

SCADA Market by Component (Programmable Logic Controller (PLC), Remote Terminal Unit (RTU), Human-Machine Interface (HMI), Communication Systems, I/O Devices, Storage Servers, Supervisory Systems), Offering, End User and Region - Global Forecast to 2029

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# **Abstracts**

The global SCADA market size is anticipated to grow from USD 11.2 billion in 2024 to USD 16.6 billion by 2029, at a CAGR of 8.3% from 2024 to 2029. The growth of the SCADA market is being driven by the increasing importance of real-time data analysis for process optimization and predictive maintenance, alongside the rising adoption of IoT technologies in manufacturing industries. Real-time data enables proactive decision-making to enhance operational efficiency and reduce downtime, while IoT integration extends SCADA capabilities, enabling seamless monitoring and control of critical processes. This synergy between real-time data analytics and IoT-enabled SCADA solutions is driving substantial market growth as manufacturing enterprises prioritize efficiency gains and operational resilience.

"RTU component to account for the largest share of the SCADA market in 2023."

RTUs are tasked with collecting data from various sources, encoding it into a format suitable for transmission, and facilitating its transfer to the central system. Multiple RTUs are typically deployed within a SCADA infrastructure to fulfil these functions effectively. The escalating demand for RTUs is notably driven by sectors such as deep-sea exploration, extraction activities, and shale gas exploration, primarily due to the substantial reliance of these industries on SCADA systems. Among the significant end-user industries, the oil and gas sector stand out as a primary beneficiary of RTU



technology within SCADA deployments.

"Services segment captured largest market share of SCADA in 2023."

Maintenance and modification services are essential for the upkeep and enhancement of SCADA systems, encompassing tasks such as bolstering security measures and implementing the latest updates pertinent to system functionality. Presently, there exists a prominent surge in demand for tailored modification services tailored to specific applications, leading to an expansion of service offerings within the domain. These services encompass a spectrum of functions, including SCADA system optimization, adherence to regulatory requirements, assistance with re-commissioning or system restart procedures, as well as support for legacy system maintenance and migration initiatives. Cybersecurity concerns loom large in industries such as oil and gas, where the potential impact of cyber threats is particularly pronounced. Consequently, cybersecurity services have significant importance within these sectors, reflecting a heightened focus on safeguarding critical infrastructure and mitigating cyber risks.

"Asia Pacific is expected to grow at the highest CAGR in the SCADA market during 2024-2029."

This highest growth is attributed towards the region's expanding population, the maturation of its economies, all of which drive an increased demand for energy resources. As industries across Asia Pacific strive for heightened efficiency and productivity, automation solutions are becoming increasingly indispensable to meet the demand for high-quality products and ramp up production capacities. Consequently, the escalating energy requirements are expected to catalyse growth within the energy sector, encompassing key industries such as oil & gas and power generation. This, in turn, will stimulate demand for automation technologies, including SCADA systems, across the Asia Pacific region, reflecting a broader industry shift towards enhanced operational efficiency and competitiveness.

Break-up of the profiles of primary participants:

By Company Type – Tier 1 – 45%, Tier 2 – 35%, and Tier 3 – 20%

By Designation – C-level Executives – 45%, Directors – 30%, and Others – 25%

By Region – North America - 45%, Europe – 25%, Asia Pacific – 20%, and RoW – 10%



#### Key players profiled in this report

Schneider Electric (France), Siemens (Germany), ABB (Switzerland), Emerson Electric Co. (US), Rockwell Automation (US) are the key players in the SCADA market. These leading companies possess a robust portfolio of products and services, establishing a strong presence in established and emerging markets. The study provides a comprehensive competitive analysis of these key players in the SCADA market, presenting their company profiles, recent developments, and key market strategies.

#### **Research Coverage**

This report offers detailed insights into the SCADA market based on Offering (Hardware, Software, Services), End User (Process Industries, Discrete Manufacturing, Utilities), Component (Programmable Logic Controller, Remote Terminal Unit, Human-Machine Interface, Communication Systems, Others), and Region (North America, Europe, Asia Pacific, and Rest of the World which includes the South America, Middle East and Africa and Africa.

The report also comprehensively reviews the SCADA market drivers, restraints, opportunities, and challenges. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to buy the report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the SCADA market's pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Surging adoption of Industry 4.0 in manufacturing and process industries, Accelerating deployment of AI and lot across manufacturing industries, Rising implementation of industrial mobility solutions, Growing



number of smart city projects, Increasing government support for SCADA adoption), restraints (High installation and maintenance costs of SCADA systems, Complexity and customization of SCADA systems), opportunities (Rapid developments in wireless sensor networks, Transition from on-premises to cloud-based SCADA systems, Integration of SCADA systems with big data analytics, Increasing adoption of SCADA in transportation, smart buildings, and agriculture) and challenges (Susceptibility of SCADA systems to cyberattacks, Communication protocol incompatibility).

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the SCADA market

Market Development: Comprehensive information about lucrative markets – the report analyses the SCADA market across varied regions

Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the SCADA market

Competitive Assessment: In-depth assessment of market shares, growth strategies, and product offerings of leading players like Schneider Electric (France), Siemens (Germany), ABB (Switzerland), Emerson Electric Co. (US), Rockwell Automation (US) among others.



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# About

Supervisory control and data acquisition (SCADA) is an automation system that operates to provide control of the remote devices and also to acquire data from these devices. It is a type of Industrial Control System (ICS), which are computer controlled systems that monitor and control industrial processes on real time basis. Various advanced features such as remote monitoring, remote controlling, and real-time data management are the core features of the SCADA system. It has been observed that SCADA is largely used with oil and gas, power (transmission and distribution), and water and wastewater management industries throughout the geographies.

With the recent developments in shale gas extraction and exploration, the demand for SCADA is expected to increase at a higher growth rate. Fracking technology is used to extract the shale gas and requires a lot of water and chemicals. This leads to huge requirements of wastewater treatment opportunities.

The benefits of SCADA system include reduced labor cost, increased uptime, quality production, accurate quantity measurement, and real time data, which make operations accurate. With the changing technology, the development in the field devices (wireless) will be an innovation for the next generation SCADA systems. The displaying and recording of the various process details in smart phones and capturing the real time information through satellites can be expected from the next generation SCADA systems.

The SCADA market is segmented in terms of components which include programmable logic controller (PLC), remote terminal unit (RTU), human machine interface (HMI), and communication system. The report is also segmented in terms of various applications which include oil and gas, power (transmission and distribution), water and wastewater management, transportation, manufacturing, chemicals, food and beverages, telecommunication, and pharmaceuticals. The SCADA Market is further segmented according to architecture, which includes hardware architecture, software architecture, services; and geography, which includes different regions such as the Americas, Europe, APAC, and Rest of the World (RoW). The cross segmentation data included in the report gives a deep insight about the applications specific for the regional markets.

Major players in SCADA market include ABB Ltd (Switzerland), Rockwell Automation (U.S.), and Siemens AG (Germany).



### I would like to order

Product name: SCADA Market by Component (Programmable Logic Controller (PLC), Remote Terminal Unit (RTU), Human-Machine Interface (HMI), Communication Systems, I/O Devices, Storage Servers, Supervisory Systems), Offering, End User and Region - Global Forecast to 2029

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