

Semi-Autonomous & Autonomous Bus Market by Level of Automation (Level 1, Level 2 & 3, Level 4, and Level 5), Propulsion (Diesel, Electric, and Hybrid), Application, ADAS Features, Sensor, and Region - Global Forecast to 2030

<https://marketpublishers.com/r/S13811742B85EN.html>

Date: May 2020

Pages: 195

Price: US\$ 4,950.00 (Single User License)

ID: S13811742B85EN

Abstracts

“The increasing need for passenger and pedestrian safety, efficient public transport, reduction in CO2 emission, and government regulations related to safety features to drive the global semi-autonomous and autonomous bus market.”

The global semi-autonomous bus market size is projected to reach 71,682 units by 2025, from an estimated 23,613 units in 2020, at a CAGR of 24.9%. On the other hand, the global autonomous bus market size is projected to reach USD 2,773 million by 2030, from USD 791 million in 2024, at a CAGR of 23.2%. The advent of autonomous technology will have a significant impact on commercial vehicles, including buses.

The entry of autonomous buses in the automotive industry will change the way public transport is done across the world. The autonomous bus technology enhances safety, efficiency, and productivity. Autonomous buses can help decrease the number of road accidents significantly, thus increasing road safety in different scenarios or conditions. These vehicles follow the traffic rules and keep a distance from other vehicles. In this way, these vehicles would help decrease traffic congestion and increase efficiency and productivity.

The effective first-mile to last-mile commuting would drive the autonomous shuttle segment in the forecast.”

The shuttle segment is expected to dominate the autonomous bus market, as these are

already commercialized. Many companies such as Navya, EasyMile, and Local Motors have developed self-driving shuttles. Successful pilot programs of autonomous shuttles across the world are indicating that shuttles could be a practical solution to the gaps in traditional public transport. For instance, EasyMile, a French autonomous shuttle provider, claims to have deployed the most number of such shuttles globally than any other company. Also, Navya, 2getthere, Local Motors, and Sensible4 are some of the companies that have developed, tested, and are offering autonomous shuttles. On the other hand, commercialization of intercity or intracity buses would take time due to challenges such as highway operation, long-distance, city traffic, lack of infrastructure (intracity coaches might require separate lane in the city and highway conditions), and government regulations.

“Asia Pacific is expected to be the fastest-growing market during the forecast period”

The Asia Pacific region comprises countries, such as China, Japan, and South Korea, which have a technologically advanced automotive industry. The Chinese bus company, King Long, developed a self-driving shuttle with the autonomous platform by Baidu and started first-ever volume production of these shuttles in June 2018. As China, Japan, and South Korea are capable of adopting such technology and produce on mass-level, the region will have a significant market share in the autonomous bus market. Apart from these testing and trials, the region is heavily dependent on buses as a public transport medium. Thus, recent developments in autonomous technologies and quick adoption of the technology would help the Asia Pacific market to grow rapidly.

“North America is expected to be the largest market in the forecast period”

The North American region is projected to account for the largest share of the semi-autonomous bus market during the forecast period. It is home to OEMs, such as New Flyer, Gillig, Novabus, Bluebird, Thomas Built Buses, and Proterra, that are offering advanced buses in the region. The region is dominated by modern buses having ADAS features as standard or optional. OEMs in the country have been providing many semi-autonomous driving features such as AEB, BSD, and ACC. Also, the region is home to many technology companies that are exploring the autonomous driving technology with testing and trials across the region.

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: Tier I - 40%, Tier II - 42%, and Tier III - 18%

By Designation: C Level - 57%, D Level - 29%, and Others - 14%

By Region: North America - 39%, Europe - 33%, and Asia Pacific - 28%

The semi-autonomous and autonomous bus market comprises major manufacturers such as Continental (Germany) Bosch (Germany), Aptiv (UK), AB Volvo (Sweden), and Denso (Japan).

Research Coverage:

The market study covers the semi-autonomous and autonomous bus market size and future growth potential across different segments such as by propulsion type, application, ADAS feature, sensor, level of automation, and region. 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 semi-autonomous and autonomous bus 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 OBJECTIVES OF THE STUDY
- 1.2 MARKET DEFINITION
 - 1.2.1 INCLUSIONS & EXCLUSIONS
- 1.3 MARKET SCOPE
 - 1.3.1 YEARS CONSIDERED FOR THE STUDY
- 1.4 PACKAGE SIZE
- 1.5 LIMITATIONS
- 1.6 STAKEHOLDERS

