

Industrial Control & Factory Automation Market Forecasts to 2034 – Global Analysis By Component (Industrial Sensors, Industrial Robots, Industrial 3D Printing, Machine Vision Systems, Control Valves, Field Instruments, Human-Machine Interface (HMI), Industrial PCs and Industrial Software), End User and By Geography

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Abstracts

According to Statistics MRC, the Global Industrial Control & Factory Automation Market is accounted for \$301.4 billion in 2026 and is expected to reach \$627.5 billion by 2034 growing at a CAGR of 9.6% during the forecast period. Factory automation and industrial control refer to the deployment of modern technologies like PLCs, control systems, robotics, and Industrial IoT to improve manufacturing processes. These solutions boost efficiency, accuracy, and workplace safety by reducing manual involvement and allowing continuous monitoring. Automation helps lower costs, enhances product standards, and maintains uniform production outcomes. Key sectors including automotive, electronics, pharmaceuticals, and food industries depend heavily on these technologies to stay competitive and address rising market needs. Additionally, the use of artificial intelligence and data-driven insights supports smarter decisions, predictive upkeep, and improved performance, contributing to highly efficient and intelligent industrial operations.

According to the International Federation of Robotics (IFR), global industrial robot installations reached 553,000 units in 2022, with Asia accounting for 74% of all newly deployed robots and China alone installing 290,000 units.

Market Dynamics:

Driver:**Rising demand for operational efficiency**

The need to improve efficiency in operations is strongly driving the growth of the industrial control and automation market. Companies are turning to automation tools to simplify workflows, cut down material wastage, and boost production levels. These technologies support quicker manufacturing, higher precision, and less downtime, ultimately increasing overall productivity. As competition grows globally, businesses must use resources wisely and control costs effectively. Automation, including robotics and advanced control systems, ensures reliable and consistent output. With industries focusing on optimizing every stage of production, the adoption of automation technologies is expanding rapidly across different sectors worldwide.

Restraint:**High initial investment costs**

The substantial upfront cost of deploying industrial automation systems acts as a key limitation to market expansion. Technologies like robotics, control units, and IoT networks demand large capital investments, which can be difficult for smaller businesses to manage. Beyond installation, additional costs for integration, workforce training, and ongoing maintenance increase the financial load. Many companies hesitate due to unclear short-term returns on investment, making them cautious about adopting automation. Although these systems offer long-term advantages, the initial financial commitment remains a significant challenge, particularly for small and medium enterprises aiming to modernize their manufacturing operations.

Opportunity:**Increasing demand for energy efficiency**

The need to improve energy efficiency is generating strong opportunities in the automation sector. Companies are aiming to lower energy usage and reduce their environmental footprint in line with sustainability goals. Automation technologies provide better control over operations, helping to optimize energy consumption and limit waste. Real-time monitoring tools allow businesses to analyze and manage energy usage effectively. Additionally, government policies and incentives encourage the adoption of

energy-saving solutions. As sustainability gains importance, industries are increasingly investing in automation systems that enhance energy efficiency and support environmentally responsible manufacturing practices worldwide.

Threat:

Rapid technological obsolescence

Fast-paced technological change is a major threat to the automation market. Equipment and systems can quickly lose relevance as advanced solutions are introduced. Organizations that invest in automation may face shorter usage cycles and the need for regular updates or replacements. This leads to increased expenses and uncertainty in strategic planning. Older systems may also have compatibility issues with new technologies, reducing efficiency. To remain competitive, companies must keep investing in upgrades and innovation, which can put pressure on budgets. The constant evolution of technology creates challenges for businesses trying to maintain modern and efficient automation systems.

Covid-19 Impact:

The pandemic of COVID-19 created both challenges and opportunities for the industrial automation market. At the beginning, restrictions, disrupted supply chains, and paused production activities led to reduced investments in automation technologies. Companies struggled with workforce shortages and delays in project execution. However, the situation highlighted the importance of minimizing human involvement, leading to faster adoption of automation solutions. There was a strong rise in demand for remote operations, digital tools, and reliable production systems. After the pandemic, businesses are increasingly focusing on automation to improve efficiency, adaptability, and risk control, supporting steady growth in the global industrial control market.

