

# **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.

## Contents

### 1 INTRODUCTION

#### 1.1 STUDY OBJECTIVES

#### 1.2 MARKET DEFINITION

TABLE 1 AUTOMOTIVE LIDAR MARKET DEFINITION, BY TECHNOLOGY

TABLE 2 AUTOMOTIVE LIDAR MARKET DEFINITION, BY ICE VEHICLE TYPE

TABLE 3 AUTOMOTIVE LIDAR MARKET DEFINITION, BY LASER WAVELENGTH

TABLE 4 AUTOMOTIVE LIDAR MARKET DEFINITION, BY ELECTRIC VEHICLE TYPE

TABLE 5 AUTOMOTIVE LIDAR MARKET DEFINITION, BY LEVEL OF AUTONOMY

TABLE 6 AUTOMOTIVE LIDAR MARKET DEFINITION, BY IMAGE TYPE

##### 1.2.1 INCLUSIONS AND EXCLUSIONS

TABLE 7 AUTOMOTIVE LIDAR MARKET: INCLUSIONS AND EXCLUSIONS

#### 1.3 MARKET SCOPE

FIGURE 1 MARKETS COVERED

##### 1.3.1 YEARS CONSIDERED

#### 1.4 CURRENCY CONSIDERED

TABLE 8 CURRENCY EXCHANGE RATES

#### 1.5 STAKEHOLDERS

#### 1.6 SUMMARY OF CHANGES

### 2 RESEARCH METHODOLOGY

#### 2.1 RESEARCH DATA

FIGURE 2 AUTOMOTIVE LIDAR MARKET: RESEARCH DESIGN

FIGURE 3 RESEARCH DESIGN MODEL

##### 2.1.1 SECONDARY DATA

2.1.1.1 Key secondary sources

2.1.1.2 Key data from secondary sources

##### 2.1.2 PRIMARY DATA

FIGURE 4 BREAKDOWN OF PRIMARY INTERVIEWS

2.1.2.1 List of primary participants

#### 2.2 MARKET SIZE ESTIMATION

FIGURE 5 RESEARCH METHODOLOGY: HYPOTHESIS BUILDING

##### 2.2.1 BOTTOM-UP APPROACH

FIGURE 6 AUTOMOTIVE LIDAR MARKET SIZE: BOTTOM-UP APPROACH

##### 2.2.2 TOP-DOWN APPROACH

FIGURE 7 TOP-DOWN APPROACH: AUTOMOTIVE LIDAR MARKET

FIGURE 8 AUTOMOTIVE LIDAR MARKET: MARKET ESTIMATION NOTES

2.2.3 GROWTH FORECAST

FIGURE 9 AUTOMOTIVE LIDAR MARKET: RESEARCH DESIGN AND  
METHODOLOGY FOR ICE VEHICLES – DEMAND SIDE

FIGURE 10 AUTOMOTIVE LIDAR MARKET: RESEARCH DESIGN AND  
METHODOLOGY FOR ELECTRIC VEHICLES – DEMAND SIDE

2.3 DATA TRIANGULATION

FIGURE 11 DATA TRIANGULATION METHODOLOGY

2.4 FACTOR ANALYSIS

FIGURE 12 FACTOR ANALYSIS: AUTOMOTIVE LIDAR MARKET

2.4.1 FACTOR ANALYSIS FOR MARKET SIZING: DEMAND AND SUPPLY SIDES

2.5 RESEARCH ASSUMPTIONS

2.6 RESEARCH LIMITATIONS

### **3 EXECUTIVE SUMMARY**

TABLE 9 LIDAR EQUIPPED VEHICLES

FIGURE 13 AUTOMOTIVE LIDAR ECOSYSTEM

FIGURE 14 AUTOMOTIVE LIDAR PLAYERS, BY REGION

FIGURE 15 AUTOMOTIVE LIDAR MARKET OVERVIEW

FIGURE 16 AUTOMOTIVE LIDAR MARKET, BY REGION, 2022–2030

FIGURE 17 AUTOMOTIVE LIDAR MARKET, BY TECHNOLOGY, 2022–2030

FIGURE 18 KEY PLAYERS IN AUTOMOTIVE LIDAR MARKET

### **4 PREMIUM INSIGHTS**

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN AUTOMOTIVE LIDAR  
MARKET

FIGURE 19 INCREASING DEMAND FOR SELF-DRIVING CARS TO BOOST MARKET  
GROWTH

4.2 AUTOMOTIVE LIDAR MARKET, BY REGION

FIGURE 20 ASIA PACIFIC TO BE LARGEST MARKET FOR AUTOMOTIVE LIDAR

4.3 AUTOMOTIVE LIDAR MARKET, BY TECHNOLOGY

FIGURE 21 SOLID-STATE LIDAR TO DOMINATE AUTOMOTIVE LIDAR MARKET

4.4 AUTOMOTIVE LIDAR MARKET, BY IMAGE TYPE

FIGURE 22 3D TO BE LARGER SEGMENT DURING FORECAST PERIOD

4.5 AUTOMOTIVE LIDAR MARKET, BY LASER WAVELENGTH

FIGURE 23 NEAR INFRARED (NIR) TO REMAIN LARGER SEGMENT DURING

## FORECAST PERIOD

### 4.6 AUTOMOTIVE LIDAR MARKET, BY MEASUREMENT PROCESS

FIGURE 24 TIME OF FLIGHT (TOF) TO HOLD LARGER SHARE OF AUTOMOTIVE LIDAR MARKET

### 4.7 AUTOMOTIVE LIDAR MARKET, BY LOCATION

FIGURE 25 BUMPERS AND GRILLS SEGMENT HELD MAXIMUM SHARE IN 2022

### 4.8 AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE

FIGURE 26 PASSENGER CARS TO COMMAND AUTOMOTIVE LIDAR MARKET

### 4.9 AUTOMOTIVE LIDAR MARKET, BY ELECTRIC VEHICLE TYPE

FIGURE 27 BEV TO ACQUIRE LARGEST SHARE DURING FORECAST PERIOD

### 4.10 AUTOMOTIVE LIDAR MARKET, BY LEVEL OF AUTONOMY

FIGURE 28 SEMI-AUTONOMOUS SEGMENT TO HOLD LARGER SHARE IN 2022

### 4.11 AUTOMOTIVE LIDAR MARKET, BY MAXIMUM RANGE

FIGURE 29 LONG-RANGE TO HOLD LARGEST SHARE DURING FORECAST PERIOD

## 5 MARKET OVERVIEW

### 5.1 INTRODUCTION

### 5.2 MARKET DYNAMICS

FIGURE 30 AUTOMOTIVE LIDAR MARKET DYNAMICS

#### 5.2.1 DRIVERS

5.2.1.1 Technological superiority of LiDAR

TABLE 10 TECHNOLOGICAL SUPERIORITY OF LIDAR IN AUTOMOTIVE APPLICATIONS

FIGURE 31 DESIGN WINS FOR LIDAR COMPANIES

5.2.1.2 Rising trend of semi-autonomous vehicles

TABLE 11 KEY VEHICLES WITH LEVEL 2 AUTONOMY (2020–2022)