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
- 2.2 SECONDARY DATA
 - 2.2.1 KEY SECONDARY SOURCES FOR THE SEMI-AUTONOMOUS & AUTONOMOUS BUS MARKET
 - 2.2.2 KEY DATA FROM SECONDARY SOURCES
- 2.3 PRIMARY DATA
 - 2.3.1 SAMPLING TECHNIQUES & DATA COLLECTION METHODS
 - 2.3.2 PRIMARY PARTICIPANTS
- 2.4 MARKET SIZE ESTIMATION
 - 2.4.1 BOTTOM-UP APPROACH: SEMI-AUTONOMOUS BUS MARKET
 - 2.4.2 TOP-DOWN APPROACH: SEMI-AUTONOMOUS BUS MARKET
 - 2.4.3 BOTTOM-UP APPROACH: AUTONOMOUS BUS MARKET
 - 2.4.4 TOP-DOWN APPROACH: AUTONOMOUS BUS MARKET
- 2.5 SEMI-AUTONOMOUS BUS MARKET: RESEARCH DESIGN & METHODOLOGY
- 2.6 SEMI-AUTONOMOUS BUS MARKET: RESEARCH METHODOLOGY ILLUSTRATION OF COMPANY-BASED REVENUE ESTIMATION
- 2.7 MARKET BREAKDOWN AND DATA TRIANGULATION
- 2.8 ASSUMPTIONS & ASSOCIATED RISKS

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

- 4.1 ATTRACTIVE OPPORTUNITIES IN THE SEMI-AUTONOMOUS BUS MARKET

- 4.2 ATTRACTIVE OPPORTUNITIES IN THE AUTONOMOUS BUS MARKET
- 4.3 ATTRACTIVE OPPORTUNITIES IN THE AUTONOMOUS BUS MARKET
- 4.4 SEMI-AUTONOMOUS BUS MARKET GROWTH RATE, BY REGION
- 4.5 SEMI-AUTONOMOUS BUS MARKET, BY PROPULSION TYPE
- 4.6 AUTONOMOUS BUS MARKET, BY PROPULSION TYPE-
- 4.7 AUTONOMOUS BUS MARKET, BY APPLICATION
- 4.8 SEMI-AUTONOMOUS BUS MARKET, BY ADAS FEATURE
- 4.9 SEMI-AUTONOMOUS BUS MARKET, BY LEVEL OF AUTOMATION
- 4.10 AUTONOMOUS BUS MARKET, BY LEVEL OF AUTOMATION
- 4.11 SEMI-AUTONOMOUS BUS MARKET, BY SENSOR TYPE, BY VOLUME
- 4.12 SEMI-AUTONOMOUS BUS MARKET, BY SENSOR TYPE, BY VALUE
- 4.13 AUTONOMOUS BUS MARKET, BY SENSOR TYPE, BY VOLUME
- 4.14 AUTONOMOUS BUS MARKET, BY SENSOR TYPE, BY VALUE

