

# **Connected Vehicle Market Forecasts to 2032 – Global Analysis By Vehicle Type (Passenger Cars, Commercial Vehicles and Two-Wheelers), Connectivity Type, Communication Type, Technology Type, Application, End User and By Geography**

<https://marketpublishers.com/r/C0F09AB06961EN.html>

Date: September 2025

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: C0F09AB06961EN

## **Abstracts**

According to Statistics MRC, the Global Connected Vehicle Market is accounted for \$87.32 billion in 2025 and is expected to reach \$188.49 billion by 2032 growing at a CAGR of 11.62% during the forecast period. Connected vehicles utilize embedded internet connectivity and advanced communication systems to link with other cars, infrastructure, and external digital platforms. Using Vehicle-to-Everything (V2X) technology, they exchange information in real time, improving safety, traffic management, and driving convenience. These vehicles integrate telematics, sensors, and intelligent software to deliver remote diagnostics, predictive maintenance, over-the-air updates, and rich infotainment solutions. They act as a foundation for autonomous mobility by helping reduce accidents, prevent traffic bottlenecks, and enhance fuel efficiency. By combining smart connectivity with automotive innovation, connected vehicles are shaping the evolution of modern mobility while fostering safer, cleaner, and more intelligent transportation networks.

According to the U.S. Department of Transportation (NHTSA), research suggests that Vehicle-to-Vehicle (V2V) communication technology could potentially prevent or mitigate between 400,000 to 615,000 crashes annually, saving approximately 780 to 1,080 lives per year.

Market Dynamics:

Driver:

## Rising demand for road safety

Growing emphasis on road safety is significantly fueling the connected vehicle market. As urban populations expand and traffic volumes rise, the risk of accidents has increased considerably. Connected vehicles tackle this challenge through Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communication, which provide drivers with timely hazard alerts, accident notifications, and real-time updates on traffic patterns. Enhanced safety features, such as lane departure warnings and collision avoidance systems, strengthen accident prevention. Moreover, the widespread adoption of ADAS solutions makes connected vehicles safer and more reliable. Stringent safety regulations and government initiatives supporting advanced safety technologies further promote market growth, making road safety a core adoption driver.

## Restraint:

### High implementation and maintenance costs

One of the key challenges for the connected vehicle market is the high cost of implementation and upkeep. Integrating vehicles with advanced sensors, telematics systems, and V2X connectivity involves substantial investment. Beyond production, maintaining these systems requires continuous software updates, cybersecurity measures, and technical servicing, further driving up costs. Price-sensitive markets particularly struggle with affordability, limiting consumer adoption. Automakers must strike a balance between innovation and cost-efficiency, which often delays large-scale deployment. Moreover, creating supporting infrastructure like smart roadways and communication networks demands heavy financial commitment from both governments and private players. Consequently, elevated costs remain a significant barrier to market expansion.

## Opportunity:

### Expansion of 5G and advanced connectivity

The rollout of 5G networks presents a critical growth opportunity for the connected vehicle industry. With high bandwidth, ultra-low latency, and reliable performance, 5G enhances real-time communication between vehicles, infrastructure, and cloud platforms. This level of connectivity supports autonomous driving, accident prevention, and advanced safety applications. Additionally, 5G enables automakers to deliver OTA

software updates, infotainment services, and personalized subscription models, boosting consumer engagement. The global expansion of telecom networks ensures consistent and widespread adoption of connected features. By strengthening real-time decision-making and vehicle intelligence, 5G integration accelerates market growth, making connectivity one of the most influential enablers of future mobility.

#### Threat:

##### Intense market competition

The connected vehicle market faces the threat of intense competition, as diverse players including automakers, telecom firms, and tech giants battle for market share. This creates pressure to deliver constant innovation, competitive pricing, and superior services. However, sustaining such efforts demands high R&D spending, which can reduce profitability, especially for smaller companies. Larger corporations with strong resources may dominate, leaving limited room for new entrants. Rapid technological shifts further complicate the competitive landscape, forcing players to adapt quickly or risk losing relevance. Intense rivalry may also trigger price wars, weakening margins and slowing overall industry investment, thus threatening long-term market growth.

#### Covid-19 Impact:

COVID-19 created both challenges and opportunities for the connected vehicle market. In the early stages, lockdowns and supply chain disruptions severely impacted production, while declining consumer spending reduced vehicle sales. Shortages of key electronic components, particularly semiconductors, slowed the integration of connected technologies. Despite these setbacks, the pandemic accelerated the adoption of digital services such as OTA updates, telematics, and remote diagnostics, as contactless solutions became highly valued. The emphasis on safety and continuous monitoring reinforced the importance of vehicle connectivity. With global economic recovery, consumer demand for intelligent, secure, and digitally enabled mobility is driving renewed growth in connected vehicles.