5.2.1.3 Increased demand for premium vehicles

FIGURE 32 HNWIS AND UHNWIS, BY GEOGRAPHY

FIGURE 33 LUXURY CAR MARKET GROWTH

TABLE 12 TOP 25 COUNTRIES WITH HIGHEST LUXURY CAR DENSITY

TABLE 13 LUXURY CAR SALES WORLDWIDE (THOUSAND UNITS) BY GERMAN BRANDS IN 2020, 2019, AND 2018

TABLE 14 TOP 20 LUXURY CARS IN INDIA

5.2.1.4 Growing demand for safety and driving comfort features

FIGURE 34 ADVANCED ELECTRONICS FOR MORE SAFETY

5.2.1.5 Increasing vehicle safety regulations and growing adoption of ADAS

FIGURE 35 ROAD TRAFFIC INJURIES FACT



FIGURE 36 GLOBAL ROAD TRAFFIC DEATH RATES PER 100,000 POPULATION, 2019

FIGURE 37 AUTONOMOUS AND ADAS FACTS

TABLE 15 GLOBAL REGULATIONS FOR DRIVER ASSISTANCE SYSTEMS

#### 5.2.2 RESTRAINTS

5.2.2.1 High cost of LiDAR

5.2.2.2 Lack of required infrastructure in emerging economies

5.2.2.3 Consumer acceptance of self-driving cars

5.2.2.4 Availability of alternatives

#### 5.2.3 OPPORTUNITIES

5.2.3.1 Rising demand for electric vehicles

TABLE 16 ELECTRIC VEHICLE MODELS WITH LIDAR TECHNOLOGY

TABLE 17 BATTERY ELECTRIC VEHICLE SALES, BY COUNTRY, 2018–2021  
(THOUSAND UNITS)

TABLE 18 PLUG-IN HYBRID ELECTRIC VEHICLE SALES, BY COUNTRY, 2018–2021  
(THOUSAND UNITS)

FIGURE 38 GLOBAL PHEV CAR STOCK, 2017–2020, BY REGION

5.2.3.2 Developments in autonomous vehicles

FIGURE 39 US L3 AND L4 AUTONOMOUS CAR MARKET, 2018 VS. 2022 VS. 2025  
(THOUSAND UNITS)

FIGURE 40 LEVELS OF AUTONOMOUS DRIVING

TABLE 19 AUTONOMOUS DRIVING ATTEMPTS MADE BY AUTOMAKERS

5.2.3.3 Sensor fusion technology for autonomous driving systems

FIGURE 41 SENSOR FUSION

FIGURE 42 SENSOR FUNCTION RATINGS

TABLE 20 LATEST MODELS (LEVEL 2 AND LEVEL 3) WITH INTEGRATED SENSOR  
SYSTEMS

#### 5.2.4 CHALLENGES

5.2.4.1 Environmental constraints

5.2.4.2 Technology integration

FIGURE 43 LIDAR INTEGRATION IN VEHICLES

#### 5.2.5 IMPACT OF MARKET DYNAMICS

TABLE 21 AUTOMOTIVE LIDAR MARKET: IMPACT OF MARKET DYNAMICS

### 5.3 TRENDS AND DISRUPTIONS IMPACTING MARKET

FIGURE 44 REVENUE SHIFT DRIVING AUTOMOTIVE LIDAR MARKET

### 5.4 PORTER'S FIVE FORCES ANALYSIS

FIGURE 45 PORTER'S FIVE FORCES: AUTOMOTIVE LIDAR MARKET

TABLE 22 AUTOMOTIVE LIDAR MARKET: IMPACT OF PORTER'S FIVE FORCES

#### 5.4.1 THREAT OF SUBSTITUTES

#### 5.4.2 THREAT OF NEW ENTRANTS

#### 5.4.3 BARGAINING POWER OF BUYERS

#### 5.4.4 BARGAINING POWER OF SUPPLIERS

#### 5.4.5 INTENSITY OF COMPETITIVE RIVALRY

### 5.5 AVERAGE SELLING PRICE TREND

FIGURE 46 PRICING TREND ANALYSIS: AVERAGE PRICE OF AUTOMOTIVE LIDAR SENSOR, BY REGION

### 5.6 AUTOMOTIVE LIDAR MARKET ECOSYSTEM

FIGURE 47 AUTOMOTIVE LIDAR MARKET: ECOSYSTEM ANALYSIS

TABLE 23 AUTOMOTIVE LIDAR MARKET: ROLE OF COMPANIES IN ECOSYSTEM

### 5.7 SUPPLY CHAIN ANALYSIS

FIGURE 48 SUPPLY CHAIN ANALYSIS OF AUTOMOTIVE LIDAR MARKET FOR AUTOMOTIVE

### 5.8 MACROECONOMIC INDICATORS

#### 5.8.1 GDP TRENDS AND FORECASTS FOR MAJOR ECONOMIES

TABLE 24 GDP TRENDS AND FORECASTS, BY MAJOR ECONOMIES, 2018–2026 (USD BILLION)

#### 5.8.2 WORLD MOTOR VEHICLE PRODUCTION STATISTICS IN 2021

TABLE 25 WORLD MOTOR VEHICLE PRODUCTION STATISTICS IN 2021 (THOUSAND UNITS)

### 5.9 PATENT ANALYSIS

#### 5.9.1 INTRODUCTION

FIGURE 49 PUBLICATION TRENDS (2012–2021)

#### 5.9.2 LEGAL STATUS OF PATENTS (2012–2021)

FIGURE 50 LEGAL STATUS OF PATENTS FILED FOR AUTOMOTIVE LIDAR (2012–2021)

#### 5.9.3 TOP PATENT APPLICANTS (2012–2021)

FIGURE 51 AUTOMOTIVE LIDAR PATENTS, BY APPLICANT

TABLE 26 IMPORTANT PATENT REGISTRATIONS RELATED TO AUTOMOTIVE LIDAR

### 5.10 CASE STUDIES

#### 5.10.1 AEYE LIDAR OUTPERFORMS IN RAIN, BEHIND WINDSHIELD

#### 5.10.2 AUTONOMOUSTUFF DRIVING AUTONOMOUS VEHICLES

5.10.3 MERCEDES-BENZ S-CLASS TO BE EQUIPPED NEW VALEO'S SECOND-GENERATION LIDAR

5.10.4 TRANSIT BUS COLLISION AVOIDANCE SYSTEM TO PROTECT VULNERABLE ROAD USERS WITH FLASH LIDAR

### 5.11 VALUE CHAIN ANALYSIS

FIGURE 52 AUTOMOTIVE LIDAR ECOSYSTEM: MAJOR VALUE ADDITION BY



## AUTOMOTIVE LIDAR MANUFACTURERS AND THEIR INTEGRATORS AND DISTRIBUTORS

### 5.12 TRADE ANALYSIS

TABLE 27 IMPORT DATA OF UNITS FOR LASERS (EXCLUDING LASER DIODES) BY COUNTRY, 2016–2020 (USD MILLION)

