

# Vision Guided Robotics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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## Abstracts

The global vision guided robotics market reached a value of US\$ 6.1 Billion in 2021. Looking forward, IMARC Group expects the market to reach US\$ 13.4 Billion by 2027, exhibiting a CAGR of 14.42% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use industries. These insights are included in the report as a major market contributor.

A vision guided robotics (VGR) is an automation technology embedded with cameras, special-purpose lighting, software, and robots. It is also integrated with machine vision (MV) and image processing technologies to provide a second feedback signal to the robot controller and navigate to a variable target position. It offers a higher level of accuracy and precision in operations and enables flexible manufacturing and production lines to accommodate product changes compared to conventional robots readily. Besides this, as it assists in eliminating time-consuming work and improving the overall productivity, the demand for VGR is escalating around the world.

Vision Guided Robotics Market Trends:

At present, there is a rise in the adoption of VGR systems in the industrial, manufacturing, and transit sectors on account of rapid industrialization across the globe. This represents one of the key factors propelling the growth of the market. Apart from this, there is an increase in the demand for automation and safety across numerous industry verticals. This, in confluence with several benefits of VGR systems over conventional robots in terms of applicability and flexibility of adaptation, is positively influencing their overall sales. Furthermore, leading market players are continuously funding research and development (R&D) activities to introduce advanced robots with

high-definition (HD) cameras and accurate sensors that involve obstacle detection and avoidance skills in vision systems. These advanced robots aid in performing flexible jobs, such as driving, flying, and mobile activities. Moreover, key players are focusing on fast-expanding computing power, improving high-level software libraries, making progress in imaging hardware, and lowering the cost of computer memory, which is creating a favorable market outlook. Besides this, the rising utilization of VGR systems in pharmaceuticals, semiconductors, automobiles, cosmetics, food and drinks, and medical devices, is driving the market.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global vision guided robotics market, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on type, component and industry vertical.

#### Breakup by Type:

2D-Vision System Robots

3D-Vision System Robots

#### Breakup by Component:

Hardware

Software

Services

#### Breakup by Industry Vertical:

Automobile

Electrical and Electronics

Aerospace and Defense

Foods and Beverages

Healthcare and Pharmaceutical

Metal Processing

#### Breakup by Region:

North America

United States

Canada  
Asia-Pacific  
China  
Japan  
India  
South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being ABB Ltd., Allied Vision Technologies GmbH, Basler AG, Bastian Solutions LLC (Toyota Industries Corporation), Cognex Corporation, DENSO Corporation, FANUC Corporation, ISRA Vision AG (Atlas Copco), Kawasaki Heavy Industries Ltd., OMRON Corporation, Universal Robots A/S (Teradyne Inc.) and Yaskawa Electric Corporation. Key Questions Answered in This Report:

How has the global vision guided robotics market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global vision guided robotics market?

What are the key regional markets?

What is the breakup of the market based on the type?

What is the breakup of the market based on the component?

What is the breakup of the market based on the industry vertical?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global vision guided robotics market and who are the key players?

What is the degree of competition in the industry?

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