The industrial robots segment is expected to be the largest during the forecast period

The industrial robots segment is expected to account for the largest market share during the forecast period as they are extensively used in various industries. They improve operational efficiency by handling repetitive and intricate tasks with accuracy and consistency. Industries like automotive, electronics, and manufacturing depend on robotic systems to enhance productivity, reduce mistakes, and ensure high-quality output. These robots enable uninterrupted production, lowering downtime and overall costs. Their adaptability and ease of integration with technologies such as artificial

intelligence and IoT contribute to their strong market position.

The semiconductors & electronics segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the semiconductors & electronics segment is predicted to witness the highest growth rate. This growth is driven by continuous innovation and increasing demand for electronic products worldwide. Manufacturing processes in this sector require high accuracy, speed, and compact designs, encouraging the use of advanced automation technologies. Automated solutions ensure consistent quality and improve production efficiency. Rising investments in semiconductor plants, along with the expansion of fabrication units and digitalization efforts, support this growth. As technologies like AI and connected devices gain popularity, the adoption of automation in this segment is expected to increase significantly.

Region with largest share:

During the forecast period, the Asia-Pacific region is expected to hold the largest market share. This leadership is supported by rapid industrial growth and a well-established manufacturing sector in countries like China, Japan, South Korea, and India. Increasing use of automation technologies, combined with government support and investments in digital manufacturing, drives regional growth. Industries such as automotive, electronics, and semiconductors play a key role in boosting demand. The availability of affordable labor and strong industrial infrastructure further enhance market expansion. Continuous technological progress and the presence of major production hubs solidify Asia-Pacific's leading position globally.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR. This growth is fueled by the rapid implementation of advanced technologies and increasing emphasis on digital transformation. The region benefits from strong industrial presence, significant R&D investments, and early adoption of modern manufacturing practices. Businesses are embracing automation to boost efficiency, cut costs, and improve overall productivity. Growing interest in smart factories and the use of AI, IoT, and robotics further supports market expansion. Government support and continuous upgrades to industrial systems are also driving higher adoption of automation solutions across the region.

Key players in the market

Some of the key players in Industrial Control & Factory Automation Market include Siemens, Rockwell Automation, Schneider Electric, ABB, Mitsubishi Electric, Honeywell, Emerson Electric, Yokogawa Electric, Omron, Keyence, Fanuc, Bosch Rexroth, Beckhoff Automation, Phoenix Contact, Eaton, B&R Industrial Automation, Fuji Electric and Hitachi Industrial Equipment Systems.

Key Developments:

In November 2025, Schneider Electric announced a two-phase supply capacity agreement (SCA) totaling \$1.9 billion in sales. The milestone deal includes prefabricated power modules and the first North American deployment of chillers. The announcement was unveiled at Schneider Electric's Innovation Summit North America in Las Vegas, convening more than 2,500 business leaders and market innovators to accelerate practical solutions for a more resilient, affordable and intelligent energy future.

In November 2025, Rockwell Automation and SLB announced that, following a strategic review, both companies have agreed to pursue an orderly dissolution of their Sensia joint venture. Under the agreement, Rockwell Automation will assume one hundred percent ownership of the Process Automation Business that it contributed to the joint venture, while SLB will fully regain ownership of its contributed assets, including Lift Control and Measurements.

In September 2025, Siemens and leading machine tools and laser manufacturer TRUMPF announced a partnership that promises to elevate industrial production by harnessing advanced digital manufacturing solutions. The collaboration joins Siemens' Xcelerator portfolio with TRUMPF's renowned machine-building and software expertise.

Components Covered:

Industrial Sensors

Industrial Robots

Industrial 3D Printing

Machine Vision Systems

Control Valves

Field Instruments

Human-Machine Interface (HMI)

Industrial PCs

Industrial Software

End Users Covered:

Automotive

Aerospace & Defense

Energy & Utilities

Food & Beverage

Chemicals & Pharmaceuticals

Metals & Mining

Oil & Gas

Semiconductors & Electronics

Other End Users

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of 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 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

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:

Industrial Control & Factory Automation Market Forecasts to 2034 – Global Analysis By Component (Industrial Se...

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

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