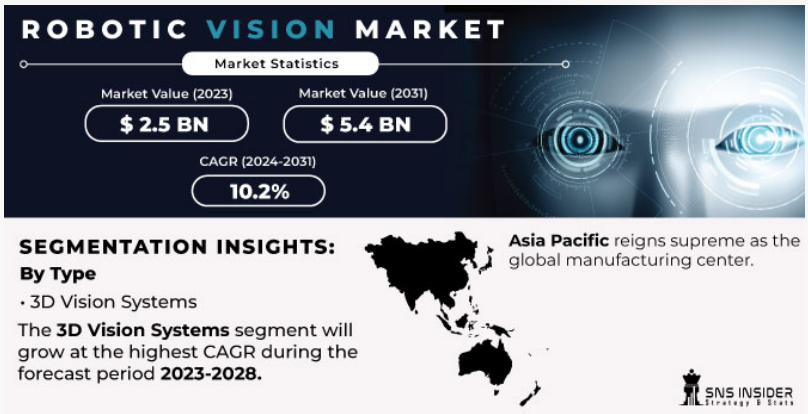
Robotic Vision Market Size to Touch USD 5.4 Billion at 10.2% CAGR by 2031 | Report by SNS Insider

Robotic Vision Market Size, Share, Growth Drivers and Regional Analysis, Global Forecast 2024 - 2031



Robotic Vision Market Size and Growth Report

AUSTIN, TEXAS, UNITED STATES, June 19, 2024 /EINPresswire.com/ --

The robotic vision market is driven by the ever-increasing need for automation across industries. This relentless push for automation stems from a desire to improve quality control, enhance efficiency, and unlock exciting new applications. The market is expected to reach USD 5.4 billion by 2031, reflecting a compound annual growth rate (CAGR) of 10.2% over the forecast period 2024-2031.

Growing Demand for Automation and Advanced Vision Systems

The robotic vision market is growing with Increasing demand for automation in various sectors, including manufacturing, logistics, and healthcare. This automation wave is driven by the need to streamline processes, reduce costs, and improve overall productivity. Advancements in vision system technology are playing a Important role. 3D vision systems, for instance, offer superior accuracy and versatility, enabling robots to perform a wider range of tasks without extensive reprogramming. Additionally, smart cameras are gaining traction due to their compact size, ease of integration, and cost-effectiveness. Industry 4.0, characterized by the integration of automation and data sharing in manufacturing, heavily relies on robotic vision systems. These systems provide real-time data through advanced imaging technologies, enabling informed decision-making and preventing costly production stoppages. The seamless integration of robotic vision systems with AI and machine learning further enhances their capabilities, allowing for complex visual data analysis and automation of intricate tasks.

Download Free Sample Report with Full TOC & Graphs @ https://www.snsinsider.com/sample-request/1553

KEY PLAYERS:
- Cognex Corporation
- Basler AG (Germany)
- OMRON Corporation
- National Instruments Corporation (US)
- Keyence Corporation
- Teledyne DALSA
- SICK AG(Germany)
- Torvidel AS (Norway)
- Hexagon AB (Sweden)
- Advantech (Taiwan)
- Yaskawa America Inc. (Japan)
- ISRA VISION (Germany)
- FANUC CORPORATION (Japan)
- ABB (Switzerland)
- Qualcomm Incorporated (US)

Recent Developments

-April 2023, Cognex Corporation, a renowned player, introduced the Insight 3800 Vision System, specifically designed for high-speed production lines.
-September 2023, Cisco acquired Splunk to bolster the security and resilience of AI-powered systems, which are crucial for robotic vision applications.
-October 2022, ABB partnered with Scalable Robotics to develop user-friendly robotic welding solutions that leverage 3D vision for simplified robot programming.
-March 2023, Teledyne DALSA released the Sapera Vision Software Edition 2023-03, featuring advancements in AI training and image processing functionalities.

Segment Analysis

By Type
-2D Vision Systems
-3D Vision Systems

by Type, 3D vision systems are poised for the highest CAGR during the forecast period. This growth is attributed to advancements in hardware, sensors, and imaging techniques, leading to improved affordability and accuracy. The versatility of 3D vision systems makes them suitable for diverse applications across various industries.

By Application
-Automotive
-Electrical & Electronics

-Chemical, Rubber, & Plastic
-Metals & Machinery
-Food & Beverages
-Precision Engineering & Optics
-Pharmaceuticals & Cosmetics
-Others

by Application, Food and beverage industry is expected to grow with highest CAGR. Robotic vision has revolutionized this sector by enabling robots to visually inspect, sort, package, and handle food items. This technology ensures quality control, enhances food safety, and streamlines operations, paving the way for a more efficient and secure food supply chain.

By Component
+Hardware
- Camera (Visible, Visible + IR, Lighting, Optics, Processors and Controllers, Frame Grabber, Others)

+Software
-Traditional Software
-Deep Learning Software

Make an Enquiry Before Buying @ https://www.snsinsider.com/enquiry/1553

Regional Developments

-Asia Pacific is the undisputed leader in the global robotic vision market due to its position as a manufacturing hub. The region's booming economies are increasing significant investments in automation technologies, with China spearheading the adoption of robotic vision across various sectors. Established manufacturing giants such as Japan and South Korea are actively integrating robotic vision to modernize their production processes and maintain a competitive edge.
-North America, with its longstanding history of embracing automation, is another prominent player in the robotic vision market. Manufacturers in the region constantly seek ways to improve efficiency, quality, and safety, making robotic vision a valuable asset. The presence of leading robotics and automation companies in North America fosters continuous innovation and development in the field of robotic vision. Key players in the region include Adept Technology, Inc., Rockwell Automation, Inc., and Basler AG. Like other developed economies, North America faces challenges related to an aging workforce and a skilled labour shortage. Robotic vision offers a solution by automating tasks and reducing dependence on human labour, making it an attractive proposition for manufacturers.

Key Takeaways

-The rising demand for automation and advanced vision systems as the primary growth drivers.

-The market is fuelled by the increasing need for automation in industries such as manufacturing and healthcare. This demand is coupled with advancements in vision system technology, such as 3D vision and smart cameras, making robotic vision more accessible and efficient.
-The dominance of Asia Pacific stems from its position as a manufacturing hub with booming economies.

Table of Content – Analysis of Key Points

Continued...

Buy Single User License @ https://www.snsinsider.com/checkout/1553

Contact us:
Akash Anand
Head of Business Development & Strategy
info@snsinsider.com
Phone: +1-415-230-0044 (US) | +91-7798602273 (IND)

Read Related Reports:

People Counting System Market

Industrial 3D Printing Market

Semiconductor Manufacturing Equipment Market

Akash Anand
SNS Insider
+1 415-230-0044
info@snsinsider.com
Visit us on social media:
Facebook
X
LinkedIn
Instagram