FIGURE 53 IMPORT DATA FOR HS CODE 901320 FOR TOP FIVE COUNTRIES IN LIDAR MARKET, 2016–2020 (USD MILLION)

TABLE 28 EXPORT DATA OF DATA OF UNITS FOR LASERS (EXCLUDING LASER DIODES), BY COUNTRY, 2016–2020 (USD MILLION)

FIGURE 54 EXPORT DATA FOR HS CODE 901320 FOR TOP FIVE COUNTRIES IN AUTOMOTIVE LIDAR MARKET, 2016–2020 (USD MILLION)

### 5.13 REGULATORY OVERVIEW

#### 5.13.1 LIDAR SAFETY REGULATIONS AND STANDARDS

FIGURE 55 LIDAR WAVELENGTHS FOR AUTONOMOUS VEHICLES AND DRIVER ASSISTANCE

5.13.2 LIST OF KEY REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 29 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 30 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 31 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

### 5.14 KEY CONFERENCES AND EVENTS IN 2022 AND 2023

TABLE 32 AUTOMOTIVE LIDAR MARKET: DETAILED LIST OF CONFERENCES AND EVENTS

## 6 INDUSTRY TRENDS

### 6.1 TECHNOLOGY ANALYSIS

#### 6.1.1 INTRODUCTION

#### 6.1.2 TECHNOLOGICAL EVOLUTION OF LIDAR IN AUTOMOTIVE INDUSTRY

#### 6.1.3 ROLE OF LIDAR TECHNOLOGIES IN AUTOMOTIVE INDUSTRY

FIGURE 56 LIDAR APPLICATIONS IN AUTOMOTIVE INDUSTRY

##### 6.1.3.1 Mechanical Laser LiDAR

##### 6.1.3.2 Solid-state LiDAR

##### 6.1.3.3 Emergence of 4D LiDAR

### 6.2 DEMOCRATIZATION OF SELF-DRIVING CARS

#### 6.2.1 TIER 1 AND OEM ADAS PACKAGE PRICING

FIGURE 57 TOYOTA SAFETY SENSE 2.0

FIGURE 58 TOYOTA SAFETY SENSE C AND SAFETY SENSE P

6.2.1.1 Mercedes

TABLE 33 ADAS PACKAGE PRICE: MERCEDES

TABLE 34 ADDITIONAL ADAS PACKAGE PRICE: MERCEDES

6.2.1.2 Audi

TABLE 35 ADAS PACKAGE PRICE: AUDI

6.2.1.3 Cadillac

TABLE 36 ADAS PACKAGE PRICE: CADILLAC

6.3 AUTONOMOUS CARS DEVELOPMENT AND DEPLOYMENT

6.3.1 DAIMLER AG

6.3.2 TUSIMPLE

FIGURE 59 TUSIMPLE: LEVEL 4 AUTONOMOUS TRUCK BOOKING PORTAL

6.3.3 ARGO AI AND FORD

6.3.4 BAIDU

6.3.5 DIDI CHUXING

6.3.6 TOYOTA, PONY.AI, AND HYUNDAI

6.3.7 WAYMO

6.3.8 VOYAGE

6.3.9 GENERAL MOTORS AND CRUISE

6.3.10 VOLVO

6.3.11 EINRIDE

6.4 MODEL-WISE ADAS OFFERINGS

6.4.1 TESLA

6.4.2 TOYOTA

6.4.2.1 Corolla

6.4.2.2 Camry

6.4.2.3 Avalon

6.4.2.4 RAV4

6.4.2.5 Tundra

6.4.3 NISSAN

6.4.3.1 Versa

6.4.3.2 Altima

TABLE 37 ADAS PACKAGE: NISSAN ALTIMA

6.4.3.3 Nissan Leaf

TABLE 38 ADAS PACKAGE: NISSAN LEAF

6.4.3.4 Nissan TITAN

TABLE 39 ADAS PACKAGE: NISSAN TITAN

6.4.4 HONDA

#### 6.4.4.1 Civic

TABLE 40 ADAS PACKAGE: HONDA CIVIC

#### 6.4.4.2 Accord

TABLE 41 ADAS PACKAGE: HONDA ACCORD

### 6.4.5 MERCEDES

#### 6.4.5.1 A-Class Sedan

TABLE 42 ADAS PACKAGE: MERCEDES A-CLASS

TABLE 43 EXTERIOR LIGHTING PACKAGE: MERCEDES A-CLASS

#### 6.4.5.2 C-Class Sedan

TABLE 44 ADAS PACKAGE: MERCEDES C-CLASS

TABLE 45 PARKING ASSISTANCE PACKAGE: MERCEDES C-CLASS

TABLE 46 EXTERIOR LIGHTING PACKAGE: MERCEDES C-CLASS

#### 6.4.5.3 E-Class Sedan

TABLE 47 ADAS PACKAGE: MERCEDES E-CLASS

TABLE 48 PARKING ASSISTANCE PACKAGE: MERCEDES E-CLASS

TABLE 49 EXTERIOR LIGHTING PACKAGE: MERCEDES E-CLASS

#### 6.4.5.4 GLB SUV

TABLE 50 ADAS PACKAGE: MERCEDES GLB SUV

TABLE 51 EXTERIOR LIGHTING PACKAGE: MERCEDES GLB SUV

### 6.4.6 AUDI

#### 6.4.6.1 A3 Sedan

TABLE 52 ADAS PACKAGE: AUDI A3 SEDAN

TABLE 53 SIDE AND REAR CROSS TRAFFIC ASSIST PACKAGE: AUDI A3 SEDAN

#### 6.4.6.2 Q3

TABLE 54 ADAS PACKAGE: AUDI Q3

TABLE 55 CONVENIENCE PACKAGE: AUDI Q3

### 6.4.7 LEXUS

#### 6.4.7.1 Lexus ES

#### 6.4.7.2 Lexus LS

TABLE 56 ADAS PACKAGE: LEXUS LS

TABLE 57 ADDITIONAL ADAS PACKAGE: LEXUS LS

#### 6.4.7.3 Lexus NX

TABLE 58 ADAS PACKAGE: LEXUS NX

TABLE 59 COMFORT PACKAGE: LEXUS NX

### 6.4.8 CADILLAC

#### 6.4.8.1 Cadillac CT6

TABLE 60 ADAS PACKAGE: CADILLAC CT6

#### 6.4.8.2 Cadillac XT4

TABLE 61 ADAS PACKAGE: CADILLAC XT4

TABLE 62 DRIVER AWARENESS PACKAGE: CADILLAC XT4

TABLE 63 DRIVER ASSIST PACKAGE: CADILLAC XT4

6.5 AUTOMOTIVE LIDAR MARKET SCENARIOS (2022–2030)

FIGURE 60 AUTOMOTIVE LIDAR MARKET – FUTURE TRENDS AND SCENARIOS,  
2022–2030 (USD MILLION)

