

Revolutionizing Mobility: Automotive LiDAR Market Set to Hit \$1.83 Billion by 2028 Amid Autonomous Driving Boom | AMR

Factors such as increase in developments of semi-autonomous & autonomous vehicle, rise in emphasis from the governments for ADAS incorporated vehicles,

WILMINGTON, NEW CASTLE, DE, UNITED STATES, December 2, 2024 /EINPresswire.com/ -- As per the report published by Allied Market Research, the global [automotive LiDAR market](#) generated \$221.7 million in 2020, and is anticipated to garner \$1.83 billion by 2028, registering a CAGR of 30.3% from 2021 to 2028.



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Development of semi-autonomous and autonomous vehicles, surge in investment and funding in LiDAR startups, and growing emphasis from the governments for ADAS incorporated vehicles have boosted the growth of the global automotive LiDAR market. However, high cost of LiDAR system, environmental constraints, and optical vulnerability hinder the market growth. On the contrary, advent of 4D LiDAR and rapid technological advancements in automotive LiDAR is expected to open new opportunities for the market players in the future.

[Lidar systems map out their environments by sending laser pulses outward.](#) When the pulse contacts an object or obstacle, it reflects or bounces back to the lidar unit. The system then receives the pulse and calculates the distance between it and the object, based on the elapsed time between emitting the pulse and receiving the return beam. Lidar does this rapidly, with some emitting millions of pulses per second. As the beams return to the system, it begins forming a picture of what's going on in the world around the vehicle and can use computer algorithms to piece together shapes for cars, people, and other obstacles.

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□□□□□ □□ □□□□□□□□□□□, the semi-autonomous vehicle segment held the largest share in 2020, accounting for around two-thirds of the market. However, the autonomous vehicle segment is estimated to register the highest CAGR of 32.7% during the forecast period.

□□ □□□ □□□□□□ □□ □□□□□□□□□□□, the solid-state LiDAR segment dominated the market in terms of revenue in 2020, contributing to nearly third-fourths of the market. However, the mechanical LiDAR segment is projected to portray the highest CAGR of 32.6% from 2021 to 2028.

□□□□□ □□ □□□□□□, the short & mid-range segment held the largest share in 2020, accounting for more than two-thirds of the market. However, the long-range segment is estimated to register the highest CAGR of 35.8% during the forecast period.

□□ □□□ □□□□□□ □□ □□□□□□□□ □□□□□, the internal combustion engine segment held the largest share in 2020, contributing to more than 88% of the total market revenue. However, the electric & hybrid segment is anticipated to register the highest CAGR of 40.1% during the forecast period.

The global automotive LiDAR market is analyzed across several regions such as North America, Europe, Asia-Pacific, and LAMEA. The market across North America held the lion's share in 2020, accounting for nearly two-fifths of the market. However, the market across Asia-Pacific is expected to register the highest CAGR of 34.4% from 2021 to 2028.

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First Sensor AG,
Continental AG,
Innoviz Technologies Ltd,

Ibeo Automotive Systems GmbH,
Luminar Technologies,
LeddarTech,
Robert Bosch GmbH,
Ouster, Inc.,
Valeo
Velodyne LiDAR, Inc.

Factors such as increase in developments of semi-autonomous & autonomous vehicle, rise in emphasis from the governments for ADAS incorporated vehicles, and surge in investments & funding in LiDAR startups are expected to drive the market growth. However, high cost of LiDAR system and environmental constraints & optical vulnerability [pose a challenge for use of LiDAR hinder the market growth.](#)

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<https://www.alliedmarketresearch.com/automotive-transceivers-market> - Automotive Transceivers Market Size, Share, Competitive Landscape and Trend Analysis Report, by Protocol, Application and Vehicle Type : Global Opportunity Analysis and Industry Forecast, 2018-2025

<https://www.alliedmarketresearch.com/automotive-hypervisor-market-A11740> - Automotive Hypervisor Market Size, Share, Competitive Landscape and Trend Analysis Report, by Vehicle Type, Type, Level of Automation and Vehicle Class : Global Opportunity Analysis and Industry Forecast, 2021-2030

<https://www.alliedmarketresearch.com/automotive-power-electronics-market> - Automotive Power Electronics Market Size, Share, Competitive Landscape and Trend Analysis Report, by Device, by Application, by Drive Type : Global Opportunity Analysis and Industry Forecast, 2023-2032

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