection, and enhanced road safety mechanisms, driving its adoption across self-driving and semi-autonomous vehicles. This surge in demand for high-resolution perception technology is fueling significant investments in solid-state and mechanical LiDAR systems by major industry players.

LiDAR technology plays a critical role in enabling Level 3 to Level 5 autonomy, providing accurate depth perception, high-definition mapping, and enhanced situational awareness. The rapid strides in sensor miniaturization, reduced production costs, and software integration have significantly contributed to LiDAR's expanding application in the automotive domain. Additionally, the transition from mechanical LiDAR to solid-state LiDAR is expected to accelerate market growth, as solid-state sensors offer higher reliability, lower power consumption, and increased durability for long-term deployment in electric and autonomous vehicles.

Governments worldwide are enacting stringent safety regulations and policies to facilitate the adoption of autonomous and connected vehicle technologies. Rising concerns over traffic congestion, road accidents, and environmental sustainability have led to heightened investments in LiDAR-based safety systems. However, high implementation costs, limited scalability, and integration challenges with existing automotive architectures remain significant barriers. The increasing focus on cost-effective LiDAR solutions, combined with technological advancements such as

+357 96 030922
info@marketpublishers.com

frequency-modulated continuous-wave (FMCW) LiDAR, is expected to unlock new opportunities for market players.

Regionally, North America dominated the Automotive LiDAR Market in 2023, owing to the presence of leading autonomous vehicle manufacturers, extensive R&D investments, and favorable regulatory policies supporting ADAS deployment. The United States is at the forefront of self-driving vehicle innovations, with companies like Tesla, Waymo, and General Motors investing in next-generation LiDAR solutions. Meanwhile, Asia-Pacific is poised to witness the fastest growth, driven by rising demand for advanced mobility solutions, increasing automotive production, and government-backed smart city initiatives in China, Japan, and South Korea. Europe is also experiencing substantial market growth, with automotive giants such as BMW, Audi, and Volkswagen integrating LiDAR-based technologies to enhance vehicle safety and automation capabilities.

Major Market Players Included in This Report Are:

Velodyne LiDAR, Inc.

Innoviz Technologies Ltd.

Luminar Technologies, Inc.

Valeo S.A.

Hesai Technology

Ouster, Inc.

AEye, Inc.

Quanergy Systems, Inc.

Continental AG

LeddarTech Inc.

RoboSense LiDAR

+357 96 030922
info@marketpublishers.com

Cepton Technologies, Inc.

Blickfeld GmbH

Waymo LLC

Xenomatix N.V.

The Detailed Segments and Sub-Segments of the Market Are Explained Below:

By Technology

Mechanical LiDAR

Solid-state LiDAR

By Application

Autonomous Vehicles

Advanced Driver Assistance Systems (ADAS)

Others

By Propulsion Type

Electric Vehicles

Internal Combustion Engine (ICE) Vehicles

By Vehicle Type

Passenger Vehicles

Commercial Vehicles

+357 96 030922
info@marketpublishers.com

By Region:

North America

- U.S.
- Canada

Europe

- UK
- Germany
- France
- Spain
- Italy
- Rest of Europe

Asia Pacific

- China
- India
- Japan
- Australia
- South Korea
- Rest of Asia Pacific

+357 96 030922
info@marketpublishers.com

Latin America

- Brazil
- Mexico
- Rest of Latin America

Middle East & Africa

- Saudi Arabia
- South Africa
- Rest of Middle East & Africa

Years Considered for the Study Are as Follows:

- Historical Year – 2022
- Base Year – 2023
- Forecast Period – 2024 to 2032

Key Takeaways:

- Market estimates and forecasts from 2022 to 2032, providing valuable insights into industry growth patterns.
- Comprehensive regional analysis, including country-level market assessments.
- Competitive landscape examination, detailing key players, strategic initiatives, and innovation trends.

+357 96 030922
info@marketpublishers.com

In-depth analysis of market drivers, challenges, and opportunities, influencing future growth trajectories.

Evaluation of industry disruptions, regulatory frameworks, and investment strategies, shaping the Automotive LiDAR Market.

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

CHAPTER 4. GLOBAL AUTOMOTIVE LIDAR MARKET INDUSTRY ANALYSIS

CHAPTER 5. GLOBAL AUTOMOTIVE LIDAR MARKET SIZE & FORECASTS BY TECHNOLOGY 2022-2032

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

CHAPTER 10. COMPETITIVE INTELLIGENCE

+357 96 030922
info@marketpublishers.com

CHAPTER 11. RESEARCH PROCESS

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Automotive LiDAR Market to Reach USD 113.77 Million by 2032

Product link: https://marketpublishers.com/r/G8F33589AB93EN.html

Price: US$ 3,218.00 (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/G8F33589AB93EN.html