6.5.1 MOST LIKELY SCENARIO

TABLE 64 MOST LIKELY SCENARIO, BY REGION, 2022–2030 (USD MILLION)

6.5.2 OPTIMISTIC SCENARIO

TABLE 65 OPTIMISTIC SCENARIO, BY REGION, 2022–2030 (USD MILLION)

6.5.3 PESSIMISTIC SCENARIO

TABLE 66 PESSIMISTIC SCENARIO, BY REGION, 2022–2030 (USD MILLION)

## **7 AUTOMOTIVE LIDAR MARKET, BY TECHNOLOGY**

7.1 INTRODUCTION

FIGURE 61 SOLID-STATE LIDAR SEGMENT TO HOLD LARGER MARKET SHARE  
BY 2030 (USD MILLION)

TABLE 67 AUTOMOTIVE LIDAR MARKET, BY TECHNOLOGY, 2021–2030  
(THOUSAND UNITS)

TABLE 68 AUTOMOTIVE LIDAR MARKET, BY TECHNOLOGY, 2021–2030 (USD  
MILLION)

7.1.1 OPERATIONAL DATA

TABLE 69 MECHANICAL AND SOLID-STATE LIDAR OFFERINGS BY KEY PLAYERS

7.1.2 ASSUMPTIONS

TABLE 70 ASSUMPTIONS: TECHNOLOGY

7.1.3 RESEARCH METHODOLOGY

7.2 MECHANICAL LIDAR

7.2.1 INCREASING FOCUS TOWARD 360-DEGREE FULL VIEW TO DRIVE  
MARKET GROWTH

TABLE 71 MECHANICAL LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND  
UNITS)

TABLE 72 MECHANICAL LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

7.3 SOLID-STATE LIDAR

7.3.1 EXPECTED TO GAIN TRACTION DUE TO COMPACT SIZE AND LOW COST  
TABLE 73 SOLID-STATE LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND  
UNITS)

TABLE 74 SOLID-STATE LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

7.3.2 MICROELECTROMECHANICAL SYSTEMS (MEMS) LIDAR

TABLE 75 APPLICATIONS OF MEMS

### 7.3.3 FLASH LIDAR

### 7.3.4 OPTICAL PHASE ARRAY (OPA)

### 7.3.5 OTHERS

## 7.4 KEY PRIMARY INSIGHTS

## 8 AUTOMOTIVE LIDAR MARKET, BY IMAGE TYPE

### 8.1 INTRODUCTION

FIGURE 62 3D SEGMENT TO HOLD LARGER MARKET SHARE BY VALUE (USD MILLION)

TABLE 76 AUTOMOTIVE LIDAR MARKET, BY IMAGE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 77 AUTOMOTIVE LIDAR MARKET, BY IMAGE TYPE, 2021–2030 (USD MILLION)

#### 8.1.1 ASSUMPTIONS

TABLE 78 ASSUMPTIONS: IMAGE TYPE

#### 8.1.2 RESEARCH METHODOLOGY

### 8.2 2D

#### 8.2.1 INCREASED FOCUS ON 3D LIDAR SENSORS TO IMPACT GROWTH

TABLE 79 2D LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 80 2D LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

### 8.3 3D

#### 8.3.1 REAL-TIME DATA ACQUISITION TO DRIVE GROWTH

TABLE 81 3D LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 82 3D LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

## 8.4 KEY PRIMARY INSIGHTS

## 9 AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE

### 9.1 INTRODUCTION

TABLE 83 POPULAR SELF-DRIVING VEHICLES FROM COMPANIES WORLDWIDE

FIGURE 63 PASSENGER CARS SEGMENT TO HOLD LARGER MARKET SHARE (USD MILLION)

TABLE 84 AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 85 AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (USD MILLION)

#### 9.1.1 ASSUMPTIONS

TABLE 86 ASSUMPTIONS: ICE VEHICLE TYPE

### 9.1.2 RESEARCH METHODOLOGY

## 9.2 PASSENGER CARS

### 9.2.1 INCREASED INVESTMENT IN AUTONOMOUS DRIVING TECHNOLOGY TO AID GROWTH

TABLE 87 PASSENGER CARS LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 88 PASSENGER CARS LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

TABLE 89 SELF-DRIVING CARS NEW LAUNCHES FOR LEVEL 2 AUTONOMY, 2021–2022

## 9.3 COMMERCIAL VEHICLES

### 9.3.1 ADVANCEMENT IN AUTONOMOUS TRUCKS TO SUPPORT SEGMENT GROWTH

TABLE 90 COMMERCIAL VEHICLES LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 91 COMMERCIAL VEHICLES LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

## 9.4 KEY PRIMARY INSIGHTS

# 10 AUTOMOTIVE LIDAR MARKET, BY LOCATION

## 10.1 INTRODUCTION

FIGURE 64 PLACEMENT OF LIDAR SENSORS

FIGURE 65 BUMPERS AND GRILLS TO HOLD LARGEST MARKET SHARE DURING FORECAST PERIOD

TABLE 92 AUTOMOTIVE LIDAR MARKET, BY LOCATION, 2021–2030 (THOUSAND UNITS)

TABLE 93 AUTOMOTIVE LIDAR MARKET, BY LOCATION, 2021–2030 (USD MILLION)

### 10.1.1 ASSUMPTIONS

TABLE 94 ASSUMPTIONS: LOCATION

### 10.1.2 RESEARCH METHODOLOGY

## 10.2 BUMPERS AND GRILLS

### 10.2.1 INCREASING DEMAND FOR SHORT-RANGE LIDAR

FIGURE 66 PLACEMENT OF SENSORS IN AUDI A8

TABLE 95 BUMPERS AND GRILLS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 96 BUMPERS AND GRILLS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)



### 10.3 HEADLIGHTS AND TAILLIGHTS

#### 10.3.1 IMPROVED FUNCTIONALITY IN AUTONOMOUS VEHICLES

TABLE 97 HEADLIGHTS AND TAILLIGHTS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 98 HEADLIGHTS AND TAILLIGHTS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

### 10.4 ROOFS AND UPPER PILLARS

#### 10.4.1 FOCUS ON LONG-RANGE DETECTION TECHNOLOGY

TABLE 99 ROOFS AND UPPER PILLARS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 100 ROOFS AND UPPER PILLARS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

### 10.5 OTHER LOCATIONS

#### 10.5.1 INCREASING TESTS AND TRIALS

TABLE 101 OTHER LOCATIONS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 102 OTHER LOCATIONS: AUTOMOTIVE LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

### 10.6 KEY PRIMARY INSIGHTS

## 11 AUTOMOTIVE LIDAR MARKET, BY ELECTRIC VEHICLE TYPE

### 11.1 INTRODUCTION

FIGURE 67 BEV SEGMENT TO HOLD LARGEST MARKET SHARE (USD MILLION)

