

Control Systems Automation Market Forecasts to 2032 - Global Analysis By Product (Distributed Control Systems (DCS), Programmable Logic Controllers (PLC), Supervisory Control and Data Acquisition (SCADA), Human-Machine Interface (HMI), Programmable Automation Controllers (PAC), Manufacturing Execution Systems (MES), Safety Instrumented Systems (SIS), and Other Products), Component, Deployment, Technology, Distribution Channel, Application and By Geography

<https://marketpublishers.com/r/C53282006FD4EN.html>

Date: January 2026

Pages: 200

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

ID: C53282006FD4EN

Abstracts

According to Statistics MRC, the Global Control Systems Automation Market is accounted for \$183.48 billion in 2025 and is expected to reach \$385.76 billion by 2032 growing at a CAGR of 11.2% during the forecast period. Control systems automation refers to the application of automated control technologies to manage, regulate, and optimize the operation of machines, processes, and industrial systems with minimal human intervention. It integrates hardware such as sensors, controllers, and actuators with software platforms to monitor real-time conditions, analyze data, and execute predefined control actions. By ensuring accuracy, consistency, and responsiveness, control systems automation improves operational efficiency, enhances safety, reduces errors, and supports continuous, reliable performance across industries including manufacturing, energy, utilities, transportation, and process-based sectors.

Market Dynamics:

Driver:

Industry 4.0 and smart factory initiatives

Manufacturers are increasingly implementing smart factory initiatives to enhance productivity, flexibility, and real-time decision-making. Advanced control systems enable seamless integration of sensors, machines, and analytics platforms across production lines. The use of cyber-physical systems and industrial IoT is improving visibility into operations and asset performance. Automation solutions support data-driven optimization of processes, energy consumption, and quality control. Governments and industry bodies are also promoting digital manufacturing through policy support and funding programs. Together, these factors are accelerating the deployment of modern control systems across industrial sectors.

Restraint:

Interoperability with legacy systems

Many industrial facilities still rely on outdated hardware and proprietary software that are difficult to integrate with modern platforms. Upgrading or replacing these systems often requires significant capital investment and operational downtime. Differences in communication protocols and data formats further complicate system integration. Skilled expertise is required to ensure smooth migration without disrupting ongoing operations. Small and mid-sized enterprises are particularly impacted due to limited budgets and technical resources.

Opportunity:

AI-Driven predictive maintenance

By leveraging machine learning algorithms, control systems can analyze real-time and historical data to predict equipment failures. This approach helps industries shift from reactive to proactive maintenance strategies. Reduced unplanned downtime leads to improved operational efficiency and lower maintenance costs. Integration of AI with distributed and programmable control systems enhances asset reliability and lifespan. Industries such as manufacturing, energy, and chemicals are increasingly investing in predictive analytics solutions. As AI models become more accurate and scalable, their adoption within control systems is expected to expand rapidly.

Threat:

Rapid technology obsolescence

Continuous advancements in hardware, software, and communication standards can shorten product life cycles. End users may hesitate to invest in new systems due to concerns about future compatibility and upgrades. Vendors are under constant pressure to innovate and update their offerings to remain competitive. This fast pace of change can increase R&D costs and strain profit margins. Industries with long asset lifetimes find it challenging to align automation investments with evolving technologies. Consequently, technology obsolescence can create uncertainty for both suppliers and customers.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the control systems automation market. Initial lockdowns disrupted manufacturing activities and delayed automation projects across industries. Supply chain interruptions affected the availability of critical components such as controllers and sensors. However, the crisis highlighted the importance of automation in maintaining operational continuity. Companies increasingly adopted remote monitoring and control solutions to manage facilities with reduced workforce presence. Digital transformation initiatives gained momentum as resilience became a strategic priority. In the post-pandemic period, investments in flexible and autonomous control systems have accelerated.

The distributed control systems (DCS) segment is expected to be the largest during the forecast period

The distributed control systems (DCS) segment is expected to account for the largest market share during the forecast period, due to its extensive use in process industries. DCS solutions are widely deployed in sectors such as oil & gas, power generation, chemicals, and pharmaceuticals. These systems enable centralized monitoring while allowing distributed control across complex operations. High reliability, scalability, and real-time process optimization are key advantages of DCS platforms. Industries rely on DCS to ensure safety, regulatory compliance, and continuous production. Ongoing upgrades toward digital and AI-enabled DCS are further strengthening adoption.

