+357 96 030922
info@marketpublishers.com

Programmable Logic Controller Market Report: Trends, Forecast and Competitive Analysis to 2030

https://marketpublishers.com/r/P7B718A5DBE7EN.html
Date: November 2024
Pages: 150
Price: US$ 4,850.00 (Single User License)
ID: P7B718A5DBE7EN

Abstracts

2 – 3 business days after placing order

Programmable Logic Controller Trends and Forecast

The future of the global programmable logic controller market looks promising with opportunities in the automotive, energy & utility, chemical & petrochemical, oil & gas, pulp & paper, pharmaceutical, and water & wastewater treatment markets. The global programmable logic controller market is expected to reach an estimated $14.0 billion by 2030 with a CAGR of 4.0% from 2024 to 2030. The major drivers for this market are the growing interest in industrial automation, the increasing demand for flexible and robust manufacturing procedures, and the growing government initiatives toward the sustainable construction of smart cities.

> Lucintel forecasts that, within the type category, the hardware & software segment will remain a larger segment over the forecast period.
>
> Within the application category, automotive will remain the largest segment over the forecast period.
>
> In terms of regions, APAC is expected to witness the highest growth over the forecast period.

Gain valuable insights for your business decisions with our comprehensive 150+ page report.

+357 96 030922
info@marketpublishers.com

Emerging Trends in the Programmable Logic Controller Market

The PLC market is evolving with several emerging trends that reflect the growing demand for smarter, more connected, and more efficient control systems. These trends are reshaping how PLCs are utilized in industrial automation and influencing future developments.

Integration with Industrial IoT: PLCs are increasingly being integrated with Industrial IoT technologies to enhance data connectivity and real-time monitoring. This trend improves operational efficiency by enabling predictive maintenance and more informed decision-making through enhanced data analytics.

Adoption of Edge Computing: Edge computing is becoming prominent in PLC systems, allowing for local data processing and reduced latency. This trend enhances the speed and responsiveness of control systems, leading to more efficient operations and quicker decision-making processes in industrial settings.

Incorporation of AI and Machine Learning: The integration of AI and machine learning into PLCs enables advanced analytics and predictive maintenance. This trend allows PLC systems to anticipate potential issues and optimize processes, leading to smarter and more efficient automation solutions.

Focus on Cybersecurity: With the rise in connectivity, there is a growing emphasis on cybersecurity for PLC systems. New developments include advanced security features to protect against cyber threats, ensuring the integrity and reliability of automated processes in increasingly connected environments.

Growth of Modular and Scalable Solutions: Modular and scalable PLC systems are becoming more popular, offering flexibility and ease of expansion. This trend supports customized automation setups that can grow with the business, catering to diverse industrial needs and enabling scalable manufacturing solutions.

These trends are transforming the PLC market by introducing more intelligent, connected, and flexible solutions. The integration of IoT, edge computing, AI, and enhanced cybersecurity features is reshaping industrial automation, leading to more

+357 96 030922
info@marketpublishers.com

efficient, secure, and adaptable control systems.

Recent Developments in the Programmable Logic Controller Market

Recent developments in the PLC market highlight significant advancements in technology and application. These developments reflect the industry's ongoing efforts to enhance functionality, efficiency, and connectivity in industrial automation systems.

Advanced Data Analytics Integration: Modern PLCs are integrating advanced data analytics, enabling real-time monitoring and predictive maintenance. This development enhances operational efficiency by providing actionable insights and reducing unplanned downtime through improved data-driven decision-making.

AI-Powered PLC Systems: New PLC systems are incorporating AI and machine learning capabilities. This advancement allows for intelligent decision-making and predictive analytics, improving automation processes and making PLC systems more adaptive and responsive to changing operational conditions.

Enhanced Connectivity with Industrial IoT: PLCs are increasingly connected with Industrial IoT technologies, facilitating better data collection and communication. This development supports more integrated manufacturing systems, enhancing real-time data exchange and operational efficiency.

Advancements in Cybersecurity Features: Recent PLC models are equipped with advanced cybersecurity features to address growing concerns about data breaches and cyber-attacks. Enhanced security protocols ensure the integrity and reliability of automated systems in connected industrial environments.

Modular and Flexible PLC Solutions: The market is seeing a rise in modular and flexible PLC systems. These solutions offer customization and scalability, allowing businesses to tailor their automation setups to specific needs and expand their systems as required, supporting diverse applications.