TABLE 103 AUTOMOTIVE LIDAR MARKET, BY ELECTRIC VEHICLE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 104 AUTOMOTIVE LIDAR MARKET, BY ELECTRIC VEHICLE TYPE, 2021–2030 (USD MILLION)

TABLE 105 L2: SELF-DRIVING CARS NEW LAUNCH, 2021–2022

#### 11.1.1 ASSUMPTIONS

TABLE 106 ASSUMPTIONS: ELECTRIC VEHICLE TYPE

#### 11.1.2 RESEARCH METHODOLOGY

### 11.2 BEV

#### 11.2.1 GOVERNMENT INITIATIVES TO BE MAJOR DRIVER

TABLE 107 LAUNCHED LEVEL 2 BEV CARS, 2020

TABLE 108 BEV LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 109 BEV LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

### 11.3 FCEV

#### 11.3.1 PLAYS KEY ROLE IN MOVING TOWARD ZERO EMISSIONS

TABLE 110 LAUNCHED LEVEL 2 FCEV CARS IN 2020

TABLE 111 FCEV LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 112 FCEV LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

11.4 HEV

11.4.1 EMERGING TECHNOLOGY AND INCREASED EFFICIENCY TO DRIVE USE

TABLE 113 LAUNCH OF LEVEL 1 AND ABOVE HEV, 2020–2022

TABLE 114 HEV LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 115 HEV LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

11.5 PHEV

11.5.1 GREATER RANGE TO DRIVE DEVELOPMENT

TABLE 116 LAUNCH OF LEVEL 2 PHEVS, 2020–2022

TABLE 117 PHEV LIDAR MARKET, BY REGION, 2021–2030 (THOUSAND UNITS)

TABLE 118 PHEV LIDAR MARKET, BY REGION, 2021–2030 (USD MILLION)

11.6 KEY PRIMARY INSIGHTS

## **12 AUTOMOTIVE LIDAR MARKET, BY MAXIMUM RANGE**

12.1 INTRODUCTION

TABLE 119 AUTOMOTIVE LIDAR MARKET: TECHNICAL SPECIFICATION FOR ADAS APPLICATIONS

FIGURE 68 LONG-RANGE (ABOVE 170 M) SEGMENT TO HOLD LARGER MARKET SHARE, BY VALUE, BY 2030 (USD MILLION)

TABLE 120 AUTOMOTIVE LIDAR MARKET, BY MAXIMUM RANGE, 2021–2030 (THOUSAND UNITS)

TABLE 121 AUTOMOTIVE LIDAR MARKET, BY MAXIMUM RANGE, 2021–2030 (USD MILLION)

12.1.1 OPERATIONAL DATA

TABLE 122 LONG-RANGE AND SHORT AND MID-RANGE AUTOMOTIVE LIDAR OFFERINGS BY KEY PLAYERS

12.1.2 ASSUMPTIONS

TABLE 123 ASSUMPTIONS: MAXIMUM RANGE

12.1.3 RESEARCH METHODOLOGY

12.2 SHORT AND MID-RANGE (170 M AND BELOW)

12.2.1 WIDE ACCEPTANCE OF SHORT-RANGE DETECTION TECHNOLOGY

12.3 LONG-RANGE (ABOVE 170 M)

12.3.1 INCREASING FOCUS TOWARD L4 & L5 AUTONOMY

12.4 KEY PRIMARY INSIGHTS

## **13 AUTOMOTIVE LIDAR MARKET, BY LASER WAVELENGTH**

### 13.1 INTRODUCTION

FIGURE 69 NEAR INFRARED SEGMENT TO HOLD LARGER MARKET SHARE, BY VALUE, BY 2030

TABLE 124 AUTOMOTIVE LIDAR MARKET, BY LASER WAVELENGTH, 2021–2030 (USD MILLION)

#### 13.1.1 OPERATIONAL DATA

TABLE 125 NEAR INFRARED AND SHORT-WAVE INFRARED OFFERINGS BY KEY PLAYERS

#### 13.1.2 ASSUMPTIONS

TABLE 126 ASSUMPTIONS: LASER WAVELENGTH

#### 13.1.3 RESEARCH METHODOLOGY

### 13.2 NEAR INFRARED (NIR)

#### 13.2.1 ENHANCED PROXIMITY-SENSING FEATURES

FIGURE 70 NIR VS. SWIR

### 13.3 SHORT-WAVE INFRARED (SWIR)

#### 13.3.1 SUPERIOR IMAGING FEATURES

FIGURE 71 ELECTROMAGNETIC SPECTRUM: SWIR WAVELENGTH RANGE

### 13.4 LONG-WAVE INFRARED (LWIR)

#### 13.4.1 UNTAPPED POTENTIAL FOR GROWTH

### 13.5 KEY PRIMARY INSIGHTS

## 14 AUTOMOTIVE LIDAR MARKET, BY MEASUREMENT PROCESS

### 14.1 INTRODUCTION

FIGURE 72 LIDAR SYSTEM WORKING PRINCIPLE

FIGURE 73 TIME OF FLIGHT (TOF) SEGMENT TO HOLD LARGER MARKET SHARE BY 2030 (USD MILLION)

TABLE 127 AUTOMOTIVE LIDAR MARKET, BY MEASUREMENT PROCESS, 2021–2030 (THOUSAND UNITS)

TABLE 128 AUTOMOTIVE LIDAR MARKET, BY MEASUREMENT PROCESS, 2021–2030 (USD MILLION)