The passenger cars segment is expected to be the largest during the forecast period

The passenger cars segment is expected to account for the largest market share during the forecast period, driven by the growing need for comfort, safety, and entertainment. Modern passenger vehicles are equipped with telematics, navigation assistance, and V2X communication, offering smarter mobility solutions. The integration of ADAS, digital

infotainment, and cloud-based platforms has transformed driving experiences, catering to rising customer expectations for connectivity. Automakers are emphasizing features like OTA updates, app-based services, and predictive diagnostics to improve efficiency and convenience. Demand for real-time entertainment, remote access, and seamless smartphone integration is further boosting connected innovations in this category, securing passenger cars as the dominant market segment.

The vehicle-to-grid (V2G) segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the vehicle-to-grid (V2G) segment is predicted to witness the highest growth rate, driven by the rising shift toward electrification and smart energy solutions. V2G technology allows electric vehicles to exchange electricity with the grid, enabling efficient load balancing, renewable integration, and energy storage. This two-way energy flow provides economic advantages to consumers while strengthening grid stability. Increasing government initiatives for clean energy and investments in smart grids are further boosting V2G adoption. By transforming vehicles into mobile energy assets, this technology bridges the gap between automotive and power sectors, making it the segment with the highest growth trajectory.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, which dominates due to its strong digital infrastructure, innovative automotive ecosystem, and early embrace of smart mobility solutions. The region is well supported by reliable 5G networks, advanced V2X communication systems, and significant R&D investments from automakers and technology firms. Regulatory bodies in North America promote safety, emissions control, and intelligent transport, accelerating adoption. Consumer interest in connectivity-driven features like telematics, infotainment, and ADAS further strengthens market growth. With established industry players and strong government backing, North America maintains a commanding position, making it the largest regional contributor to the connected vehicle market.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, driven by its booming automotive sector, urban expansion, and strong digital transformation efforts. Leading nations like China, Japan, India, and South Korea are heavily investing in IoT, 5G networks, and smart mobility infrastructure. Increasing

consumer preference for advanced in-car connectivity, telematics, and safety solutions is boosting adoption across passenger and commercial vehicles. Additionally, supportive government regulations encouraging intelligent transport and electric mobility initiatives are accelerating progress. With rising vehicle demand and robust collaboration between global automakers and technology firms, Asia-Pacific is set to dominate in future growth rates.

### Key players in the market

Some of the key players in Connected Vehicle Market include Morris Garage Motor India (MG Motor India), Bosch, Maruti Suzuki, Payment24, Airbiquity, Harman International, Continental AG, Daimler AG, General Motors, Hyundai Motor Group, Volvo, Ford Motor Company, Audi, Denso Corporation and Qualcomm Technologies, Inc.

### Key Developments:

In September 2025, Bosch has signed an expanded agreement with Alibaba Group for cloud computing and AI technologies. The two companies will work together on cloud-based enterprise operations, AI business innovations, and expanding Bosch's e-commerce business.

In August 2025, Maruti Suzuki India Limited has signed a Memorandum of Agreement (“MoA”) with the Transport Department, Government of Rajasthan, to automate 21 driving license test tracks. The MoA was signed in the august presence of Hon'ble Chief Minister of Rajasthan, Shri Bhajan Lal Sharma and Hon'ble Deputy Chief Minister & Minister, Transport and Road Safety, Government of Rajasthan, Dr. Prem Chand Bairwa.

In March 2023, MG Motor India has announced that it has signed an agreement with WTICabs India for 100 vehicles. The fleet includes MG's Hector and ZS EV that will be used for the rent-a-car division of WTICabs India. Both companies have signed a formal agreement with Rakesh Sidana, Senior Director, Sales, MG Motor India and Ashok Vashist, CEO, WTICabs, at Dwarka, New Delhi. According to MG, the first batch of the fleet has been delivered as well.