These developments are driving innovation in the PLC market by enhancing data analytics, AI integration, connectivity, and security. Modular and flexible solutions are providing businesses with greater adaptability and efficiency, reshaping the landscape of industrial automation.

+357 96 030922
info@marketpublishers.com

Strategic Growth Opportunities for Programmable Logic Controller Market

The PLC market offers numerous strategic growth opportunities across various applications. These opportunities highlight areas where PLC solutions can drive innovation and efficiency, catering to evolving industrial needs and expanding market reach.

Expansion in Smart Manufacturing: The growth of smart manufacturing presents opportunities for PLC systems to integrate with IoT and AI technologies. This integration supports advanced automation and real-time data processing, driving innovation and enhancing manufacturing efficiency.

Development of Industry-Specific Solutions: Creating PLC solutions tailored to specific industries, such as automotive, pharmaceuticals, and food processing, offers significant growth potential. Customized PLC systems address unique industry needs, providing enhanced functionality and specialized features.

Adoption of Edge Computing: The rise of edge computing provides opportunities for PLC systems to offer localized data processing and analysis. This trend enhances system responsiveness and reduces latency, supporting efficient control in complex industrial environments.

Focus on Energy Efficiency: Developing energy-efficient PLC systems addresses the growing demand for sustainable practices. Solutions with lower power consumption and improved energy management features can reduce operational costs and meet environmental regulations.

Integration with Robotics and AI: Integrating PLC systems with robotics and AI technologies supports advanced automation applications. This trend enhances the capabilities of PLC systems, driving innovation and improving efficiency in various industrial processes.

These growth opportunities highlight key areas where PLC solutions can drive innovation and efficiency. By focusing on smart manufacturing, industry-specific solutions, edge computing, energy efficiency, and integration with robotics and AI, the PLC market is poised for significant advancements and expansion.

+357 96 030922
info@marketpublishers.com

Programmable Logic Controller Market Driver and Challenges

The PLC market is influenced by various technological, economic, and regulatory factors. Understanding the major drivers and challenges is essential for navigating the evolving landscape of industrial automation and driving future growth.

The factors responsible for driving the programmable logic controller market include:

Technological Advancements: Continuous improvements in PLC technology, such as AI, IoT integration, and edge computing, drive market growth by enhancing system capabilities and performance, leading to smarter and more efficient automation solutions.

Increased Demand for Automation: The growing need for automation across industries, including manufacturing and automotive, boosts the PLC market. Automation enhances efficiency, productivity, and accuracy, driving the adoption of advanced PLC systems.

Focus on Industrial IoT Integration: Integrating PLCs with Industrial IoT technologies supports real-time data collection and analysis. This trend drives market growth by enabling more intelligent and connected automation solutions, improving operational efficiency.

Cybersecurity Concerns: The need for robust cybersecurity features to protect against cyber threats influences PLC market development. Advanced security protocols are essential for ensuring the integrity and reliability of automated systems.

Economic Factors and Cost Pressures: Economic factors, including cost pressures and budget constraints, impact the PLC market. Developing cost-effective and scalable solutions is crucial for meeting the needs of various industries while maintaining competitive pricing.

Challenges in the programmable logic controller market are:

Regulatory Compliance: Adhering to regulatory requirements for data security and automation standards presents challenges for PLC manufacturers. Ensuring compliance influences product development and market entry strategies.

+357 96 030922
info@marketpublishers.com

Integration Complexity: The integration of advanced technologies like AI and IoT into PLC systems can be complex and costly. Managing this complexity poses a challenge for manufacturers and users seeking to implement cutting-edge solutions.

Cybersecurity Threats: As PLC systems become more connected, they are increasingly vulnerable to cyber threats. Ensuring robust security measures to protect against data breaches and attacks is a significant challenge.

Technological advancements, increased automation demand, and IoT integration are key drivers for the PLC market, while regulatory compliance, integration complexity, cybersecurity threats, rapid technological changes, and costs are significant challenges. Addressing these factors is crucial for driving growth and innovation in the PLC industry.