#### 14.1.1 OPERATIONAL DATA

TABLE 129 TOF AND FMCW OFFERINGS BY KEY PLAYERS

#### 14.1.2 ASSUMPTIONS

TABLE 130 ASSUMPTIONS: MEASUREMENT PROCESS

#### 14.1.3 RESEARCH METHODOLOGY

### 14.2 TIME OF FLIGHT (TOF)

#### 14.2.1 WIDE ACCEPTANCE OF TOF TECHNOLOGY

**FIGURE 74 TOF PRINCIPLE****14.3 FMCW****14.3.1 EXPECTED TO GAIN TRACTION DUE TO ADVANTAGES OVER  
CONVENTIONAL LIDAR****FIGURE 75 FMCW PRINCIPLE****14.4 KEY PRIMARY INSIGHTS****15 AUTOMOTIVE LIDAR MARKET, BY LEVEL OF AUTONOMY****15.1 INTRODUCTION****TABLE 131 ONGOING DEMONSTRATION AND TESTING OF CONNECTED  
AUTONOMOUS VEHICLES BY KEY COMPANIES****TABLE 132 ECONOMIC IMPACT OF CONNECTED AND AUTONOMOUS VEHICLES  
AND THEIR BREAKDOWN****FIGURE 76 SEMI-AUTONOMOUS SEGMENT HELD LARGER MARKET SHARE IN  
2022 (USD MILLION)****TABLE 133 AUTOMOTIVE LIDAR MARKET, BY LEVEL OF AUTONOMY, 2021–2030  
(THOUSAND UNITS)****TABLE 134 AUTOMOTIVE LIDAR MARKET, BY LEVEL OF AUTONOMY, 2021–2030  
(USD MILLION)****15.1.1 OPERATIONAL DATA****TABLE 135 L2 & L3 LAUNCHES, 2021–2022****15.1.2 ASSUMPTIONS****TABLE 136 ASSUMPTIONS: LEVEL OF AUTONOMY****15.1.3 RESEARCH METHODOLOGY****15.2 SEMI-AUTONOMOUS****15.2.1 PREVALENCE OF LEVEL 3 SELF-DRIVING CAR MODELS****TABLE 137 UPCOMING L2 LAUNCHES, 2022 AND 2023****15.3 AUTONOMOUS****15.3.1 INCREASING DEMAND FOR AUTONOMOUS VEHICLES****TABLE 138 POPULAR SELF-DRIVING VEHICLES FROM COMPANIES WORLDWIDE****15.4 KEY PRIMARY INSIGHTS****16 AUTOMOTIVE LIDAR MARKET, BY REGION****16.1 INTRODUCTION****FIGURE 77 OEMS ADOPTING LIDAR TECHNOLOGY****FIGURE 78 AUTOMOTIVE LIDAR MARKET, BY REGION, 2022 VS. 2030****TABLE 139 AUTOMOTIVE LIDAR MARKET (ICE AND EV), BY REGION, 2021–2030**

(THOUSAND UNITS)

TABLE 140 AUTOMOTIVE LIDAR MARKET (ICE AND EV), BY REGION, 2021–2030  
(USD MILLION)

TABLE 141 AUTOMOTIVE LIDAR MARKET (EV), BY REGION, 2021–2030  
(THOUSAND UNITS)

TABLE 142 AUTOMOTIVE LIDAR MARKET (EV), BY REGION, 2021–2030 (USD  
MILLION)

TABLE 143 AUTOMOTIVE LIDAR MARKET (ICE), BY REGION, 2021–2030  
(THOUSAND UNITS)

TABLE 144 AUTOMOTIVE LIDAR MARKET (ICE), BY REGION, 2021–2030 (USD  
MILLION)

## 16.2 ASIA PACIFIC

FIGURE 79 ASIA PACIFIC: AUTOMOTIVE LIDAR MARKET SNAPSHOT

TABLE 145 ASIA PACIFIC: AUTOMOTIVE LIDAR MARKET, BY COUNTRY,  
2021–2030 (THOUSAND UNITS)

TABLE 146 ASIA PACIFIC: AUTOMOTIVE LIDAR MARKET, BY COUNTRY,  
2021–2030 (USD MILLION)

### 16.2.1 CHINA

16.2.1.1 Strong government support for electric mobility

TABLE 147 KEY COMPANIES IN AUTONOMOUS VEHICLE TECHNOLOGY AND  
THEIR KNOWN PARTNERS IN CHINA

TABLE 148 L2 NEW LAUNCHES IN CHINA, 2021–2022

TABLE 149 CHINA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (THOUSAND UNITS)

TABLE 150 CHINA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (MILLION USD)

### 16.2.2 JAPAN

16.2.2.1 Standardization of ADAS features by Japanese OEMs

TABLE 151 L2 NEW LAUNCHES IN JAPAN, 2021–2022

TABLE 152 JAPAN: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (THOUSAND UNITS)

TABLE 153 JAPAN: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (MILLION USD)

### 16.2.3 SOUTH KOREA

16.2.3.1 Increasing adoption of L2 autonomous vehicles

TABLE 154 L2 NEW LAUNCHES IN SOUTH KOREA, 2020–2022

TABLE 155 SOUTH KOREA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE  
TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 156 SOUTH KOREA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE

TYPE, 2021–2030 (MILLION USD)

#### 16.2.4 INDIA

16.2.4.1 Increasing presence of global OEMs

TABLE 157 INDIA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 158 INDIA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (MILLION USD)

#### 16.3 EUROPE

FIGURE 80 EUROPE: AUTOMOTIVE LIDAR MARKET, 2022 VS. 2030 (USD MILLION)

TABLE 159 EUROPE: AUTOMOTIVE LIDAR MARKET, BY COUNTRY, 2021–2030 (THOUSAND UNITS)

TABLE 160 EUROPE: AUTOMOTIVE LIDAR MARKET, BY COUNTRY, 2021–2030 (USD MILLION)

##### 16.3.1 GERMANY

16.3.1.1 Innovation and developments in autonomous technology

TABLE 161 LAUNCH/UNDERDEVELOPMENT OF SEMI-AUTONOMOUS CARS, 2021–2022

TABLE 162 GERMANY: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 163 GERMANY: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (USD MILLION)

##### 16.3.2 ITALY

16.3.2.1 Consumer demand for driver assistance features

TABLE 164 ITALY: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 165 ITALY: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (USD MILLION)

##### 16.3.3 FRANCE

16.3.3.1 Investments toward autonomous mobility

TABLE 166 LAUNCH/UNDERDEVELOPMENT OF SEMI-AUTONOMOUS CARS, 2021–2023

TABLE 167 FRANCE: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (THOUSAND UNITS)

TABLE 168 FRANCE: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030 (USD MILLION)

##### 16.3.4 UK

16.3.4.1 Government initiatives for connected and autonomous vehicles

TABLE 169 UK: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030



(THOUSAND UNITS)

TABLE 170 UK: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030  
(USD MILLION)

#### 16.3.5 SPAIN

16.3.5.1 Growing traffic and safety concerns

TABLE 171 SPAIN: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (THOUSAND UNITS)

TABLE 172 SPAIN: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (USD MILLION)

#### 16.4 NORTH AMERICA

FIGURE 81 NORTH AMERICA: AUTOMOTIVE LIDAR MARKET SNAPSHOT

TABLE 173 NORTH AMERICA: AUTOMOTIVE LIDAR MARKET, BY COUNTRY,  
2021–2030 (THOUSAND UNITS)

TABLE 174 NORTH AMERICA: AUTOMOTIVE LIDAR MARKET, BY COUNTRY,  
2021–2030 (USD MILLION)

#### 16.4.1 US

16.4.1.1 Developments in autonomous driving

TABLE 175 NORTH AMERICA: AUTONOMOUS VEHICLE EFFORTS

TABLE 176 LAUNCH OF SEMI-AUTONOMOUS CARS, 2021–2023

TABLE 177 US: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030  
(THOUSAND UNITS)

TABLE 178 US: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE, 2021–2030  
(USD MILLION)

#### 16.4.2 CANADA

16.4.2.1 Focus on convenient driving experience

TABLE 179 CANADA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (THOUSAND UNITS)

TABLE 180 CANADA: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (USD MILLION)

#### 16.4.3 MEXICO

16.4.3.1 Increased demand for self-driving cars

TABLE 181 MEXICO: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (THOUSAND UNITS)