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

5.2.1 DRIVERS

5.2.1.1 Increasing emphasis on better road safety and traffic control

5.2.1.2 Economic effect of semi-autonomous and autonomous buses on the transport industry

5.2.2 RESTRAINTS

5.2.2.1 Cybersecurity and data security concerns

5.2.2.2 High cost of development

5.2.2.3 Lack of information technology and communication infrastructure in developing nations

5.2.3 OPPORTUNITIES

5.2.3.1 Increasing demand for 5G technology for vehicle connectivity

5.2.3.2 Demand for fuel-efficient and emission-free buses

5.2.4 CHALLENGES

5.2.4.1 Tapping the untapped market

5.2.4.2 Legal and regulatory framework issues

5.3 AUTONOMOUS BUS MARKET, SCENARIOS (2024–2030)

5.3.1 MOST LIKELY SCENARIO

5.3.2 OPTIMISTIC SCENARIO

5.3.3 PESSIMISTIC SCENARIO

6 INDUSTRY TRENDS

6.1 INTRODUCTION

6.2 AUTONOMOUS SHUTTLE

6.3 PORTER'S FIVE FORCES MODEL ANALYSIS

6.4 VALUE CHAIN ANALYSIS

6.4.1 PLANNING AND REVISING FUNDS

6.4.2 AUTOMOTIVE COMPONENT SUPPLIERS

6.4.3 AV SOFTWARE AND SENSOR SUPPLIERS

6.4.4 OEMS

6.5 ECOSYSTEM OF AUTONOMOUS DRIVING

6.6 PATENT ANALYSIS

6.6.1 INTRODUCTION

6.6.2 PATENTS FILED

6.6.2.1 COUNTRY-WISE PATENT ANALYSIS

6.6.2.2 OEM-WISE PATENT ANALYSIS & DETAILS

6.6.3 CASE STUDY ANALYSIS

6.6.3.1 Case study on European automated bus/shuttle pilot projects

6.6.4 LIST OF ONGOING AUTONOMOUS SHUTTLE PILOT PROJECTS IN THE EUROPEAN REGION

6.6.4.1 Case study on Mcity Driverless Shuttle project

7 GOVERNMENT REGULATIONS & GUIDELINES FOR TESTING

7.1 REGIONAL AND COUNTRY-LEVEL REGULATIONS/GUIDELINES RELATED TO THE SEMI-AUTONOMOUS & AUTONOMOUS BUSES MARKET:

7.2 REGULATIONS RELATED TO AUTONOMOUS SHUTTLES AND BUSES

7.3 IMPACT OF CURRENT AND FUTURE REGULATIONS ON THE SEMI-AUTONOMOUS BUS MARKET

8 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, BY PROPULSION TYPE

8.1 INTRODUCTION

8.2 OPERATIONAL DATA

8.2.1 ASSUMPTIONS

8.2.2 RESEARCH METHODOLOGY

8.3 DIESEL

8.3.1 DOMINANCE OF DIESEL BUSES IN PUBLIC TRANSPORT FLEETS ACROSS THE WORLD TO HELP NORTH AMERICA LEAD THE MARKET

8.4 ELECTRIC

8.4.1 ELECTRIC BUS OEMS OFFERING ADVANCED FEATURES, ESPECIALLY IN NORTH AMERICA AND EUROPE

8.4.2 PRESENCE OF TECHNOLOGY PROVIDERS IN THE REGION TO HELP NORTH AMERICA LEAD THE SEGMENT

8.5 HYBRID

8.5.1 NORTH AMERICA IS PROJECTED TO DOMINATE THE HYBRID SEGMENT

8.5.2 INCREASING DEMAND FOR MORE EFFICIENT BUSES WILL DOMINATE THE HYBRID SEGMENT

8.6 KEY INDUSTRY INSIGHTS

9 AUTONOMOUS BUS MARKET, BY APPLICATION

9.1 INTRODUCTION

9.2 OPERATIONAL DATA

9.2.1 ASSUMPTIONS

9.2.2 RESEARCH METHODOLOGY

9.3 SHUTTLE

9.3.1 DOMINATION OF EUROPEAN COMPANIES TO HELP THE REGION LEAD THE MARKET, AT LEAST INITIALLY

9.4 INTERCITY/INTRACITY

9.4.1 BUSES EQUIPPED WITH ADVANCED TECHNOLOGIES DRIVING THE MARKET

9.5 KEY INDUSTRY INSIGHTS

10 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, BY ADAS FEATURE

10.1 INTRODUCTION

10.2 OPERATIONAL DATA

10.2.1 ASSUMPTIONS

10.2.2 RESEARCH METHODOLOGY

10.3 ADAPTIVE CRUISE CONTROL (ACC)

10.3.1 REDUCTION IN FUEL CONSUMPTION DUE TO ACC WILL DRIVE ITS DEMAND

10.4 AUTOMATIC EMERGENCY BRAKING (AEB)

10.4.1 INCREASING DEMAND FOR SAFETY IN PUBLIC TRANSPORT WOULD BOOST THE AEB SEGMENT

10.5 BLIND SPOT DETECTION (BSD)

10.5.1 INCREASING NUMBER OF ACCIDENTS TO HELP THE BSD SEGMENT TO

GROW

10.6 INTELLIGENT PARK ASSIST (IPA)

10.6.1 EASE OF PARKING IN CONGESTED PLACES SUCH AS BUS DEPOTS AND BUS STATIONS TO BENEFIT IPA IN THE FUTURE

10.7 LANE KEEP ASSIST (LKA)

10.7.1 HIGH DEMAND FOR SAFETY FEATURES TO MINIMIZE THE RATE OF ACCIDENTS ON HIGHWAYS WILL DRIVE THE NORTH AMERICAN MARKET

