

# **Global Substation Automation Market Size study & Forecast, by Module (SCADA, IED, Communication Network Technology), by Component (Reclose Controller, Programmable Logical Controller, Others), by Communication Channel (Ethernet, Power Line Communication, Copper Wire Communication, Optical Fiber Communication) and Regional Analysis, 2023-2030**

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## **Abstracts**

Global Substation Automation Market is valued at approximately USD 154,876 million in 2022 and is anticipated to grow with a healthy growth rate of more than 5.5% over the forecast period 2023-2030. Substation Automation refers to the integration of various control, protection, and monitoring functions within an electrical substation through advanced technologies and communication systems. The goal of substation automation is to enhance the efficiency, reliability, and safety of power distribution and management. The Substation Automation market is expanding because of factors such as increasing demand for electric and hybrid vehicles and rapid urbanization. As a result, the demand for Substation Automation has progressively increased in the international market during the forecast period 2023-2030.

Electric vehicles require charging infrastructure, which places additional demands on the electrical grid. Substation automation helps manage the increased power demand by optimizing energy distribution, load balancing, and scheduling charging times to prevent grid overloads. According to Statista, it is estimated that 2022 saw plug-in electric light sales of around 10.2 million units. Furthermore, about 2.9 million new plug-in hybrid electric cars were sold worldwide in 2022. Plug-in hybrid electric vehicle sales

accounted for around 28.4% of electric vehicle sales in 2022. Another important factor that drives the Substation Automation market is rapid urbanization. Urban areas experience higher population densities and economic activities, leading to greater energy consumption. Substation automation helps utilities manage the increased demand by optimizing energy distribution, load balancing, and improving grid efficiency. In addition, as per Statista, high-income countries are projected to have 88.4% of their populations living in urban areas by 2050. Moreover, rising demand for electric power and growing investments in renewable energy projects are anticipated to create lucrative growth opportunities for the market over the forecast period. However, the high initial cost of Substation Automation and technical complexity are going to impede overall market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Substation Automation Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the increasing popularity and adoption of advanced intelligent electronic devices & communication technologies in the region. The region's dominant performance is anticipated to propel the overall demand for Substation Automation. Furthermore, Asia Pacific is anticipated to grow fastest over the forecast period, owing to factors such as increasing demand for rural electrification and adoption of equipment facilitating safety and better operation of the substation in the region.

Major market player included in this report are:

Ingeteam S.A.

ABB Ltd

Schneider Electric SE

Siemens AG

Amperion Inc

GE Grid Solutions

Cisco Systems Inc

Eaton Technologies Pvt. Ltd

Honeywell International Inc

Schweitzer Engineering Laboratories, Inc

Recent Developments in the Market:

In June 2023, Siemens Smart Infrastructure has introduced the SICAM 8 power automation platform, which is highly scalable. The platform, is designed with scalability and security in mind, assists clients in achieving resilient and secure grid operation while allowing for the introduction of additional applications in the future. It also includes two new software solutions: the SICAM Human Machine Interface visualisation tool and the SICAM S8000 software solution for power automation. It is part of the Siemens Xcelerator portfolio, an open digital platform that allows customers to accelerate their digital transformation more easily, quickly, and at scale.

Global Substation Automation Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered - Module, Component, Communication Channel, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Module

SCADA

IED

Communication Network Technology

By Component

Reclose Controller

Programmable Logical Controller

Capacitor Bank Controller

Digital Transducer/Smart Meter

Load Tap Controller

Communication Channel

Digital Relays

Others

By Communication Channel

Ethernet

Power Line Communication

Copper Wire Communication

Optical Fiber Communication

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

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Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

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