TABLE 182 MEXICO: AUTOMOTIVE LIDAR MARKET, BY ICE VEHICLE TYPE,  
2021–2030 (USD MILLION)

## 17 COMPETITIVE LANDSCAPE

### 17.1 OVERVIEW

## 17.2 MARKET RANKING ANALYSIS

FIGURE 82 AUTOMOTIVE LIDAR MARKET: MARKET RANKING 2021

## 17.3 COMPETITIVE SCENARIO

17.3.1 PRODUCT LAUNCHES, 2021–2022

17.3.2 DEALS

TABLE 183 DEALS, 2019–2022

17.3.3 EXPANSIONS

TABLE 184 EXPANSIONS, 2018–2022

## 17.4 COMPETITIVE LEADERSHIP MAPPING

17.4.1 STARS

17.4.2 EMERGING LEADERS

17.4.3 PERVASIVE PLAYERS

17.4.4 PARTICIPANTS

FIGURE 83 AUTOMOTIVE LIDAR MARKET: COMPETITIVE LEADERSHIP MAPPING, 2021

TABLE 185 AUTOMOTIVE LIDAR MARKET: COMPANY FOOTPRINT, 2021

TABLE 186 AUTOMOTIVE LIDAR MARKET: TECHNOLOGY FOOTPRINT, 2021

TABLE 187 AUTOMOTIVE LIDAR MARKET: REGIONAL FOOTPRINT, 2021

## 17.5 SME EVALUATION QUADRANT FOR AUTOMOTIVE LIDAR MARKET

17.5.1 PROGRESSIVE COMPANIES

17.5.2 RESPONSIVE COMPANIES

17.5.3 DYNAMIC COMPANIES

17.5.4 STARTING BLOCKS

FIGURE 84 AUTOMOTIVE LIDAR MARKET: SME EVALUATION QUADRANT, 2021

TABLE 188 AUTOMOTIVE LIDAR MARKET: DETAILED LIST OF KEY STARTUPS/SMES

TABLE 189 AUTOMOTIVE LIDAR MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES

## 18 COMPANY PROFILES

### 18.1 KEY PLAYERS

(Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments)\*

18.1.1 VALEO

TABLE 190 VALEO: BUSINESS OVERVIEW

FIGURE 85 VALEO: COMPANY SNAPSHOT

FIGURE 86 VALEO: ORIGINAL EQUIPMENT SALES BY CUSTOMER PORTFOLIO

(2021)

TABLE 191 VALEO: PRODUCTS OFFERED

TABLE 192 VALEO: KEY CUSTOMERS

TABLE 193 VALEO: MAJOR SUPPLY AGREEMENTS

TABLE 194 VALEO: BUSINESS GROUPS WITH MAJOR COMPETITORS

TABLE 195 VALEO: PERCENTAGE SPLIT OF TOTAL SALES, BY BUSINESS OFFERING

TABLE 196 VALEO: NEW PRODUCT DEVELOPMENTS

TABLE 197 VALEO: DEALS

TABLE 198 VALEO: OTHERS

#### 18.1.2 DENSO CORPORATION

TABLE 199 DENSO CORPORATION: BUSINESS OVERVIEW

FIGURE 87 DENSO CORPORATION: COMPANY SNAPSHOT

FIGURE 88 DENSO CORPORATION'S SHAREHOLDERS (2020)

TABLE 200 DENSO CORPORATION: KEY CUSTOMERS

TABLE 201 DENSO CORPORATION: SALES BREAKDOWN BY OEM, MARCH 2022

TABLE 202 DENSO CORPORATION: MAJOR SUPPLY AGREEMENTS

TABLE 203 DENSO CORPORATION: PRODUCTS OFFERED

TABLE 204 DENSO CORPORATION: NEW PRODUCT DEVELOPMENTS

TABLE 205 DENSO CORPORATION: DEALS

#### 18.1.3 INNOVIZ TECHNOLOGIES LTD.

TABLE 206 INNOVIZ TECHNOLOGIES LTD.: BUSINESS OVERVIEW

FIGURE 89 INNOVIZ TECHNOLOGIES LTD.: COMPANY SNAPSHOT

TABLE 207 INNOVIZ TECHNOLOGIES LTD.: PRODUCTS OFFERED

TABLE 208 INNOVIZ TECHNOLOGIES LTD.: NEW PRODUCT DEVELOPMENTS

TABLE 209 INNOVIZ TECHNOLOGIES LTD.: DEALS

TABLE 210 INNOVIZ TECHNOLOGIES LTD.: OTHERS

#### 18.1.4 VELODYNE LIDAR, INC.

TABLE 211 VELODYNE LIDAR, INC.: BUSINESS OVERVIEW

FIGURE 90 VELODYNE LIDAR, INC.: COMPANY SNAPSHOT

TABLE 212 VELODYNE LIDAR, INC.: PRODUCTS OFFERED

TABLE 213 VELODYNE LIDAR, INC.: KEY DISTRIBUTORS

TABLE 214 VELODYNE LIDAR, INC.: NEW PRODUCT DEVELOPMENTS

TABLE 215 VELODYNE LIDAR, INC.: DEALS

TABLE 216 VELODYNE LIDAR, INC.: OTHERS

#### 18.1.5 LUMINAR TECHNOLOGIES, INC.

TABLE 217 LUMINAR TECHNOLOGIES, INC.: BUSINESS OVERVIEW

FIGURE 91 LUMINAR TECHNOLOGIES, INC.: AUTONOMOUS VEHICLE LANDSCAPE

FIGURE 92 CURRENT AND TARGET PARTNER ECOSYSTEM OF LUMINAR TECHNOLOGIES, INC.

FIGURE 93 LUMINAR TECHNOLOGIES, INC.: MAINTAINING AND ACCELERATING COMPETITIVE ADVANTAGE

TABLE 218 LUMINAR TECHNOLOGIES, INC.: PRODUCTS OFFERED

TABLE 219 LUMINAR TECHNOLOGIES, INC.: KEY CUSTOMERS

TABLE 220 LUMINAR TECHNOLOGIES, INC.: MAJOR SUPPLY AGREEMENTS

TABLE 221 LUMINAR TECHNOLOGIES, INC.: DEALS

TABLE 222 LUMINAR TECHNOLOGIES, INC.: OTHERS

#### 18.1.6 CONTINENTAL AG

TABLE 223 CONTINENTAL AG: BUSINESS OVERVIEW

FIGURE 94 CONTINENTAL AG: COMPANY SNAPSHOT

FIGURE 95 CONTINENTAL AG: BUSINESS LOCATIONS AND EMPLOYEES (2021)