The healthcare & pharmaceuticals segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the healthcare & pharmaceuticals segment is predicted to witness the highest growth rate, due to rising demand for precision manufacturing and strict regulatory compliance is driving automation adoption in this sector. Automated control systems ensure consistency, traceability, and quality in drug production processes. The integration of cleanroom automation and advanced process control is improving operational efficiency. Pharmaceutical companies are increasingly deploying control systems to support continuous manufacturing models. Growth in biologics, vaccines, and personalized medicine is further boosting automation needs.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, due to rapid industrialization and expanding manufacturing bases in countries such as China, India, and South Korea are key contributors. Governments in the region are promoting smart manufacturing and automation through national initiatives. Rising investments in energy, chemicals, and infrastructure projects are increasing demand for advanced control systems. Local and global automation vendors are strengthening their presence through partnerships and localized production. Cost-effective manufacturing and a large industrial workforce support market expansion.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR, owing to adoption of advanced automation and digital technologies. Strong investments in AI, industrial IoT, and cloud-based control platforms are driving innovation. Industries are modernizing legacy systems to enhance efficiency and cybersecurity. The presence of major automation solution providers supports rapid technology deployment. Regulatory emphasis on safety, quality, and energy efficiency further encourages automation adoption.

Key players in the market

Some of the key players in Control Systems Automation Market include Siemens AG, Delta Electronics, Inc., ABB Ltd., Johnson Controls, Rockwell Automation, Inc., Hitachi, Ltd., Schneider Electric, General Electric, Honeywell International Inc., Bosch Rexroth AG, Emerson Electric Co., Fanuc Corporation, Mitsubishi Electric Corporation, Yokogawa Electric Corporation, and OMRON Corporation.

Key Developments:

In December 2025, Delta Electronics, Inc. and VIVOTEK Inc. announced approval by their respective boards of directors of a proposed cash-for-share exchange transaction under which Delta is to acquire 100% of VIVOTEK's outstanding shares for approximately NT\$3,733 million. Under the terms of the Transaction agreement, the acquisition price is set at NT\$100 per share, representing an approximate premium of 16.8%.

In July 2025, Siemens AG announced that it has completed the acquisition of Dotmatics, a leading provider of Life Sciences R&D software headquartered in Boston and Portfolio Company of global software investor Insight Partners, for an enterprise value of \$5.1 billion. With the transaction now completed, Dotmatics will form part of Siemens' Digital Industries Software business, marking a significant expansion of Siemens' industry-leading Product Lifecycle Management (PLM) portfolio into the rapidly growing and complementary Life Sciences market.

Products Covered:

- Distributed Control Systems (DCS)
- Programmable Logic Controllers (PLC)
- Supervisory Control and Data Acquisition (SCADA)
- Human-Machine Interface (HMI)
- Programmable Automation Controllers (PAC)
- Manufacturing Execution Systems (MES)
- Safety Instrumented Systems (SIS)
- Other Products

Components Covered:

- Hardware

Software

Services

Deployments Covered:

On-Premises / On-Site

Cloud / SaaS

Hybrid Deployment

Technologies Covered:

IoT-Enabled Control Systems

AI & Machine Learning Integrated Systems

Cloud-Based / Edge Computing Systems

Cyber-Secure Control Platforms

Open Standards vs Proprietary Architectures

Distribution Channels Covered:

Direct Sales

Distributors & Partners

Online / E-Commerce Platforms

Applications Covered:

Manufacturing

Automotive & Transportation

Energy & Utilities

Oil & Gas

Chemical & Petrochemical

Food & Beverage

Aerospace & Defence

Healthcare & Pharmaceuticals

Mining & Metals

Water & Wastewater Management

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 Product Analysis
- 3.7 Application Analysis
- 3.8 Emerging Markets
- 3.9 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 CONTROL SYSTEMS AUTOMATION MARKET, BY PRODUCT