List of Programmable Logic Controller Companies

Companies in the market compete on the basis of product quality offered. Major players in this market focus on expanding their manufacturing facilities, R&D investments, infrastructural development, and leverage integration opportunities across the value chain. Through these strategies programmable logic controller companies cater increasing demand, ensure competitive effectiveness, develop innovative products & technologies, reduce production costs, and expand their customer base. Some of the programmable logic controller companies profiled in this report include-

ABB

Delta Electronics

Eaton Corporation

Emerson Electric

Fuji Electric

Hitachi

Honeywell International

+357 96 030922
info@marketpublishers.com

Mitsubishi Electric

OMRON

Panasonic

Programmable Logic Controller by Segment

The study includes a forecast for the global programmable logic controller by type, end use, and region.

Programmable Logic Controller Market by Type [Analysis by Value from 2018 to 2030]:

Hardware & Software

Services

Programmable Logic Controller Market by End Use [Analysis by Value from 2018 to 2030]:

Automotive

Energy & Utilities

Chemical & Petrochemical

Oil & Gas

Pulp & Paper

Pharmaceutical

Water & Wastewater Treatment

Others

+357 96 030922
info@marketpublishers.com

Programmable Logic Controller Market by Region [Analysis by Value from 2018 to 2030]:

North America

Europe

Asia Pacific

The Rest of the World

Country Wise Outlook for the Programmable Logic Controller Market

Major players in the market are expanding their operations and forming strategic partnerships to strengthen their positions. The image below highlights recent developments by major programmable logic controller producers in key regions: the USA, China, India, Japan, and Germany.

United States: In the U.S., PLCs are increasingly integrating with AI and data analytics for advanced predictive maintenance. This development improves operational efficiency by enabling real-time diagnostics and reducing downtime. The focus is on developing smart PLCs that provide deeper insights into system performance and maintenance needs.

China: China's PLC market is seeing growth through cost-effective solutions designed to enhance automation in high-volume manufacturing. New PLC models emphasize affordability while incorporating essential features for Industry 4.0 integration, aiming to boost productivity and efficiency in manufacturing processes.

Germany: In Germany, there is a strong push towards integrating PLCs with Industrial IoT and cybersecurity features. Recent advancements include PLCs with enhanced data processing capabilities and robust security protocols, addressing the need for secure and intelligent automation solutions in precision manufacturing.

India: India’s PLC market is focusing on providing scalable and affordable automation solutions for SMEs. New developments include compact and cost-

+357 96 030922
info@marketpublishers.com

effective PLCs designed to enhance automation in various industrial sectors, promoting wider adoption and improving efficiency in smaller manufacturing setups.

Japan: Japan is advancing PLC technology with high-speed processing and energy-efficient designs. Recent PLC systems are incorporating robotics and AI technologies, improving automation capabilities and addressing the need for intelligent, energy-efficient solutions in highly automated industrial environments.

Features of the Global Programmable Logic Controller Market

Market Size Estimates: Programmable logic controller market size estimation in terms of value ($B).

Trend and Forecast Analysis: Market trends (2018 to 2023) and forecasts (2024 to 2030) by various segments and regions.

Segmentation Analysis: Programmable logic controller market size by type, end use, and region in terms of value ($B).

Regional Analysis: Programmable logic controller market breakdown by North America, Europe, Asia Pacific, and Rest of the World.

Growth Opportunities: Analysis of growth opportunities in different types, end uses, and regions for the programmable logic controller market.

Strategic Analysis: This includes M&A, new product development, and competitive landscape of the programmable logic controller market.

Analysis of competitive intensity of the industry based on Porter’s Five Forces model.

If you are looking to expand your business in this or adjacent markets, then contact us. We have done hundreds of strategic consulting projects in market entry, opportunity screening, due diligence, supply chain analysis, M & A, and more.

This report answers following 11 key questions:

Q.1. What are some of the most promising, high-growth opportunities for the

+357 96 030922
info@marketpublishers.com

programmable logic controller market by type (hardware & software and services), end use (automotive, energy & utilities, chemical & petrochemical, oil & gas, pulp & paper, pharmaceutical, water & wastewater treatment, and others), and region (North America, Europe, Asia Pacific, and the Rest of the World)?

Q.2. Which segments will grow at a faster pace and why?

Q.3. Which region will grow at a faster pace and why?

Q.4. What are the key factors affecting market dynamics? What are the key challenges and business risks in this market?

Q.5. What are the business risks and competitive threats in this market?

Q.6. What are the emerging trends in this market and the reasons behind them?

Q.7. What are some of the changing demands of customers in the market?

Q.8. What are the new developments in the market? Which companies are leading these developments?

Q.9. Who are the major players in this market? What strategic initiatives are key players pursuing for business growth?