10.8 TRAFFIC JAM ASSIST (TJA)

10.8.1 RISING FOCUS ON BETTER ROAD SAFETY AND ADVANCED AUTONOMOUS DRIVING TECHNOLOGY TO DRIVE THE NORTH AMERICAN MARKET

10.9 HIGHWAY PILOT (HP)

10.9.1 SHORT RANGE OBJECT DETECTION BY ULTRASONIC SENSORS WILL BOOST THE MARKET

10.10 KEY INDUSTRY INSIGHTS

11 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, BY LEVEL OF AUTOMATION

11.1 INTRODUCTION

11.2 OPERATIONAL DATA

11.2.1 ASSUMPTIONS

11.2.2 RESEARCH METHODOLOGY

11.3 LEVEL 1

11.3.1 GOVERNMENT MANDATES FOR LEVEL 1 AUTOMATION WILL FUEL THE MARKET

11.4 LEVEL 2 & 3

11.4.1 UPGRADE OF MORE SAFETY FEATURES IN LEVEL 2 & 3 AUTOMATION WILL BOOST THE SEMI-AUTONOMOUS BUS MARKET

11.5 AUTONOMOUS BUS MARKET, BY LEVEL OF AUTOMATION

11.6 LEVEL 4

11.6.1 INCREASING TREND OF LEVEL 4 AUTONOMOUS SHUTTLES TO DRIVE THE EUROPEAN AND NORTH AMERICAN MARKETS

11.7 LEVEL 5

11.7.1 NORTH AMERICA IS EXPECTED TO BE THE FIRST TO ADOPT LEVEL 5 AUTONOMOUS BUSES OR SHUTTLES

11.8 KEY INDUSTRY INSIGHTS

12 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, BY SENSOR TYPE

12.1 INTRODUCTION

12.2 OPERATIONAL DATA

12.2.1 ASSUMPTIONS

12.2.2 RESEARCH METHODOLOGY

12.3 CAMERA

12.3.1 OEMS OFFERING ADVANCED BUSES IN THE REGION TO BOOST THE NORTH AMERICAN REGION

12.4 RADAR

12.4.1 HIGH DEMAND FOR ACCURATE DATA WITH A PRECISE ANGULAR RESOLUTION DRIVING THE GROWTH OF RADAR SENSORS

12.5 LIDAR

12.5.1 ADAS APPLICATIONS SUPPORTED BY LIDAR WILL FUEL THE MARKET

12.6 ULTRASONIC

12.6.1 SHORT RANGE OBJECT DETECTION BY ULTRASONIC SENSORS WILL BOOST THE MARKET

12.7 KEY INDUSTRY INSIGHTS

13 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, BY REGION

13.1 INTRODUCTION

13.1.1 INCREASING DEMAND FOR SAFE COMMERCIAL VEHICLES PROJECTED TO DRIVE THE MARKET

13.1.2 INCREASING DEMAND FOR EFFICIENT AND SAFE PUBLIC TRANSPORT MODE TO DRIVE THE MARKET

13.2 ASIA PACIFIC

13.2.1 CHINA

13.2.1.1 Large sales of advanced electric buses equipped with semi-autonomous driving features

13.2.2 JAPAN

13.2.2.1 Upcoming safety regulations will drive the Japanese semi-autonomous bus market

13.2.3 INDIA

13.2.3.1 Increasing government initiatives toward improving road safety to drive the Indian market

13.2.4 SOUTH KOREA

13.2.4.1 Mandating of FCW and LDW will fuel the South Korean market

13.3 EUROPE

13.3.1 PRESENCE OF LEADING TECHNOLOGY PROVIDERS IN THE REGION TO

DRIVE THE EUROPEAN MARKET

13.3.2 FRANCE

13.3.2.1 Increasing trend of adoption of safe vehicles fueling the French market

13.3.3 GERMANY

13.3.3.1 Presence of leading bus OEMs to drive the German market

13.3.4 ITALY

13.3.4.1 Increasing vehicle safety concerns to drive the French market

13.3.5 SPAIN

13.3.5.1 Upcoming safety features mandate in the European region would boost the Spanish market as well

13.3.6 UK

13.3.6.1 Increasing initiatives from various institutions for installation of ADAS features will drive the UK market

13.4 NORTH AMERICA

13.4.1 THE US IS DRIVING AUTONOMOUS DRIVING TECHNOLOGY

DEVELOPMENTS IN THE REGION

13.4.2 US

13.4.2.1 Increasing efforts from the government for the adoption of ADAS to reduce road crashes will drive the US market

13.4.3 CANADA

13.4.3.1 Increasing testing and trials in the country to drive the Canadian market

13.4.4 MEXICO

13.4.4.1 Increasing number of road crashes to drive the semi-autonomous bus market

13.5 REST OF THE WORLD

13.5.1 BRAZIL

13.5.1.1 The need to reduce traffic accidents will drive the market in Brazil

13.5.2 RUSSIA

13.5.2.1 Presence of companies investing and developing self-driving vehicles in Russia triggering the market

14 COMPETITIVE LANDSCAPE

14.1 OVERVIEW

14.2 MARKET RANKING ANALYSIS FOR THE SEMI-AUTONOMOUS BUS MARKET

14.3 MARKET RANKING ANALYSIS FOR THE AUTONOMOUS BUS MARKET

14.4 COMPETITIVE SCENARIO

14.4.1 COLLABORATIONS/JOINT VENTURES/SUPPLY CONTRACTS/ PARTNERSHIPS/AGREEMENTS

- 14.4.2 NEW PRODUCT DEVELOPMENTS
- 14.4.3 MERGERS & ACQUISITIONS, 2016–2017
- 14.4.4 EXPANSIONS, 2017–2019
- 14.5 COMPETITIVE LEADERSHIP MAPPING FOR THE SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET
 - 14.5.1 STARS
 - 14.5.2 EMERGING LEADERS
 - 14.5.3 PERVASIVE
 - 14.5.4 EMERGING COMPANIES
- 14.6 STRENGTH OF PRODUCT PORTFOLIO
- 14.7 BUSINESS STRATEGY EXCELLENCE
- 14.8 WINNERS VS. TAIL-ENDERS

