

# **Global Automation and Instrumentation in Power Market Size Study, by Solution (Advanced Process Control (APC), Distributed Control System (DCS), Human Machine Interaction (HMI), Manufacturing Execution System (MES), Programmable Logic Controller (PLC), Safety Automation, Supervisory Control and Data Acquisition (SCADA)), by Instrument (Field Instruments, Process Analyzers) and Regional Forecasts 2022-2032**

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## **Abstracts**

Global Automation and Instrumentation in Power Market was valued at approximately USD 30.12 billion in 2023, and it is anticipated to grow at a CAGR of 7.34% over the forecast period 2024-2032. Automation and instrumentation in power systems involve the integration of advanced technologies designed to enhance the efficiency, reliability, and safety of electrical power production, transmission, and distribution. Automation utilizes control systems, sensors, and sophisticated software algorithms to automatically monitor and control various aspects of electricity generation and distribution, thereby reducing human intervention and minimizing errors.

The Global Automation and Instrumentation in Power Market is driven by rising power demand and strategic initiatives towards upgradation of ageing infrastructure across the world. Increasing demand for power and strategic initiatives aimed at modernizing ageing infrastructure. As global populations expand and economies develop, there is a corresponding rise in electricity consumption across residential, commercial, and industrial sectors. This surge in power demand necessitates efficient management and control of power generation, transmission, and distribution systems, thereby driving the adoption of automation and instrumentation technologies. In addition, regulatory

mandates and incentives aimed at promoting sustainable energy practices are also influencing market dynamics. Governments and utilities worldwide are increasingly investing in smart grid technologies and digital transformation initiatives to achieve energy efficiency targets and integrate renewable energy sources seamlessly into the grid. However, high initial investment costs and technical complexity is going to impede the overall demand for the market during the forecast period 2024-2032.

The key regions considered for the Global Automation and Instrumentation in Power Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. In 2023, Asia-Pacific was the dominating among regional market in terms of revenue owing to factors such as surge in power demand driven by population growth, industrialization, and the increasing adoption of electric vehicles and heating systems across the region. This heightened demand has compelled power utilities to upgrade their infrastructure and operations, resulting in significant investments in automation and instrumentation technologies. Furthermore, the market in North America is anticipated to develop at the fastest rate over the forecast period 2024-2032.

Major market players included in this report are:

Emerson Process Management

Danaher Industrial Ltd

ABB

Rockwell Automation, Inc.

Omron Automation

Siemens

Honeywell Process Solutions

Mitsubishi Electric

Schneider Electric

Yokogawa Electric

The detailed segments and sub-segment of the market are explained below:

By Solution:

- Advanced Process Control (APC)
- Distributed Control System (DCS)
- Human Machine Interaction (HMI)
- Manufacturing Execution System (MES)
- Programmable Logic Controller (PLC)
- Safety Automation
- Supervisory Control and Data Acquisition (SCADA)

By Instrument:

- Field Instruments
- Process Analyzers

**By Region:****North America**

- U.S.
- Canada

**Europe**

- UK
- Germany
- France
- Spain
- Italy
- ROE

**Asia Pacific**

- China
- India
- Japan
- Australia
- South Korea
- RoAPAC

**Latin America**

- Brazil
- Mexico

**Middle East & Africa**

- Saudi Arabia
- South Africa
- RoMEA

**Years considered for the study are as follows:**

- Historical year – 2022
- Base year – 2023
- Forecast period – 2024 to 2032

**Key Takeaways:**

- Market Estimates & Forecast for 10 years from 2022 to 2032.
- Annualized revenues and regional level analysis for each market segment.
- Detailed analysis of geographical landscape with Country level analysis of major regions.
- Competitive landscape with information on major players in the market.
- Analysis of key business strategies and recommendations on future market approach.
- Analysis of competitive structure of the market.
- Demand side and supply side analysis of the market

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