TABLE 224 CONTINENTAL AG: PRODUCTS OFFERED

TABLE 225 CONTINENTAL AG: KEY CUSTOMERS

TABLE 226 CONTINENTAL AG: MAJOR SUPPLY AGREEMENTS

TABLE 227 CONTINENTAL AG: NEW PRODUCT DEVELOPMENTS

TABLE 228 CONTINENTAL AG: DEALS

TABLE 229 CONTINENTAL AG: OTHERS

#### 18.1.7 OUSTER, INC.

TABLE 230 OUSTER, INC.: BUSINESS OVERVIEW

FIGURE 96 OUSTER, INC.: COMPANY SNAPSHOT

TABLE 231 OUSTER, INC.: PRODUCTS OFFERED

TABLE 232 OUSTER, INC.: NEW PRODUCT DEVELOPMENTS

TABLE 233 OUSTER, INC.: DEALS

TABLE 234 OUSTER, INC.: OTHERS

#### 18.1.8 ROBERT BOSCH GMBH

TABLE 235 ROBERT BOSCH GMBH: BUSINESS OVERVIEW

FIGURE 97 ROBERT BOSCH GMBH: COMPANY SNAPSHOT

TABLE 236 ROBERT BOSCH GMBH: PRODUCTS OFFERED

TABLE 237 ROBERT BOSCH GMBH: KEY CUSTOMERS

TABLE 238 ROBERT BOSCH GMBH: NUMBER OF EMPLOYEES BY BUSINESS SECTOR

TABLE 239 ROBERT BOSCH GMBH: MAJOR SUPPLY AGREEMENTS

TABLE 240 ROBERT BOSCH GMBH: NEW PRODUCT DEVELOPMENTS

TABLE 241 ROBERT BOSCH GMBH: DEALS

#### 18.1.9 TRIMBLE INC.

TABLE 242 TRIMBLE INC.: BUSINESS OVERVIEW

TABLE 243 TRIMBLE INC.: PRODUCTS OFFERED

**TABLE 244 TRIMBLE INC.: NEW PRODUCT DEVELOPMENTS****18.1.10 APTIV****TABLE 245 APTIV: BUSINESS OVERVIEW****FIGURE 98 APTIV: COMPANY SNAPSHOT****TABLE 246 APTIV: PRODUCTS OFFERED****TABLE 247 APTIV: KEY CUSTOMERS****TABLE 248 APTIV: PERCENTAGE OF NET SALES TO LARGEST CUSTOMERS OF APTIV****TABLE 249 APTIV: MANUFACTURING FACILITIES, BY REGION****TABLE 250 APTIV: MAJOR SUPPLY AGREEMENTS****TABLE 251 APTIV: NEW PRODUCT DEVELOPMENTS****TABLE 252 APTIV: DEALS****TABLE 253 APTIV: OTHERS****18.1.11 ZF FRIEDRICHSHAFEN AG****TABLE 254 ZF FRIEDRICHSHAFEN AG: BUSINESS OVERVIEW****FIGURE 99 ZF FRIEDRICHSHAFEN AG: COMPANY SNAPSHOT****FIGURE 100 ZF FRIEDRICHSHAFEN AG: OPERATING ACTIVITIES AND STRUCTURE****TABLE 255 ZF FRIEDRICHSHAFEN AG: PRODUCTS OFFERED****TABLE 256 ZF FRIEDRICHSHAFEN AG: KEY CUSTOMERS****TABLE 257 ZF FRIEDRICHSHAFEN AG: MAJOR SUPPLY AGREEMENTS****TABLE 258 ZF FRIEDRICHSHAFEN AG: EMPLOYEE STRENGTH, BY REGION****TABLE 259 ZF FRIEDRICHSHAFEN AG: DEALS****TABLE 260 ZF FRIEDRICHSHAFEN AG: OTHERS****18.1.12 INFINEON TECHNOLOGIES AG****TABLE 261 INFINEON TECHNOLOGIES AG: BUSINESS OVERVIEW****FIGURE 101 INFINEON TECHNOLOGIES AG: COMPANY SNAPSHOT****FIGURE 102 INFINEON TECHNOLOGIES AG: REVENUE MIX****TABLE 262 INFINEON TECHNOLOGIES AG: KEY CUSTOMERS****TABLE 263 INFINEON TECHNOLOGIES AG: PRODUCTS OFFERED****TABLE 264 INFINEON TECHNOLOGIES AG: NEW PRODUCT DEVELOPMENTS****TABLE 265 INFINEON TECHNOLOGIES AG: DEALS**

\*Business Overview, Products/Services/Solutions Offered, MnM View, Key Strengths and Right to Win, Strategic Choices Made, Weaknesses and Competitive Threats, Recent Developments might not be captured in case of unlisted companies.

**18.2 OTHER PLAYERS****18.2.1 QUANERGY SYSTEMS, INC.****TABLE 266 QUANERGY SYSTEMS, INC.: BUSINESS OVERVIEW****18.2.2 ROBOSENSE**

**TABLE 267 ROBOSENSE: BUSINESS OVERVIEW****18.2.3 MARELLI CORPORATION****TABLE 268 MARELLI CORPORATION: BUSINESS OVERVIEW****18.2.4 HUAWEI TECHNOLOGIES CO., LTD.****TABLE 269 HUAWEI TECHNOLOGIES CO., LTD.: BUSINESS OVERVIEW****18.2.5 PIONEER CORPORATION****TABLE 270 PIONEER CORPORATION: BUSINESS OVERVIEW****18.2.6 AEVA, INC.****TABLE 271 AEVA, INC.: BUSINESS OVERVIEW****18.2.7 ARGO AI, LLC****TABLE 272 ARGO AI, LLC: BUSINESS OVERVIEW****18.2.8 CEPTON, INC.****TABLE 273 CEPTON, INC.: BUSINESS OVERVIEW****18.2.9 BLICKFELD GMBH****TABLE 274 BLICKFELD GMBH: BUSINESS OVERVIEW****18.2.10 IBEO AUTOMOTIVE SYSTEMS GMBH****TABLE 275 IBEO AUTOMOTIVE SYSTEMS GMBH: BUSINESS OVERVIEW****18.2.11 INNOVUSION, INC.****TABLE 276 INNOVUSION, INC.: BUSINESS OVERVIEW****18.2.12 HESAI****TABLE 277 HESAI: BUSINESS OVERVIEW****18.2.13 LIVOX****TABLE 278 LIVOX: BUSINESS OVERVIEW****18.2.14 HEXAGON****TABLE 279 HEXAGON: BUSINESS OVERVIEW****19 RECOMMENDATIONS BY MARKET SAND MARKETS****19.1 ASIA PACIFIC TO BE SIGNIFICANT MARKET FOR AUTOMOTIVE LIDAR SENSORS****19.2 SENSOR FUSION EXPECTED TO BE KEY TECHNOLOGY IN MARKET****19.3 4D LIDAR TO EMERGE AS PROMISING SEGMENT IN FUTURE****19.4 CONCLUSION****20 APPENDIX****20.1 KEY INSIGHTS FROM INDUSTRY EXPERTS****20.2 DISCUSSION GUIDE****20.3 KNOWLEDGESTORE: MARKET SAND MARKETS' SUBSCRIPTION PORTAL**



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20.5 RELATED REPORTS

20.6 AUTHOR DETAILS

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