15 COMPANY PROFILES

15.1 KEY PLAYERS

(Business overview, Products offered, Recent Developments, SWOT analysis, MNM view)*

- 15.1.1 AB VOLVO
- 15.1.2 BOSCH
- 15.1.3 CONTINENTAL
- 15.1.4 DENSO
- 15.1.5 APTIV
- 15.1.6 NVIDIA
- 15.1.7 DAIMLER
- 15.1.8 2GETTHERE (ZF)
- 15.1.9 LOCAL MOTORS (LM INDUSTRIES)
- 15.1.10 PROTERRA
- 15.1.11 EASYMILE
- 15.1.12 NAVYA-

*Details on Business overview, Products offered, Recent Developments, SWOT analysis, MNM view might not be captured in case of unlisted companies.

15.2 OTHER MAJOR PLAYERS

- 15.2.1 NORTH AMERICA
 - 15.2.1.1 Qualcomm
 - 15.2.1.2 Intel
 - 15.2.1.3 Uber
- 15.2.2 EUROPE
 - 15.2.2.1 Scania

- 15.2.2.2 NXP
- 15.2.2.3 IVECO
- 15.2.2.4 BMW
- 15.2.3 ASIA PACIFIC
 - 15.2.3.1 Yutong

16 RECOMMENDATIONS BY MARKETSANDMARKETS

- 16.1 NORTH AMERICA WILL BE A MAJOR SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET
- 16.2 PUBLIC TRANSPORT SOLUTION CAN BE A KEY FOCUS FOR BUS OEMS
- 16.3 CONCLUSION

17 APPENDIX

- 17.1 KEY INSIGHTS OF INDUSTRY EXPERTS
- 17.2 DISCUSSION GUIDE
- 17.3 KNOWLEDGE STORE: MARKETSANDMARKETS SUBSCRIPTION PORTAL
- 17.4 AVAILABLE CUSTOMIZATIONS
- 17.5 RELATED REPORTS
- 17.6 AUTHOR DETAILS

List Of Tables

LIST OF TABLES

TABLE 1 INCLUSIONS & EXCLUSIONS OF THE SEMI-AUTONOMOUS BUS MARKET

TABLE 2 AUTONOMOUS BUS MARKET SIZE (MOST LIKELY), BY REGION, 2024–2030 (UNITS)

TABLE 3 AUTONOMOUS BUS MARKET SIZE (OPTIMISTIC), BY REGION, 2024–2030 (UNITS)

TABLE 4 AUTONOMOUS BUS MARKET SIZE (PESSIMISTIC), BY REGION, 2024–2030 (UNITS)

TABLE 6 SOME NOTEWORTHY TESTING AND TRIALS OF AUTONOMOUS BUSES AND SHUTTLES:

TABLE 7 SEMI-AUTONOMOUS BUS MARKET SIZE, BY PROPULSION TYPE, 2018–2025 (UNITS)

TABLE 8 AUTONOMOUS BUS MARKET SIZE, BY PROPULSION TYPE, 2024–2030 (UNITS)

TABLE 9 SEMI-AUTONOMOUS AND AUTONOMOUS BUS DATA BASED ON PROPULSION TYPE

TABLE 10 DIESEL: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025 (UNITS)

TABLE 11 ELECTRIC: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025 (UNITS)

TABLE 12 ELECTRIC: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030 (UNITS)

TABLE 13 HYBRID: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025 (UNITS)

TABLE 14 HYBRID: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030 (UNITS)

TABLE 15 AUTONOMOUS BUS MARKET SIZE, BY APPLICATION, 2024–2030 (UNITS)

TABLE 16 AUTONOMOUS SHUTTLE DATA BASED ON APPLICATION

TABLE 17 SHUTTLE: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030 (UNITS)

TABLE 18 INTERCITY/INTRACITY: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030 (UNITS)

TABLE 19 SEMI-AUTONOMOUS BUS MARKET SIZE, BY ADAS FEATURE, 2018–2025 (UNITS)

TABLE 20 TOP OEMS OFFERING BUSES WITH ADAS FEATURES

TABLE 21 CRASH REDUCTION THROUGH APPLICATION OF ADAS SYSTEMS

TABLE 22 ACC: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 23 AEB: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 24 BSD: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 25 IPA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 26 LKA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 27 TJA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 28 HP: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 29 SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION,
2018–2025 (UNITS)

TABLE 30 EUROPE BUS SALES DATA (MEDIUM AND HEAVY BUSES>3.5T)

TABLE 31 LEVEL 1: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (THOUSAND UNITS)

TABLE 32 LEVEL 2 & 3: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (UNITS)

TABLE 33 AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION,
2024–2030 (UNITS)

TABLE 34 LEVEL 4: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(UNITS)

TABLE 35 LEVEL 5: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(UNITS)

