

Automotive Camera Market by Application (ACC, BSD, LDW, FCW, AFL, IPA, Driver 60848 Monitoring System & Night Vision), View (Front, Rear, Surround), Technology, Level of Autonomy, ICE-Electric & Hybrid Vehicle, Application & Region - Global Forecast to 2028

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Abstracts

The automotive camera market is projected to grow from USD 8.0 billion in 2023 to USD 13.9 billion by 2028, at a CAGR of 11.7%. Camera systems and technologies are being deployed in an ever-increasing range of applications in the vehicle to control the vehicle and augment the driving experience. Recent developments in camera technology are allowing automotive manufacturers to reimagine and redesign the vehicle silhouette through the replacement of some traditional features, for example, manufacturers are coming up with mirrorless vehicles. Owing to government regulations for adopting safety features play a significant role in driving the ADAS market which in turn fuels the automotive camera market growth. For instance, the European Commission (EC) published 11 new safety features to be mandated for new cars. The list includes several existing ADAS functions, specifically autonomous emergency braking, lane-keeping assistance, intelligent speed assistance system, and a reversing camera/rear detection system. Hence, the rise in the trend of integrating additional safety features in modern vehicles is primarily driving the growth of the automotive camera market in recent years. National Agency for Automotive Safety & Victims Aid (NASVA) Japan established partnerships and collaborations with the government and industries to encourage the advancement of ADAS Features in new vehicles. Currently, Adaptive Cruise Control, and Lane Departure Warning are some features which become commercialized in Japan which will further drive the automotive camera market in this country. The rising penetration of ADAS features in automotive vehicles is

expected to transform the overall automotive sector. It reduces driving complexity with features such as a park assist system, adaptive cruise control, etc. Further, government mandates related to some safety features in countries like U.S., Japan, China, and European countries will create lucrative opportunities for the growth of the automotive camera market. The automotive camera would provide optimum results and cost against advanced sensors like LiDAR and RADAR. Due to this, automotive cameras are anticipated to grow in line with the improving adoption of ADAS solution features in the global market.

“The front-view camera segment is projected to dominate the market.”

A front-view camera will lead the market over the forecast period. Most ADAS applications work based on front-view cameras such as adaptive cruise control, forward collision warning, lane assist & lane departure warning, and traffic sign recognition. According to MnM analysis, Asia Pacific is the prominent region that is contributing to the segmental growth of front-view cameras. This growth is attributed to the offering of these front-view cameras by key OEMs like Mazda, Lexus, Mahindra & Mahindra, Honda, etc. in their variants which will further shape the market in the forecast period. This front camera aims to cover the wide range of the vehicle's front area, enhance the active safety features, and play an important role in driver assistance functions. The ADAS application using front view cameras plays a vital role for automakers in complying with New Car Assessment Program standards which are influential in reducing accidents. OEMs in developing countries such as China and India have started offering ACC features in mid-variants and are expected to remain in focus as a strong selling point. This will boost the demand for front-view cameras in the years to come globally.

“The Level 2 & 3 Vehicles are expected to be the largest market for cameras.”

Level 1 vehicles hold the largest market presently, whereas Level 2 & 3 vehicles are projected to dominate the automotive camera market in coming years. The dominance of Level 1 vehicles is mainly due to the higher production of vehicles in China, India, Japan, and South Korea, with the first level of autonomy. OEMs from this region usually provide ADAS features like ACC, LDW, FCW, and backup cameras for reverse parking. This allows OEMs to distinguish themselves with minimal additional cost and the inclusion of an advanced feature to influence consumer buying decisions. Alternatively, Level 2 & 3 vehicles are the largest in value owing to multiple cameras combined with other sensors such as RADAR and LIDAR. These are installed for more advanced features such as adaptive cruise control, lane centering, traffic sign recognition, blind

spot detection, driver monitoring systems, etc. Companies such as Mazda (Japan), Honda (Japan), Nissan (Japan), Toyota (Japan), Stellantis (Netherlands), Renault (France), BMW (Germany), Mercedes-Benz (Germany), and Ford (US), among others, have launched models with level 2 automation in recent years. For instance, Audi (Germany), launched its new Q8 with level 2 automation in 2023. Similarly, in 2023, Volvo (Sweden) launched its Polestar 3 EV, which also comes with level 3 automation. Furthermore, Ford's F-150 pickup launched in 2022 also comes with level 2 automation.