### Vehicle Types Covered:

Passenger Cars

Commercial Vehicles

Two-Wheelers

Connectivity Types Covered:

Embedded

Integrated

Tethered

Communication Types Covered:

Vehicle-to-Vehicle (V2V)

Vehicle-to-Infrastructure (V2I)

Vehicle-to-Pedestrian (V2P)

Vehicle-to-Grid (V2G)

Vehicle-to-Network (V2N)

Technology Types Covered:

2G

3G

4G/LTE

5G

Dedicated Short-Range Communications (DSRC)

## Cellular Vehicle-to-Everything (C-V2X)

### Applications Covered:

Safety & Driver Assistance

Infotainment

Telematics

Fleet Management

Navigation & Location-Based Services

Remote Diagnostics & Maintenance

### End Users Covered:

OEM-Fitted Platforms

Aftermarket Solutions

Fleet Operators

### Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

## Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

### What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

### Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

#### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

#### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as

per the client's interest (Note: Depends on feasibility check)

### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

## Contents

### **1 EXECUTIVE SUMMARY**

### **2 PREFACE**

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
  - 2.4.1 Data Mining
  - 2.4.2 Data Analysis
  - 2.4.3 Data Validation
  - 2.4.4 Research Approach
- 2.5 Research Sources
  - 2.5.1 Primary Research Sources
  - 2.5.2 Secondary Research Sources
  - 2.5.3 Assumptions

### **3 MARKET TREND ANALYSIS**

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 Application Analysis
- 3.8 End User Analysis
- 3.9 Emerging Markets
- 3.10 Impact of Covid-19

### **4 PORTERS FIVE FORCE ANALYSIS**

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

## **5 GLOBAL CONNECTED VEHICLE MARKET, BY VEHICLE TYPE**

- 5.1 Introduction
- 5.2 Passenger Cars
- 5.3 Commercial Vehicles
- 5.4 Two-Wheelers

## **6 GLOBAL CONNECTED VEHICLE MARKET, BY CONNECTIVITY TYPE**

- 6.1 Introduction
- 6.2 Embedded
- 6.3 Integrated
- 6.4 Tethered

## **7 GLOBAL CONNECTED VEHICLE MARKET, BY COMMUNICATION TYPE**

- 7.1 Introduction
- 7.2 Vehicle-to-Vehicle (V2V)
- 7.3 Vehicle-to-Infrastructure (V2I)
- 7.4 Vehicle-to-Pedestrian (V2P)
- 7.5 Vehicle-to-Grid (V2G)
- 7.6 Vehicle-to-Network (V2N)

## **8 GLOBAL CONNECTED VEHICLE MARKET, BY TECHNOLOGY TYPE**

- 8.1 Introduction
- 8.2 2G
- 8.3 3G
- 8.4 4G/LTE
- 8.5 5G
- 8.6 Dedicated Short-Range Communications (DSRC)
- 8.7 Cellular Vehicle-to-Everything (C-V2X)

## **9 GLOBAL CONNECTED VEHICLE MARKET, BY APPLICATION**

- 9.1 Introduction
- 9.2 Safety & Driver Assistance
- 9.3 Infotainment

- 9.4 Telematics
- 9.5 Fleet Management
- 9.6 Navigation & Location-Based Services
- 9.7 Remote Diagnostics & Maintenance

## **10 GLOBAL CONNECTED VEHICLE MARKET, BY END USER**

- 10.1 Introduction
- 10.2 OEM-Fitted Platforms
- 10.3 Aftermarket Solutions
- 10.4 Fleet Operators

## **11 GLOBAL CONNECTED VEHICLE MARKET, BY GEOGRAPHY**

- 11.1 Introduction
- 11.2 North America
  - 11.2.1 US
  - 11.2.2 Canada
  - 11.2.3 Mexico
- 11.3 Europe
  - 11.3.1 Germany
  - 11.3.2 UK
  - 11.3.3 Italy
  - 11.3.4 France
  - 11.3.5 Spain
  - 11.3.6 Rest of Europe
- 11.4 Asia Pacific
  - 11.4.1 Japan
  - 11.4.2 China
  - 11.4.3 India
  - 11.4.4 Australia
  - 11.4.5 New Zealand
  - 11.4.6 South Korea
  - 11.4.7 Rest of Asia Pacific
- 11.5 South America
  - 11.5.1 Argentina
  - 11.5.2 Brazil
  - 11.5.3 Chile
  - 11.5.4 Rest of South America