TABLE 36 SEMI-AUTONOMOUS BUS MARKET SIZE, BY SENSOR TYPE, 2018–2025
(UNITS)

TABLE 37 SEMI-AUTONOMOUS BUS MARKET SIZE, BY SENSOR TYPE, 2018–2025
(USD MILLION)

TABLE 38 AUTONOMOUS BUS MARKET SIZE, BY SENSOR TYPE, 2024–2030
(UNITS)

TABLE 39 AUTONOMOUS BUS MARKET SIZE, BY SENSOR TYPE, 2024–2030 (USD
THOUSAND)

TABLE 40 COMMERCIAL VEHICLE SALES DATA, 2016–2019

TABLE 41 CAMERA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,

2018–2025 (UNITS)

TABLE 42 CAMERA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (USD MILLION)

TABLE 43 CAMERA: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(UNITS)

TABLE 44 CAMERA: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(USD THOUSAND)

TABLE 45 RADAR: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (UNITS)

TABLE 46 RADAR: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (USD MILLION)

TABLE 47 RADAR: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(UNITS)

TABLE 48 RADAR: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(USD THOUSAND)

TABLE 49 LIDAR: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (UNITS)

TABLE 50 LIDAR: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (USD MILLION)

TABLE 51 LIDAR: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(UNITS)

TABLE 52 LIDAR: AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030
(USD THOUSAND)

TABLE 53 ULTRASONIC: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (UNITS)

TABLE 54 ULTRASONIC: SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION,
2018–2025 (USD MILLION)

TABLE 55 ULTRASONIC: AUTONOMOUS BUS MARKET SIZE, BY REGION,
2024–2030 (UNITS)

TABLE 56 ULTRASONIC: AUTONOMOUS BUS MARKET SIZE, BY REGION,
2024–2030 (USD THOUSAND)

TABLE 57 SEMI-AUTONOMOUS BUS MARKET SIZE, BY REGION, 2018–2025
(UNITS)

TABLE 58 AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030 (UNITS)

TABLE 59 AUTONOMOUS BUS MARKET SIZE, BY REGION, 2024–2030 (USD
MILLION)

TABLE 60 ASIA PACIFIC: SEMI-AUTONOMOUS BUS MARKET SIZE, BY COUNTRY,
2018–2025 (UNITS)

TABLE 61 CHINA: SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET SIZE,

BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 62 JAPAN: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 63 INDIA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 64 SOUTH KOREA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 65 EUROPE: SEMI-AUTONOMOUS BUS MARKET SIZE, BY COUNTRY, 2018–2025 (UNITS)

TABLE 66 FRANCE: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 67 GERMANY: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 68 ITALY: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 69 SPAIN: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 70 UK: SEMI-AUTONOMOUS BUS MARKET SIZE, LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 71 NORTH AMERICA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY COUNTRY, 2018–2025 (UNITS)

TABLE 72 US: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 73 CANADA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 74 MEXICO: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 75 ROW: SEMI-AUTONOMOUS BUS MARKET SIZE, BY COUNTRY, 2017–2027 (UNITS)

TABLE 76 BRAZIL: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 77 RUSSIA: SEMI-AUTONOMOUS BUS MARKET SIZE, BY LEVEL OF AUTOMATION, 2018–2025 (UNITS)

TABLE 78 COLLABORATIONS/JOINT VENTURES/SUPPLY CONTRACTS/PARTNERSHIPS/ AGREEMENTS, 2017–2019

TABLE 79 NEW PRODUCT DEVELOPMENTS, 2017–2018

TABLE 80 MERGERS & ACQUISITIONS, 2016–2017

TABLE 81 EXPANSIONS, 2017-2019

TABLE 82 WINNERS VS. TAIL-ENDERS

TABLE 83 AB VOLVO: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 84 AB VOLVO: NEW PRODUCT LAUNCHES

TABLE 85 AB VOLVO: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/SUPPLY CONTRACTS/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 86 BOSCH: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 87 BOSCH: NEW PRODUCT LAUNCHES

TABLE 88 BOSCH: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/SUPPLY CONTRACTS/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 89 CONTINENTAL: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 90 CONTINENTAL: NEW PRODUCT LAUNCHES/EXPANSIONS

TABLE 91 CONTINENTAL: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 92 DENSO: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 93 DENSO: NEW PRODUCT LAUNCHES/EXPANSIONS

TABLE 94 DENSO: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 95 APTIV: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 96 APTIV: NEW PRODUCT LAUNCHES/EXPANSIONS

TABLE 97 APTIV: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 98 NVIDIA: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 99 NVIDIA: NEW PRODUCT LAUNCHES

TABLE 100 NVIDIA: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 101 DAIMLER: THE COMPANY OFFERS THE FOLLOWING PRODUCTS

