

# **Automotive LiDAR Market by Technology (Solid-state LiDAR, & Mechanical LiDAR), Image Type (2D & 3D), Measurement Process (ToF, FMCW), Location, EV Type, ICE Vehicle Type, Maximum Range, Laser Wavelength, Autonomy and Region - Global Forecast to 2030**

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## **Abstracts**

The global automotive LiDAR market is projected to grow from USD 555 million in 2022 to USD 8,611 million by 2030, at a CAGR of 40.9%. Parameters such as increased demand for premium vehicles, along with growing demand for safety & driving comfort features are expected to bolster the revenue growth of the automotive LiDAR market during the forecast period. In addition, increasing sales of electric vehicles, paired with increasing focus towards autonomous mobility will create new opportunities for automotive LiDAR market during the forecast period.

“Bumpers & grills segment is expected to be the largest market during the forecast period, by location.”

The bumpers & grills segment is expected to have significant growth opportunities during the forecast period. The use of LiDAR sensors in bumpers & grills improves the aesthetics of autonomous vehicles and helps with the proper functioning of LiDAR technology. Most level 4 and level 5 autonomous vehicles will be equipped with LiDAR sensors at bumpers & grills in the coming years. Currently, automotive OEM Audi (Germany) has incorporated a LiDAR sensor at the bumper & grill in its A8 model.

“North America is expected to have significant growth during the forecast period.”

The North American region is expected to have significant growth during the forecast period. This region is typically dominated by automotive OEMs such as General Motors, and Ford Motor Company, paired with some established Asian as well as European automotive OEMs such as Nissan Corporation (Japan), Toyota Motor Corporation (Japan), BMW Group (Germany), Hyundai/Kia (South Korea), Honda (Japan), and Volkswagen Group (Germany). In addition, the consistent increase in sales of luxury vehicles is likely to positively impact the demand for self-driving cars in North America. The large customer base and high disposable income levels in the region have fueled the demand for premium passenger cars. All these parameters are expected to bolster the revenue growth of the North America automotive LiDAR market during the forecast period. The US is projected to be the largest automotive LiDAR market in North America. There is a wide variety of car models equipped with automotive LiDAR sensors available in the country, such as the BMW 7 Series, Mercedes-Benz S-Class, Toyota MIRAI, and Audi A8.

“BEV segment is estimated to be the promising segment in the automotive LiDAR market during the forecast period”

BEV is expected to be the promising segment by electric vehicle type during the forecast period. According to primary inputs, the penetration of BEVs is anticipated to increase in the coming years due to strict emission norms introduced by governments of various countries and the increased driving range of electric vehicles. Governments of some countries now provide subsidies for environment-friendly cars to encourage the use of BEVs. The BEV segment is expected to have a noticeable growth rate. Sales of BEV in 2020 were approximately 2 million units, which increased to 4.7 million units in 2021. The BEV sales clearly show that the BEV segment witnessed a growth of approximately 130% in 2021 over 2020. All these factors, are expected to augment revenues for BEV segment of the automotive LiDAR market during the forecast period.

In-depth interviews were conducted with CEOs, marketing directors, other innovation and technology directors, and executives from various key organizations operating in this market.

By Company Type: OEMs - 21%, Tier I - 31%, and Tier II - 48%

By Designation: CXOs - 40%, Directors - 35%, and Others - 25%

By Region: North America - 31%, Europe - 53%, Asia Pacific - 16%

The automotive LiDAR market is dominated by major players including Valeo (France), DENSO Corporation (Japan), Innoviz Technologies Ltd. (Israel), Velodyne Lidar, Inc. (US), and Luminar Technologies Inc. (US). These companies have strong product portfolio as well as strong distribution networks at the global level.

#### Research Coverage:

The report covers the automotive LiDAR market, in terms of Technology (Solid-state LiDAR, and Mechanical LiDAR), Image Type (2D, and 3D), ICE Vehicle Type (Passenger Cars, and Commercial Vehicles), Location (Bumpers & Grills, Headlights & Taillights, Roofs & Upper Pillars, and Other Locations), Electric Vehicle Type (BEV, FCEV, HEV, and PHEV), Maximum Range (Short & Mid-range (170 m and Below), and Long-range (Above 170 m)), Laser Wavelength (Near Infrared (NIR), Short-wave Infrared (SWIR), and Long-wave Infrared (LWIR)), Measurement Process (Frequency-modulated Continuous Wave (FMCW), and Time of Flight (ToF)), Level of Autonomy (Semi-autonomous and Autonomous), and Region (Asia Pacific, Europe, and North America). It covers the competitive landscape and company profiles of the major players in the automotive LiDAR market ecosystem.

The study also includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

#### Key Benefits of Buying the Report:

The report will help market leaders/new entrants in this market with information on the closest approximations of revenue numbers for the overall automotive LiDAR market and its subsegments.

This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market strategies.

The report also helps stakeholders understand the pulse of the market and provides them information on key market drivers, restraints, challenges, and opportunities.

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