+357 96 030922
info@marketpublishers.com

Power Metering Market ? Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By End-User (Residential, Commercial, and Industrial), By Type (Analog Meters, Digital Meters, and Smart Meters), By Phase (Single Phase, Three Phase), By Region & Competition, 2021-2031F

https://marketpublishers.com/r/PC41014E9E94EN.html
Date: January 2026
Pages: 180
Price: US$ 4,500.00 (Single User License)
ID: PC41014E9E94EN

Abstracts

The Global Power Metering Market is projected to expand from USD 24.27 Billion in 2025 to USD 36.36 Billion by 2031, achieving a CAGR of 6.97%. Power metering involves the exact measurement and tracking of electrical energy metrics, including voltage, current, and total consumption, to ensure accurate billing and effective resource allocation. The market is largely driven by the urgent global requirement for grid modernization and the growing incorporation of renewable energy sources, which demand real-time data to uphold network stability. This transition is bolstered by significant financial investments from utility sectors focused on updating aging infrastructure; for example, the Edison Electric Institute reported that in 2024, U.S. investor-owned electric companies invested a record $178.2 billion to create a smarter, stronger, and cleaner energy grid.

Despite these strong drivers, the market encounters a major hurdle due to the substantial upfront capital needed for widespread deployment. The high costs associated with replacing legacy systems and installing advanced metering infrastructure can discourage utility providers, particularly in markets that are sensitive to costs. Additionally, the difficulty of ensuring interoperability among diverse systems and mitigating emerging cybersecurity threats presents a significant barrier that could slow down comprehensive market expansion on a global scale.

+357 96 030922
info@marketpublishers.com

Market Driver

Government regulations promoting energy efficiency and the rollout of smart meters act as the primary catalyst for market growth. Legislative bodies around the world are enforcing strict deadlines for the shift from analog to Advanced Metering Infrastructure (AMI) to improve billing precision, lower carbon footprints, and enhance demand-side management. These regulatory frameworks require utilities to replace legacy systems with intelligent, communicating assets that align with national sustainability goals, effectively driving market penetration in both mature and developing economies. For instance, a November 2024 report by the Department for Energy Security and Net Zero titled 'Smart Meter Statistics in Great Britain' indicated that there were 37 million smart and advanced meters active in homes and small businesses, accounting for 65% of all meters in the region.

The growth of smart grid infrastructure and modernization projects significantly fuels the demand for precise metering technologies. As utilities integrate decentralized renewable energy sources like wind and solar, they require real-time data to maintain network stability and manage bidirectional power flows. This operational change necessitates the deployment of advanced metering solutions to handle the complexities of a modern, digitized grid. According to the International Energy Agency's 'World Energy Investment 2024' report from June 2024, global spending on electricity grids is expected to reach $400 billion in 2024, largely to support these clean energy transitions. Furthermore, federal initiatives are reinforcing this trend; the U.S. Department of Energy announced in 2024 nearly $2 billion in funding for 38 projects specifically designed to protect the grid and increase capacity.

Market Challenge

The significant upfront capital required for deployment serves as a primary constraint on the Global Power Metering Market. Utility providers face heavy financial obligations when transitioning from legacy analog systems to Advanced Metering Infrastructure (AMI). This expenditure includes not only the procurement of sophisticated hardware but also the substantial costs associated with installation, backend software integration, and the maintenance of communication networks. Consequently, these high initial expenses deter decision-makers, particularly in cost-sensitive regions where budget constraints often take precedence over long-term modernization goals, leading to deferred upgrades and prolonged project timelines.

The economic burden is further intensified by the disparity in financing costs across

different geographies, which directly hampers the ability of utilities to secure funding. According to the International Energy Agency, in 2024, the cost of capital for grid and clean energy projects in emerging and developing economies was at least twice as high as in advanced economies. This financial discrepancy limits the borrowing capacity of operators in these regions, making capital-intensive metering projects economically unviable. As a result, the market experiences uneven growth, with significant delays in widespread implementation in areas where capital resources are scarce.