TABLE 102 DAIMLER: NEW PRODUCT LAUNCHES

TABLE 103 DAIMLER: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 104 2GETTHERE (ZF): THE COMPANY OFFERS THE FOLLOWING
PRODUCTS

TABLE 105 2GETTHERE (ZF): PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 106 LOCAL MOTORS (LM INDUSTRIES):

PARTNERSHIPS/COLLABORATIONS/JOINT VENTURES/SUPPLY
CONTRACTS/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 107 PROTERRA: THE COMPANY OFFERS THE FOLLOWING PRODUCTS:

TABLE 108 PROTERRA: EXPANSIONS

TABLE 109 PROTERRA: PARTNERSHIPS/COLLABORATIONS/JOINT

VENTURES/SUPPLY CONTRACTS/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 110 EASYMILE: NEW PRODUCT DEVELOPMENTS

TABLE 111 EASYMILE: EXPANSIONS

TABLE 112 EASYMILE: PARTNERSHIPS/COLLABORATIONS/JOINT
VENTURES/SUPPLY CONTRACTS/AGREEMENTS/MERGERS & ACQUISITIONS

TABLE 113 NAVYA: PARTNERSHIPS/COLLABORATIONS/JOINT
VENTURES/SUPPLY CONTRACTS/AGREEMENTS/MERGERS & ACQUISITIONS

List Of Figures

LIST OF FIGURES

FIGURE 1 SEMI-AUTONOMOUS BUS: MARKETS COVERED

FIGURE 2 AUTONOMOUS BUS: MARKETS COVERED

FIGURE 3 SEMI-AUTONOMOUS & AUTONOMOUS BUS MARKET: RESEARCH DESIGN

FIGURE 4 RESEARCH DESIGN MODEL

FIGURE 5 BREAKDOWN OF PRIMARY INTERVIEWS

FIGURE 6 DATA TRIANGULATION

FIGURE 7 COVID-19 IMPACT ON THE SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, 2018–2025

FIGURE 8 REVENUE SHIFT IN THE SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET

FIGURE 9 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET: MARKET DYNAMICS

FIGURE 10 SEMI-AUTONOMOUS BUS MARKET, BY REGION, 2020–2025

FIGURE 11 SEMI-AUTONOMOUS BUS MARKET, BY PROPULSION TYPE, 2020 VS. 2025

FIGURE 12 INCREASING REGULATIONS FOR SAFETY FEATURES IN BUSES AND DEMAND FOR ADVANCED DRIVER ASSIST FEATURES TO DRIVE THE MARKET FOR SEMI-AUTONOMOUS BUSES

FIGURE 13 SHORTAGE OF DRIVERS, EFFICIENT OPERATION, AND SAFETY TO DRIVE THE MARKET FOR AUTONOMOUS BUSES

FIGURE 14 ADVANCEMENT IN TECHNOLOGY TO DRIVE THE MARKET FOR AUTONOMOUS BUSES

FIGURE 15 ASIA PACIFIC IS PROJECTED TO BE THE FASTEST-GROWING SEMI-AUTONOMOUS BUS MARKET

FIGURE 16 DIESEL SEGMENT PROJECTED TO BE THE LARGEST MARKET, 2020 VS. 2025 (UNITS)

FIGURE 17 ELECTRIC SEGMENT PROJECTED TO BE THE LARGEST MARKET, 2024 VS. 2030 (UNITS)

FIGURE 18 SHUTTLE SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE AUTONOMOUS BUS MARKET, 2024 VS. 2030 (UNITS)

FIGURE 19 AEB SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE SEMI-AUTONOMOUS BUS MARKET, 2020 VS. 2025 (UNITS)

FIGURE 20 LEVEL 1 SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE

SEMI-AUTONOMOUS BUS MARKET, 2020 VS. 2025 (UNITS)

FIGURE 21 LEVEL 4 SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE AUTONOMOUS BUS MARKET, 2024 VS. 2030 (UNITS)

FIGURE 22 ULTRASONIC SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE

SEMI-AUTONOMOUS BUS MARKET, 2020 VS. 2025 (UNITS)

FIGURE 23 RADAR SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE

SEMI-AUTONOMOUS BUS MARKET, 2020 VS. 2025 (USD MILLION)

FIGURE 24 ULTRASONIC SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE AUTONOMOUS BUS MARKET, 2024 VS. 2030 (UNITS)

FIGURE 25 LIDAR SEGMENT PROJECTED TO BE THE LARGEST SEGMENT OF THE AUTONOMOUS BUS MARKET, 2024 VS. 2030 (USD THOUSAND)

FIGURE 26 SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET: MARKET DYNAMICS

