

Global Smart Grid Communications Market Size Study & Forecast, by Components, Technology, End-User and Regional Forecasts 2025-2035

https://marketpublishers.com/r/GCF3ECF40D17EN.html

Date: June 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: GCF3ECF40D17EN

Abstracts

The Global Smart Grid Communications Market is valued at approximately USD 41.44 billion in 2024 and is expected to surge at a compound annual growth rate (CAGR) of over 12.75% during the forecast period of 2025 to 2035. Smart grid communications serve as the lifeline of modern electrical grids by enabling real-time, two-way communication between utilities and consumers. These systems enhance operational efficiency, reliability, and energy sustainability by leveraging advanced technologies such as Internet of Things (IoT), Artificial Intelligence (AI), and data analytics. The continual rise in electricity demand, mounting environmental concerns, and the global shift towards decentralized energy production have collectively compelled governments and utilities to adopt intelligent grid infrastructure — thereby catalyzing demand for smart grid communication solutions worldwide.

The escalating emphasis on grid modernization has been pivotal in accelerating the adoption of robust communication frameworks across electric utilities. Key industry players are harnessing both wired and wireless technologies to support fault detection, energy load balancing, remote monitoring, and demand-response capabilities. According to a 2023 report from the International Energy Agency (IEA), smart grid investments reached new heights, with over \$35 billion funneled globally towards communication and automation upgrades. Furthermore, the need to integrate renewable energy sources, electric vehicles (EVs), and energy storage systems into existing grids has intensified the requirement for reliable, low-latency communication platforms — propelling the market's trajectory. However, persistent challenges such as cybersecurity threats, high deployment costs, and interoperability issues continue to temper market expansion across some developing regions.



Regionally, North America commanded a dominant share of the Smart Grid Communications Market in 2024, bolstered by aggressive grid digitalization projects in the U.S. and Canada, favorable regulatory frameworks, and sustained investment by utility giants. Europe closely follows, backed by the EU's decarbonization agenda and smart meter rollouts. Meanwhile, Asia Pacific is poised to exhibit the fastest CAGR throughout the forecast timeline, driven by rapid urbanization, government-backed electrification programs, and expanding smart city initiatives in populous nations such as China, India, and South Korea. Latin America and the Middle East & Africa are also gradually emerging as lucrative markets, supported by improving grid infrastructure and international funding for energy access programs.

Major market player included in this report are: Honeywell International Inc. ABB Ltd. Siemens AG Cisco Systems, Inc. General Electric Company Itron Inc. Schneider Electric SE Nokia Corporation Toshiba Corporation Ericsson AB Trilliant Holdings Inc. Sensus (Xylem Inc.)

IBM Corporation



Qualcomm Technologies, Inc.

Oracle Corporation

Global Smart Grid Communications Market Report Scope:

Historical Data – 2023, 2024

Base Year for Estimation - 2024

Forecast period - 2025-2035

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

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

Customization Scope - Free report customization (equivalent up to 8 analysts' 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 for the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within the countries involved in the study. The report also provides detailed information about crucial aspects, such as driving factors and challenges, which will define the future growth of the market. Additionally, it incorporates potential opportunities in micro-markets for stakeholders to invest, along with a detailed analysis of the competitive landscape and product offerings of key players. The detailed segments and sub-segments of the market are explained below:

By Components:

Hardware

Software



	Services	
By Technology:		
	Wired	
	Wireless	
By End-User:		
•	Residential	
	Corporate	
	Government	
By Region:		
North America		
	U.S.	
	Canada	
Europe		
	UK	
	Germany	
	France	
	Spain	



	Italy	
	Rest of Europe	
Asia Pacific		
	China	
	India	
	Japan	
	Australia	
	South Korea	
	Rest of Asia Pacific	
Latin America		
	Brazil	
	Mexico	
Middle East & Africa		
	UAE	
	Saudi Arabia	
	South Africa	
	Rest of Middle East & Africa	



Market Estimates & Forecast for 10 years from 2025 to 2035.

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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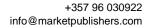


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