Market Trends

The evolution to Advanced Metering Infrastructure (AMI) 2.0 is redefining the market by integrating Artificial Intelligence and Machine Learning directly at the grid edge. Unlike legacy systems focused primarily on billing data, these next-generation platforms leverage edge computing to process real-time waveforms and detect network anomalies instantly. This capability enables utilities to execute predictive maintenance and manage distributed energy resources with high precision, significantly reducing the data load on central servers. Underscoring this technological priority, Itron reported in its '2024 Resourcefulness Insight Report' from October 2024 that 82% of utility executives surveyed are in the process of adopting AI and machine learning tools, primarily to enhance grid safety and operational resilience.

Simultaneously, the adoption of Cellular IoT connectivity, including NB-IoT and 5G, is rapidly replacing proprietary radio frequency mesh networks. Utilities are increasingly utilizing public carrier networks to minimize the substantial capital costs and maintenance burdens associated with deploying private communication infrastructure. This strategic shift ensures superior signal penetration for meters located in deep indoor or rural locations and provides the low-latency communication required for modern grid management. Evidencing this trend, Airtel confirmed in a January 2024 press release regarding a strategic partnership with Adani Energy Solutions that it has a mandate to connect over 20 million smart meters using its NB-IoT technology for real-time energy monitoring.

Key Market Players

Eaton Corporation PLC

Kamstrup A/S

Siemens AG

Aclara Technologies LLC

General Electric Company

Holley Technology LTD

Elster Group GmbH

Landis+Gyr

Schneider Electric

Sensus USA Inc.

Report Scope

In this report, the Global Power Metering Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Power Metering Market, By End-User

- Residential
- Commercial
- Industrial

Power Metering Market, By Type

- Analog Meters
- Digital Meters
- Smart Meters

Power Metering Market, By Phase

+357 96 030922
info@marketpublishers.com

- Single Phase
- Three Phase

Power Metering Market, By Region

- North America
  - United States
  - Canada
  - Mexico
- Europe
  - France
  - United Kingdom
  - Italy
  - Germany
  - Spain
- Asia Pacific
  - China
  - India
  - Japan
  - Australia
  - South Korea
- South America

+357 96 030922
info@marketpublishers.com

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Power Metering Market.

Available Customizations:

Global Power Metering Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

1. PRODUCT OVERVIEW

1.1. Market Definition
1.2. Scope of the Market
  1.2.1. Markets Covered
  1.2.2. Years Considered for Study
  1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

2.1. Objective of the Study
2.2. Baseline Methodology
2.3. Key Industry Partners
2.4. Major Association and Secondary Sources
2.5. Forecasting Methodology
2.6. Data Triangulation & Validation
2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

3.1. Overview of the Market
3.2. Overview of Key Market Segmentations
3.3. Overview of Key Market Players
3.4. Overview of Key Regions/Countries
3.5. Overview of Market Drivers, Challenges, Trends

4. VOICE OF CUSTOMER

5. GLOBAL POWER METERING MARKET OUTLOOK

5.1. Market Size & Forecast
  5.1.1. By Value
5.2. Market Share & Forecast
  5.2.1. By End-User (Residential, Commercial, Industrial)
  5.2.2. By Type (Analog Meters, Digital Meters, Smart Meters)
  5.2.3. By Phase (Single Phase, Three Phase)
  5.2.4. By Region

+357 96 030922
info@marketpublishers.com

5.2.5. By Company (2025)
5.3. Market Map

6. NORTH AMERICA POWER METERING MARKET OUTLOOK

6.1. Market Size & Forecast
6.1.1. By Value
6.2. Market Share & Forecast
6.2.1. By End-User
6.2.2. By Type
6.2.3. By Phase
6.2.4. By Country
6.3. North America: Country Analysis
6.3.1. United States Power Metering Market Outlook
6.3.1.1. Market Size & Forecast
6.3.1.1.1. By Value
6.3.1.2. Market Share & Forecast
6.3.1.2.1. By End-User
6.3.1.2.2. By Type
6.3.1.2.3. By Phase
6.3.2. Canada Power Metering Market Outlook
6.3.2.1. Market Size & Forecast
6.3.2.1.1. By Value
6.3.2.2. Market Share & Forecast
6.3.2.2.1. By End-User
6.3.2.2.2. By Type
6.3.2.2.3. By Phase
6.3.3. Mexico Power Metering Market Outlook
6.3.3.1. Market Size & Forecast
6.3.3.1.1. By Value
6.3.3.2. Market Share & Forecast
6.3.3.2.1. By End-User
6.3.3.2.2. By Type
6.3.3.2.3. By Phase