FIGURE 27 PORTER'S FIVE FORCES MODEL: SEMI-AUTONOMOUS AND AUTONOMOUS BUS

FIGURE 28 VALUE CHAIN ANALYSIS: AV SOFTWARE & SENSOR DEVELOPMENT AND SYSTEM INTEGRATION PHASES ADD MAXIMUM VALUE

FIGURE 29 AVERAGE SELLING PRICE TREND FOR SEMI-AUTONOMOUS BUS SENSORS, BY REGION, 2018–2020

FIGURE 30 PATENT APPLICATION TRENDS – LAST 5 YEARS

FIGURE 31 COUNTRY-WISE PATENT ANALYSIS

FIGURE 32 TOP PATENT APPLICANTS, 2010-2019

FIGURE 33 DIESEL SEGMENT TO DOMINATE THE SEMI-AUTONOMOUS BUS MARKET DURING THE FORECAST PERIOD

FIGURE 34 ELECTRIC SEGMENT TO DOMINATE THE AUTONOMOUS BUS MARKET

DURING THE FORECAST PERIOD

FIGURE 35 SHUTTLE SEGMENT TO DOMINATE THE AUTONOMOUS BUS MARKET

DURING THE FORECAST PERIOD

FIGURE 36 SEMI-AUTONOMOUS BUS MARKET, BY ADAS FEATURE, 2020 VS. 2025 (UNITS)

FIGURE 37 SEMI-AUTONOMOUS BUS MARKET, BY LEVEL OF AUTOMATION, 2020 VS. 2025 (UNITS)

FIGURE 38 AUTONOMOUS BUS MARKET, BY LEVEL OF AUTOMATION, 2024 VS. 2030 (UNITS)

FIGURE 39 SEMI-AUTONOMOUS BUS MARKET, BY SENSOR TYPE, 2020 VS. 2025

(UNITS)

FIGURE 40 SEMI-AUTONOMOUS BUS MARKET, BY SENSOR TYPE, 2020 VS. 2025
(USD MILLION)

FIGURE 41 AUTONOMOUS BUS MARKET, BY SENSOR TYPE, 2024 VS. 2030
(UNITS)

FIGURE 42 AUTONOMOUS BUS MARKET, BY SENSOR TYPE, 2024 VS. 2030 (USD
THOUSAND)

FIGURE 43 SEMI-AUTONOMOUS BUS MARKET, BY REGION, 2020 VS. 2025
(UNITS)

FIGURE 44 AUTONOMOUS BUS MARKET, BY REGION, 2024 VS. 2030 (UNITS)

FIGURE 45 ASIA PACIFIC: SEMI-AUTONOMOUS AND AUTONOMOUS BUS
MARKET SNAPSHOT

FIGURE 46 EUROPE: SEMI-AUTONOMOUS BUS MARKET, BY COUNTRY, 2020 VS.
2025 (UNITS)

FIGURE 47 NORTH AMERICA: SEMI-AUTONOMOUS AND AUTONOMOUS BUS
MARKET SNAPSHOT

FIGURE 48 ROW: SEMI-AUTONOMOUS AND AUTONOMOUS BUS MARKET, BY
COUNTRY, 2020 VS. 2025 (UNITS)

FIGURE 49 KEY DEVELOPMENTS BY LEADING PLAYERS IN THE SEMI-
AUTONOMOUS AND AUTONOMOUS BUS MARKET

FIGURE 50 SEMI AUTONOMOUS AND AUTONOMOUS BUS MARKET:
COMPETITIVE LEADERSHIP MAPPING, 2019

FIGURE 51 PRODUCT PORTFOLIO ANALYSIS OF TOP PLAYERS IN SEMI
AUTONOMOUS AND AUTONOMOUS BUS MARKET

FIGURE 52 BUSINESS STRATEGY EXCELLENCE OF TOP PLAYERS IN SEMI
AUTONOMOUS AND AUTONOMOUS BUS MARKET

FIGURE 53 AB VOLVO: COMPANY SNAPSHOT (2019)

FIGURE 54 BOSCH: COMPANY SNAPSHOT (2019)

FIGURE 55 CONTINENTAL: COMPANY SNAPSHOT (2019)

FIGURE 56 DENSO: COMPANY SNAPSHOT (2019)

FIGURE 57 APTIV: COMPANY SNAPSHOT (2017)

FIGURE 58 NVIDIA: COMPANY SNAPSHOT

FIGURE 59 DAIMLER: COMPANY SNAPSHOT (2019)

FIGURE 60 NAVYA: COMPANY SNAPSHOT

I would like to order

Product name: Semi-Autonomous & Autonomous Bus Market by Level of Automation (Level 1, Level 2 & 3, Level 4, and Level 5), Propulsion (Diesel, Electric, and Hybrid), Application, ADAS Features, Sensor, and Region - Global Forecast to 2030

Product link: <https://marketpublishers.com/r/S13811742B85EN.html>

Price: US\$ 4,950.00 (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/S13811742B85EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:

Last name:

Email:

Company:

Address:

City:

Zip code:

Country:

Tel:

Fax:

Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970