

Data Center Power Monitoring & Analytics Market Forecasts to 2034 – Global Analysis By Component (Software Solutions and Services), Monitoring Type, Deployment Mode, Application, End User and By Geography

<https://marketpublishers.com/r/D911934E8403EN.html>

Date: February 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: D911934E8403EN

Abstracts

According to Statistics MRC, the Global Data Center Power Monitoring & Analytics Market is accounted for \$2.93 billion in 2026 and is expected to reach \$7.47 billion by 2034 growing at a CAGR of 12.4% during the forecast period. Data Center Power Monitoring & Analytics refers to the systematic collection, analysis, and management of electrical power consumption and related parameters within data centers. It involves deploying hardware such as PDUs, meters, and sensors to track real-time energy usage, environmental conditions, and circuit performance, while software platforms provide dashboards, reporting, and predictive analytics for actionable insights. This integrated approach enables efficient energy management, capacity planning, and asset optimization, while enhancing operational reliability and uptime. By identifying inefficiencies, preventing failures, and supporting sustainability goals, power monitoring and analytics are critical for modern enterprise, colocation, cloud, and hyperscale data centers.

Market Dynamics:

Driver:

Rising Energy Costs and Efficiency Demands

Rising energy costs and the push for operational efficiency are key drivers for the data center power monitoring and analytics market. Data centers are under increasing

pressure to optimize electricity consumption and reduce carbon footprints. By deploying PDUs, meters, and sensors along with analytics platforms, operators can track energy usage in real time, identify inefficiencies, and implement corrective measures. This not only lowers costs but also ensures sustainability, reliability, and uninterrupted operations across enterprise, colocation, cloud, and hyperscale facilities. Thus, it drives market expansion.

Restraint:

High Initial Investment

High initial investment poses a significant restraint on market growth. Implementing advanced monitoring hardware, analytics software, and environmental sensors requires substantial capital expenditure, especially for small and medium-sized data centers. The costs associated with installation, integration with existing infrastructure, and training of personnel further increase financial burdens. Despite the long-term benefits of energy optimization, predictive maintenance, and operational efficiency, the high upfront cost remains a barrier, particularly in developing regions with limited budgets.

Opportunity:

Expansion of Hyperscale and Cloud Data Centers

The expansion of hyperscale and cloud data centers presents a significant growth opportunity. Increasing adoption of AI and cloud computing workloads demands reliable power monitoring and analytics solutions. These infrastructures require real-time energy tracking, predictive maintenance, and capacity planning to ensure operational continuity. Rising investments in scalable, energy-efficient, and sustainable data centers create opportunities for hardware and software providers, enabling advanced analytics solutions that optimize performance, reduce costs, and enhance uptime across enterprise, colocation, and hyperscale facilities.

Threat:

Data Security Concerns

Data security concerns pose a notable threat to market adoption. Power monitoring and analytics systems, particularly cloud-based platforms, collect vast amounts of operational data, which can be vulnerable to cyberattacks if not properly secured.

Unauthorized access or breaches may compromise sensitive infrastructure information, leading to potential service disruptions and financial losses. Ensuring secure data transmission, encryption, and access controls is essential, but security challenges may slow adoption, particularly for enterprises and smaller operators wary of exposing critical operational data.

Covid-19 Impact:

The COVID-19 pandemic accelerated demand for data center power monitoring and analytics due to the surge in remote work, cloud adoption, and digital services. While initial lockdowns and supply chain disruptions temporarily slowed hardware deployment, the need for real-time energy tracking, predictive maintenance, and operational efficiency became more critical. Organizations prioritized scalable, reliable, and secure monitoring solutions to ensure uninterrupted data center operations and support the rapid growth of enterprise, hyperscale, and cloud workloads.

The circuit monitoring segment is expected to be the largest during the forecast period

The circuit monitoring segment is expected to account for the largest market share during the forecast period, due to its critical role in ensuring reliable power distribution within data centers. Circuit monitoring systems track real-time electrical parameters, prevent overloads, and maintain operational continuity. By providing visibility into energy consumption and system performance, these solutions help reduce downtime, optimize energy usage, and support predictive maintenance. Their widespread adoption across enterprise, cloud, and hyperscale data centers positions circuit monitoring as the dominant component in the market.