“Europe is another prominent market for an automotive camera.”

The European automotive camera market is expected to be driven by the launches of new vehicles featuring camera based ADAS technologies for safety enhancement. One key driver of this growth is the increasing focus on road safety. The European Union has set a target to reduce road fatalities by 50% by 2030, and automotive cameras are seen as a critical technology in achieving this goal. Germany, Spain, France, and the UK are the most lucrative markets for luxury vehicle sales due to the presence of major leading players Mercedes, BMW, Audi, Land Rover, etc., driving the ADAS featured vehicle sales and hence shaping the growth of the automotive camera market. Consumers in Europe are willing to pay a premium for vehicles equipped with advanced safety features, and automotive cameras are seen as a critical component of these features. This is particularly true in luxury cars, where automotive cameras are becoming increasingly common. Other European countries have introduced regulations mandating the installation of advanced safety features in vehicles, thereby reporting a buoyant demand for the automotive camera market in the region.

The break-up of the profile of primary participants in the automotive camera market:

By Company Type: Supply Side – 20%, and Demand Side – 80%

By Designation: C Level – 60%, Director Level – 25%, Others-15%

By Region: North America – 30%, Europe – 20%, Asia Pacific – 45%, Rest of the World – 5%

Prominent companies include Robert Bosch (Germany), Continental AG (Germany), Denso Corporation (Japan), and Aptiv (Ireland) among others.

Research Coverage:

This research report categorizes the automotive camera market by view type (front view, rear view and surround view), by vehicle type (passenger cars, light commercial vehicles, heavy commercial vehicles), by EV applications (Adaptive Cruise Control, Adaptive Cruise Control+ Forward Collision Warning, Adaptive Cruise Control+ Forward Collision Warning+ Traffic Sign recognition, Blind Spot Detection, Blind Spot Detection + Lane Keep Assist +Lane Departure Warning, Adaptive Lighting System, Intelligent Park Assist, Driver Monitoring System, Night Vision system, Parking Assist), by ICE applications (Adaptive Cruise Control, Adaptive Cruise Control+ Forward Collision Warning, Adaptive Cruise Control+ Forward Collision Warning+ Traffic Sign recognition, Blind Spot Detection, Blind Spot Detection + Lane Keep Assist +Lane Departure Warning, Adaptive Lighting System, Intelligent Park Assist, Driver Monitoring System, Night Vision system, Parking Assist), by level of autonomy (Level 1, Level 2 and Level 3, Level 4/5), by Electric & Hybrid Vehicle type (Battery Electric Vehicle, Plug in Hybrid Vehicle, Fuel Cell Electric Vehicle), by technology (digital, infrared, thermal) and by region (North America, Europe, Asia Pacific, and Rest of the World). The report's scope covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the automotive camera market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; contracts, partnerships, agreements, new product & service launches, mergers and acquisitions, recession impact, and recent developments associated with the automotive camera market. This report covers the competitive analysis of upcoming startups in the automotive camera market ecosystem.

Reasons to buy this report:

The report will help the market leaders/new entrants with information on the closest approximations of the revenue numbers for the overall automotive camera market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Government initiatives for vehicle safety features in

economically advanced countries), restraints (Lack of supportive infrastructure for camera-based ADAS applications in developing and underdeveloped countries), opportunities (increasing sales of electric vehicles will pave the way for futuristic growth of camera-based solutions), and challenges (constraints in real-time image processing in surround view system) are influencing the growth of the automotive camera market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the automotive camera market.

Market Development: Comprehensive information about lucrative markets – the report analyses the automotive camera market across varied regions.

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the automotive camera market

Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Robert Bosch (Germany), Continental AG (Germany), Denso Corporation (Japan), and Valeo (France) are among others in the automotive camera market.

The report also helps stakeholders understand the pulse of the automotive micro-mobility market & electric vehicle market by providing them with information on key market drivers, restraints, challenges, and opportunities.

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Details on Business Overview, Products/Solutions/Services Offered, Recent Developments, MnM view (Key strengths/Right to win, Strategic choices made, Weakness/competitive threats) might not be captured in case of unlisted companies.

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