## 11.6 Middle East & Africa

11.6.1 Saudi Arabia

11.6.2 UAE

11.6.3 Qatar

11.6.4 South Africa

11.6.5 Rest of Middle East & Africa

## 12 KEY DEVELOPMENTS

12.1 Agreements, Partnerships, Collaborations and Joint Ventures

12.2 Acquisitions & Mergers

12.3 New Product Launch

12.4 Expansions

12.5 Other Key Strategies

## 13 COMPANY PROFILING

13.1 Morris Garage Motor India (MG Motor India)

13.2 Bosch

13.3 Maruti Suzuki

13.4 Payment24

13.5 Airbiquity

13.6 Harman International

13.7 Continental AG

13.8 Daimler AG

13.9 General Motors

13.10 Hyundai Motor Group

13.11 Volvo

13.12 Ford Motor Company

13.13 Audi

13.14 Denso Corporation

13.15 Qualcomm Technologies, Inc.

## List Of Tables

### LIST OF TABLES

Table 1 Global Connected Vehicle Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Connected Vehicle Market Outlook, By Vehicle Type (2024-2032) (\$MN)

Table 3 Global Connected Vehicle Market Outlook, By Passenger Cars (2024-2032) (\$MN)

Table 4 Global Connected Vehicle Market Outlook, By Commercial Vehicles (2024-2032) (\$MN)

Table 5 Global Connected Vehicle Market Outlook, By Two-Wheelers (2024-2032) (\$MN)

Table 6 Global Connected Vehicle Market Outlook, By Connectivity Type (2024-2032) (\$MN)

Table 7 Global Connected Vehicle Market Outlook, By Embedded (2024-2032) (\$MN)

Table 8 Global Connected Vehicle Market Outlook, By Integrated (2024-2032) (\$MN)

Table 9 Global Connected Vehicle Market Outlook, By Tethered (2024-2032) (\$MN)

Table 10 Global Connected Vehicle Market Outlook, By Communication Type (2024-2032) (\$MN)

Table 11 Global Connected Vehicle Market Outlook, By Vehicle-to-Vehicle (V2V) (2024-2032) (\$MN)

Table 12 Global Connected Vehicle Market Outlook, By Vehicle-to-Infrastructure (V2I) (2024-2032) (\$MN)

Table 13 Global Connected Vehicle Market Outlook, By Vehicle-to-Pedestrian (V2P) (2024-2032) (\$MN)

Table 14 Global Connected Vehicle Market Outlook, By Vehicle-to-Grid (V2G) (2024-2032) (\$MN)

Table 15 Global Connected Vehicle Market Outlook, By Vehicle-to-Network (V2N) (2024-2032) (\$MN)

Table 16 Global Connected Vehicle Market Outlook, By Technology Type (2024-2032) (\$MN)

Table 17 Global Connected Vehicle Market Outlook, By 2G (2024-2032) (\$MN)

Table 18 Global Connected Vehicle Market Outlook, By 3G (2024-2032) (\$MN)

Table 19 Global Connected Vehicle Market Outlook, By 4G/LTE (2024-2032) (\$MN)

Table 20 Global Connected Vehicle Market Outlook, By 5G (2024-2032) (\$MN)

Table 21 Global Connected Vehicle Market Outlook, By Dedicated Short-Range Communications (DSRC) (2024-2032) (\$MN)

Table 22 Global Connected Vehicle Market Outlook, By Cellular Vehicle-to-Everything (C-V2X) (2024-2032) (\$MN)

Table 23 Global Connected Vehicle Market Outlook, By Application (2024-2032) (\$MN)

Table 24 Global Connected Vehicle Market Outlook, By Safety & Driver Assistance (2024-2032) (\$MN)

Table 25 Global Connected Vehicle Market Outlook, By Infotainment (2024-2032) (\$MN)

Table 26 Global Connected Vehicle Market Outlook, By Telematics (2024-2032) (\$MN)

Table 27 Global Connected Vehicle Market Outlook, By Fleet Management (2024-2032) (\$MN)

Table 28 Global Connected Vehicle Market Outlook, By Navigation & Location-Based Services (2024-2032) (\$MN)

Table 29 Global Connected Vehicle Market Outlook, By Remote Diagnostics & Maintenance (2024-2032) (\$MN)

Table 30 Global Connected Vehicle Market Outlook, By End User (2024-2032) (\$MN)

Table 31 Global Connected Vehicle Market Outlook, By OEM-Fitted Platforms (2024-2032) (\$MN)

Table 32 Global Connected Vehicle Market Outlook, By Aftermarket Solutions (2024-2032) (\$MN)

Table 33 Global Connected Vehicle Market Outlook, By Fleet Operators (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

## I would like to order

Product name: Connected Vehicle Market Forecasts to 2032 – Global Analysis By Vehicle Type (Passenger Cars, Commercial Vehicles and Two-Wheelers), Connectivity Type, Communication Type, Technology Type, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/C0F09AB06961EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/C0F09AB06961EN.html>