Q.10. What are some of the competing products in this market and how big of a threat do they pose for loss of market share by material or product substitution?

Q.11. What M&A activity has occurred in the last 5 years and what has its impact been on the industry?

+357 96 030922
info@marketpublishers.com

Contents

1. EXECUTIVE SUMMARY

2. GLOBAL PROGRAMMABLE LOGIC CONTROLLER MARKET : MARKET DYNAMICS

2.1: Introduction, Background, and Classifications
2.2: Supply Chain
2.3: Industry Drivers and Challenges

3. MARKET TRENDS AND FORECAST ANALYSIS FROM 2018 TO 2030

3.1. Macroeconomic Trends (2018-2023) and Forecast (2024-2030)
3.2. Global Programmable Logic Controller Market Trends (2018-2023) and Forecast (2024-2030)
3.3: Global Programmable Logic Controller Market by Type
  3.3.1: Hardware & Software
  3.3.2: Services
3.4: Global Programmable Logic Controller Market by End Use
  3.4.1: Automotive
  3.4.2: Energy & Utilities
  3.4.3: Chemical & Petrochemical
  3.4.4: Oil & Gas
  3.4.5: Pulp & Paper
  3.4.6: Pharmaceutical
  3.4.7: Water & Wastewater Treatment
  3.4.8: Others

4. MARKET TRENDS AND FORECAST ANALYSIS BY REGION FROM 2018 TO 2030

4.1: Global Programmable Logic Controller Market by Region
4.2: North American Programmable Logic Controller Market
  4.2.1: North American Market by Type: Hardware & Software and Services
  4.2.2: North American Market by End Use: Automotive, Energy & Utilities, Chemical & Petrochemical, Oil & Gas, Pulp & Paper, Pharmaceutical, Water & Wastewater Treatment, and Others
4.3: European Programmable Logic Controller Market

+357 96 030922
info@marketpublishers.com

4.3.1: European Market by Type: Hardware & Software and Services
4.3.2: European Market by End Use: Automotive, Energy & Utilities, Chemical & Petrochemical, Oil & Gas, Pulp & Paper, Pharmaceutical, Water & Wastewater Treatment, and Others
4.4: APAC Programmable Logic Controller Market
4.4.1: APAC Market by Type: Hardware & Software and Services
4.4.2: APAC Market by End Use: Automotive, Energy & Utilities, Chemical & Petrochemical, Oil & Gas, Pulp & Paper, Pharmaceutical, Water & Wastewater Treatment, and Others
4.5: ROW Programmable Logic Controller Market
4.5.1: ROW Market by Type: Hardware & Software and Services
4.5.2: ROW Market by End Use: Automotive, Energy & Utilities, Chemical & Petrochemical, Oil & Gas, Pulp & Paper, Pharmaceutical, Water & Wastewater Treatment, and Others

5. COMPETITOR ANALYSIS

5.1: Product Portfolio Analysis
5.2: Operational Integration
5.3: Porter’s Five Forces Analysis

6. GROWTH OPPORTUNITIES AND STRATEGIC ANALYSIS

6.1: Growth Opportunity Analysis
6.1.1: Growth Opportunities for the Global Programmable Logic Controller Market by Type
6.1.2: Growth Opportunities for the Global Programmable Logic Controller Market by End Use
6.1.3: Growth Opportunities for the Global Programmable Logic Controller Market by Region
6.2: Emerging Trends in the Global Programmable Logic Controller Market
6.3: Strategic Analysis
6.3.1: New Product Development
6.3.2: Capacity Expansion of the Global Programmable Logic Controller Market
6.3.3: Mergers, Acquisitions, and Joint Ventures in the Global Programmable Logic Controller Market
6.3.4: Certification and Licensing

7. COMPANY PROFILES OF LEADING PLAYERS

+357 96 030922
info@marketpublishers.com

7.1: ABB
7.2: Delta Electronics
7.3: Eaton Corporation
7.4: Emerson Electric
7.5: Fuji Electric
7.6: Hitachi
7.7: Honeywell International
7.8: Mitsubishi Electric
7.9: OMRON
7.10: Panasonic

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Programmable Logic Controller Market Report: Trends, Forecast and Competitive Analysis to 2030

Product link: https://marketpublishers.com/r/P7B718A5DBE7EN.html

Price: US$ 4,850.00 (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/P7B718A5DBE7EN.html