- 5.1 Introduction
- 5.2 Distributed Control Systems (DCS)
- 5.3 Programmable Logic Controllers (PLC)
- 5.4 Supervisory Control and Data Acquisition (SCADA)
- 5.5 Human-Machine Interface (HMI)
- 5.6 Programmable Automation Controllers (PAC)
- 5.7 Manufacturing Execution Systems (MES)
- 5.8 Safety Instrumented Systems (SIS)
- 5.9 Other Products

6 GLOBAL CONTROL SYSTEMS AUTOMATION MARKET, BY COMPONENT

- 6.1 Introduction
- 6.2 Hardware
 - 6.2.1 Controllers
 - 6.2.2 Sensors
 - 6.2.3 Actuators
 - 6.2.4 Drives
 - 6.2.5 Relays & Contactors
 - 6.2.6 Power Supplies
- 6.3 Software
- 6.4 Services

7 GLOBAL CONTROL SYSTEMS AUTOMATION MARKET, BY DEPLOYMENT

- 7.1 Introduction
- 7.2 On-Premises / On-Site
- 7.3 Cloud / SaaS
- 7.4 Hybrid Deployment

8 GLOBAL CONTROL SYSTEMS AUTOMATION MARKET, BY TECHNOLOGY

- 8.1 Introduction
- 8.2 IoT-Enabled Control Systems
- 8.3 AI & Machine Learning Integrated Systems
- 8.4 Cloud-Based / Edge Computing Systems
- 8.5 Cyber-Secure Control Platforms

8.6 Open Standards vs Proprietary Architectures

9 GLOBAL CONTROL SYSTEMS AUTOMATION MARKET, BY DISTRIBUTION CHANNEL

9.1 Introduction

9.2 Direct Sales

9.3 Distributors & Partners

9.4 Online / E-Commerce Platforms

10 GLOBAL CONTROL SYSTEMS AUTOMATION MARKET, BY APPLICATION

10.1 Introduction

10.2 Manufacturing

10.3 Automotive & Transportation

10.4 Energy & Utilities

10.5 Oil & Gas

10.6 Chemical & Petrochemical

10.7 Food & Beverage

10.8 Aerospace & Defence

10.9 Healthcare & Pharmaceuticals

10.10 Mining & Metals

10.11 Water & Wastewater Management

11 GLOBAL CONTROL SYSTEMS AUTOMATION 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 Siemens AG
- 13.2 Delta Electronics, Inc.
- 13.3 ABB Ltd.
- 13.4 Johnson Controls International plc
- 13.5 Rockwell Automation, Inc.
- 13.6 Hitachi, Ltd.
- 13.7 Schneider Electric SE
- 13.8 General Electric Company
- 13.9 Honeywell International Inc.
- 13.10 Bosch Rexroth AG

- 13.11 Emerson Electric Co.
- 13.12 Fanuc Corporation
- 13.13 Mitsubishi Electric Corporation
- 13.14 Yokogawa Electric Corporation
- 13.15 OMRON Corporation

List Of Tables

LIST OF TABLES

Table 1 Global Control Systems Automation Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Control Systems Automation Market Outlook, By Product (2024-2032) (\$MN)

Table 3 Global Control Systems Automation Market Outlook, By Distributed Control Systems (DCS) (2024-2032) (\$MN)

Table 4 Global Control Systems Automation Market Outlook, By Programmable Logic Controllers (PLC) (2024-2032) (\$MN)

Table 5 Global Control Systems Automation Market Outlook, By Supervisory Control and Data Acquisition (SCADA) (2024-2032) (\$MN)

Table 6 Global Control Systems Automation Market Outlook, By Human-Machine Interface (HMI) (2024-2032) (\$MN)

Table 7 Global Control Systems Automation Market Outlook, By Programmable Automation Controllers (PAC) (2024-2032) (\$MN)

Table 8 Global Control Systems Automation Market Outlook, By Manufacturing Execution Systems (MES) (2024-2032) (\$MN)

Table 9 Global Control Systems Automation Market Outlook, By Safety Instrumented Systems (SIS) (2024-2032) (\$MN)

Table 10 Global Control Systems Automation Market Outlook, By Other Products (2024-2032) (\$MN)

Table 11 Global Control Systems Automation Market Outlook, By Component (2024-2032) (\$MN)

Table 12 Global Control Systems Automation Market Outlook, By Hardware (2024-2032) (\$MN)