7. EUROPE POWER METERING MARKET OUTLOOK

7.1. Market Size & Forecast
7.1.1. By Value

+357 96 030922
info@marketpublishers.com

7.2. Market Share & Forecast
7.2.1. By End-User
7.2.2. By Type
7.2.3. By Phase
7.2.4. By Country
7.3. Europe: Country Analysis
7.3.1. Germany Power Metering Market Outlook
7.3.1.1. Market Size & Forecast
7.3.1.1.1. By Value
7.3.1.2. Market Share & Forecast
7.3.1.2.1. By End-User
7.3.1.2.2. By Type
7.3.1.2.3. By Phase
7.3.2. France Power Metering Market Outlook
7.3.2.1. Market Size & Forecast
7.3.2.1.1. By Value
7.3.2.2. Market Share & Forecast
7.3.2.2.1. By End-User
7.3.2.2.2. By Type
7.3.2.2.3. By Phase
7.3.3. United Kingdom Power Metering Market Outlook
7.3.3.1. Market Size & Forecast
7.3.3.1.1. By Value
7.3.3.2. Market Share & Forecast
7.3.3.2.1. By End-User
7.3.3.2.2. By Type
7.3.3.2.3. By Phase
7.3.4. Italy Power Metering Market Outlook
7.3.4.1. Market Size & Forecast
7.3.4.1.1. By Value
7.3.4.2. Market Share & Forecast
7.3.4.2.1. By End-User
7.3.4.2.2. By Type
7.3.4.2.3. By Phase
7.3.5. Spain Power Metering Market Outlook
7.3.5.1. Market Size & Forecast
7.3.5.1.1. By Value
7.3.5.2. Market Share & Forecast
7.3.5.2.1. By End-User

+357 96 030922
info@marketpublishers.com

7.3.5.2.2. By Type
7.3.5.2.3. By Phase

8. ASIA PACIFIC POWER METERING MARKET OUTLOOK

8.1. Market Size & Forecast
8.1.1. By Value
8.2. Market Share & Forecast
8.2.1. By End-User
8.2.2. By Type
8.2.3. By Phase
8.2.4. By Country
8.3. Asia Pacific: Country Analysis
8.3.1. China Power Metering Market Outlook
8.3.1.1. Market Size & Forecast
8.3.1.1.1. By Value
8.3.1.2. Market Share & Forecast
8.3.1.2.1. By End-User
8.3.1.2.2. By Type
8.3.1.2.3. By Phase
8.3.2. India Power Metering Market Outlook
8.3.2.1. Market Size & Forecast
8.3.2.1.1. By Value
8.3.2.2. Market Share & Forecast
8.3.2.2.1. By End-User
8.3.2.2.2. By Type
8.3.2.2.3. By Phase
8.3.3. Japan Power Metering Market Outlook
8.3.3.1. Market Size & Forecast
8.3.3.1.1. By Value
8.3.3.2. Market Share & Forecast
8.3.3.2.1. By End-User
8.3.3.2.2. By Type
8.3.3.2.3. By Phase
8.3.4. South Korea Power Metering Market Outlook
8.3.4.1. Market Size & Forecast
8.3.4.1.1. By Value
8.3.4.2. Market Share & Forecast
8.3.4.2.1. By End-User

8.3.4.2.2. By Type
8.3.4.2.3. By Phase
8.3.5. Australia Power Metering Market Outlook
8.3.5.1. Market Size & Forecast
8.3.5.1.1. By Value
8.3.5.2. Market Share & Forecast
8.3.5.2.1. By End-User
8.3.5.2.2. By Type
8.3.5.2.3. By Phase