Table 13 Global Control Systems Automation Market Outlook, By Controllers (2024-2032) (\$MN)

Table 14 Global Control Systems Automation Market Outlook, By Sensors (2024-2032) (\$MN)

Table 15 Global Control Systems Automation Market Outlook, By Actuators (2024-2032) (\$MN)

Table 16 Global Control Systems Automation Market Outlook, By Drives (2024-2032) (\$MN)

Table 17 Global Control Systems Automation Market Outlook, By Relays & Contactors (2024-2032) (\$MN)

Table 18 Global Control Systems Automation Market Outlook, By Power Supplies

(2024-2032) (\$MN)

Table 19 Global Control Systems Automation Market Outlook, By Software (2024-2032) (\$MN)

Table 20 Global Control Systems Automation Market Outlook, By Services (2024-2032) (\$MN)

Table 21 Global Control Systems Automation Market Outlook, By Deployment (2024-2032) (\$MN)

Table 22 Global Control Systems Automation Market Outlook, By On-Premises / On-Site (2024-2032) (\$MN)

Table 23 Global Control Systems Automation Market Outlook, By Cloud / SaaS (2024-2032) (\$MN)

Table 24 Global Control Systems Automation Market Outlook, By Hybrid Deployment (2024-2032) (\$MN)

Table 25 Global Control Systems Automation Market Outlook, By Technology (2024-2032) (\$MN)

Table 26 Global Control Systems Automation Market Outlook, By IoT-Enabled Control Systems (2024-2032) (\$MN)

Table 27 Global Control Systems Automation Market Outlook, By AI & Machine Learning Integrated Systems (2024-2032) (\$MN)

Table 28 Global Control Systems Automation Market Outlook, By Cloud-Based / Edge Computing Systems (2024-2032) (\$MN)

Table 29 Global Control Systems Automation Market Outlook, By Cyber-Secure Control Platforms (2024-2032) (\$MN)

Table 30 Global Control Systems Automation Market Outlook, By Open Standards vs Proprietary Architectures (2024-2032) (\$MN)

Table 31 Global Control Systems Automation Market Outlook, By Distribution Channel (2024-2032) (\$MN)

Table 32 Global Control Systems Automation Market Outlook, By Direct Sales (2024-2032) (\$MN)

Table 33 Global Control Systems Automation Market Outlook, By Distributors & Partners (2024-2032) (\$MN)

Table 34 Global Control Systems Automation Market Outlook, By Online / E-Commerce Platforms (2024-2032) (\$MN)

Table 35 Global Control Systems Automation Market Outlook, By Application (2024-2032) (\$MN)

Table 36 Global Control Systems Automation Market Outlook, By Manufacturing (2024-2032) (\$MN)

Table 37 Global Control Systems Automation Market Outlook, By Automotive & Transportation (2024-2032) (\$MN)

Table 38 Global Control Systems Automation Market Outlook, By Energy & Utilities (2024-2032) (\$MN)

Table 39 Global Control Systems Automation Market Outlook, By Oil & Gas (2024-2032) (\$MN)

Table 40 Global Control Systems Automation Market Outlook, By Chemical & Petrochemical (2024-2032) (\$MN)

Table 41 Global Control Systems Automation Market Outlook, By Food & Beverage (2024-2032) (\$MN)

Table 42 Global Control Systems Automation Market Outlook, By Aerospace & Defence (2024-2032) (\$MN)

Table 43 Global Control Systems Automation Market Outlook, By Healthcare & Pharmaceuticals (2024-2032) (\$MN)

Table 44 Global Control Systems Automation Market Outlook, By Mining & Metals (2024-2032) (\$MN)

Table 45 Global Control Systems Automation Market Outlook, By Water & Wastewater Management (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: Control Systems Automation Market Forecasts to 2032 - Global Analysis By Product (Distributed Control Systems (DCS), Programmable Logic Controllers (PLC), Supervisory Control and Data Acquisition (SCADA), Human-Machine Interface (HMI), Programmable Automation Controllers (PAC), Manufacturing Execution Systems (MES), Safety Instrumented Systems (SIS), and Other Products), Component, Deployment, Technology, Distribution Channel, Application and By Geography

Product link: <https://marketpublishers.com/r/C53282006FD4EN.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

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/C53282006FD4EN.html>