9. MIDDLE EAST & AFRICA POWER METERING MARKET OUTLOOK

9.1. Market Size & Forecast
9.1.1. By Value
9.2. Market Share & Forecast
9.2.1. By End-User
9.2.2. By Type
9.2.3. By Phase
9.2.4. By Country
9.3. Middle East & Africa: Country Analysis
9.3.1. Saudi Arabia Power Metering Market Outlook
9.3.1.1. Market Size & Forecast
9.3.1.1.1. By Value
9.3.1.2. Market Share & Forecast
9.3.1.2.1. By End-User
9.3.1.2.2. By Type
9.3.1.2.3. By Phase
9.3.2. UAE Power Metering Market Outlook
9.3.2.1. Market Size & Forecast
9.3.2.1.1. By Value
9.3.2.2. Market Share & Forecast
9.3.2.2.1. By End-User
9.3.2.2.2. By Type
9.3.2.2.3. By Phase
9.3.3. South Africa Power Metering Market Outlook
9.3.3.1. Market Size & Forecast
9.3.3.1.1. By Value
9.3.3.2. Market Share & Forecast
9.3.3.2.1. By End-User

9.3.3.2.2. By Type
9.3.3.2.3. By Phase

10. SOUTH AMERICA POWER METERING MARKET OUTLOOK

10.1. Market Size & Forecast
10.1.1. By Value
10.2. Market Share & Forecast
10.2.1. By End-User
10.2.2. By Type
10.2.3. By Phase
10.2.4. By Country
10.3. South America: Country Analysis
10.3.1. Brazil Power Metering Market Outlook
10.3.1.1. Market Size & Forecast
10.3.1.1.1. By Value
10.3.1.2. Market Share & Forecast
10.3.1.2.1. By End-User
10.3.1.2.2. By Type
10.3.1.2.3. By Phase
10.3.2. Colombia Power Metering Market Outlook
10.3.2.1. Market Size & Forecast
10.3.2.1.1. By Value
10.3.2.2. Market Share & Forecast
10.3.2.2.1. By End-User
10.3.2.2.2. By Type
10.3.2.2.3. By Phase
10.3.3. Argentina Power Metering Market Outlook
10.3.3.1. Market Size & Forecast
10.3.3.1.1. By Value
10.3.3.2. Market Share & Forecast
10.3.3.2.1. By End-User
10.3.3.2.2. By Type
10.3.3.2.3. By Phase

11. MARKET DYNAMICS

11.1. Drivers
11.2. Challenges

+357 96 030922
info@marketpublishers.com

12. MARKET TRENDS & DEVELOPMENTS

12.1. Merger & Acquisition (If Any)
12.2. Product Launches (If Any)
12.3. Recent Developments

13. GLOBAL POWER METERING MARKET: SWOT ANALYSIS

14. PORTER'S FIVE FORCES ANALYSIS

14.1. Competition in the Industry
14.2. Potential of New Entrants
14.3. Power of Suppliers
14.4. Power of Customers
14.5. Threat of Substitute Products

15. COMPETITIVE LANDSCAPE

15.1. Eaton Corporation PLC
  15.1.1. Business Overview
  15.1.2. Products & Services
  15.1.3. Recent Developments
  15.1.4. Key Personnel
  15.1.5. SWOT Analysis
15.2. Kamstrup A/S
15.3. Siemens AG
15.4. Aclara Technologies LLC
15.5. General Electric Company
15.6. Holley Technology LTD
15.7. Elster Group GmbH
15.8. Landis+Gyr
15.9. Schneider Electric
15.10. Sensus USA Inc.

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Power Metering Market ? Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By End-User (Residential, Commercial, and Industrial), By Type (Analog Meters, Digital Meters, and Smart Meters), By Phase (Single Phase, Three Phase), By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/PC41014E9E94EN.html

Price: US$ 4,500.00 (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/PC41014E9E94EN.html