The asset management segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the asset management segment is predicted to witness the highest growth rate, due to need for optimized utilization of IT and power infrastructure. Advanced analytics solutions enable monitoring, tracking, and managing servers and power systems efficiently. Organizations leverage these insights to improve operational efficiency, reduce maintenance costs, and plan capacity effectively. Rising adoption of cloud, hyperscale, and AI-driven data centers accelerates demand for sophisticated asset management tools, making this the fastest-growing application in the data center power monitoring and analytics market.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, due to strong presence of hyperscale cloud providers, and early adoption of advanced monitoring solutions. Enterprises and colocation providers prioritize operational reliability and sustainability, driving investments in PDUs, meters, sensors, and analytics platforms. Established IT infrastructure, supportive regulations, and a skilled workforce reinforce North America's dominance, enabling widespread deployment of real-time monitoring and asset management solutions across enterprise, cloud, and hyperscale data centers.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, owing to rapid digital transformation and hyperscale data center expansion. Countries such as China, India, Japan, and South Korea are investing heavily in power monitoring and analytics solutions to ensure energy efficiency, operational continuity, and scalable infrastructure. Rising adoption of AI, big data, and edge computing workloads further fuels the demand. Government initiatives and a developing technology ecosystem position Asia Pacific as the fastest-growing region for data center power monitoring and analytics solutions.

Key players in the market

Some of the key players in Data Center Power Monitoring & Analytics Market include Schneider Electric, Johnson Controls International plc, Eaton Corporation, Honeywell International Inc., ABB Ltd., IBM Corporation, Siemens AG, FNT GmbH, Vertiv Holdings Co., Socomec Group, Cisco Systems, Inc., Panduit Corp., Delta Electronics, Inc., Huawei Technologies Co., Ltd. and Emerson Electric Co.

Key Developments:

In October 2025, IBM and AMD announced a strategic collaboration to deliver one of the largest next-generation AI training infrastructures by deploying a massive AMD GPU cluster on IBM Cloud for Zephyra, enabling advanced multimodal AI model development and scaling foundation model capabilities.

In January 2025, IBM and Telefónica Tech signed a strategic collaboration to integrate IBM's quantum-safe cryptography into Telefónica Tech's cybersecurity services,

developing solutions that protect critical data from future quantum computing threats and help organizations transition to post quantum secure standards.

Components Covered:

Hardware

Software

Services

Monitoring Types Covered:

Real-Time Monitoring

Circuit Monitoring

Environmental Monitoring

Other Monitoring Types

Deployment Modes Covered:

On-Premises

Cloud/SaaS

Applications Covered:

Energy Management

Capacity Planning

Asset Management

Predictive Analytics

Other Applications

End Users Covered:

Enterprise Data Centers

Colocation Data Centers

Cloud Data Centers

Hyperscale Data Centers

Other End Users

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants

- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 3032 and 2034
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL DATA CENTER POWER MONITORING & ANALYTICS MARKET, BY COMPONENT

- 5.1 Hardware
 - 5.1.1 PDUs & Meters
 - 5.1.2 Sensors
- 5.2 Software
 - 5.2.1 Analytics Platforms
 - 5.2.2 Dashboards & Reporting
- 5.3 Services
 - 5.3.1 Consulting
 - 5.3.2 Integration & Deployment
 - 5.3.3 Support & Maintenance

6 GLOBAL DATA CENTER POWER MONITORING & ANALYTICS MARKET, BY MONITORING TYPE

- 6.1 Real-Time Monitoring
- 6.2 Circuit Monitoring
- 6.3 Environmental Monitoring
- 6.4 Other Monitoring Types

7 GLOBAL DATA CENTER POWER MONITORING & ANALYTICS MARKET, BY DEPLOYMENT MODE

- 7.1 On-Premises
- 7.2 Cloud/SaaS

8 GLOBAL DATA CENTER POWER MONITORING & ANALYTICS MARKET, BY APPLICATION

- 8.1 Energy Management
- 8.2 Capacity Planning
- 8.3 Asset Management
- 8.4 Predictive Analytics

8.5 Other Applications

9 GLOBAL DATA CENTER POWER MONITORING & ANALYTICS MARKET, BY END USER

9.1 Enterprise Data Centers

9.2 Colocation Data Centers

9.3 Cloud Data Centers

9.4 Hyperscale Data Centers

9.5 Other End Users

10 GLOBAL DATA CENTER POWER MONITORING & ANALYTICS MARKET, BY GEOGRAPHY

10.1 North America

10.1.1 United States

10.1.2 Canada

10.1.3 Mexico

10.2 Europe

10.2.1 United Kingdom

10.2.2 Germany

10.2.3 France

10.2.4 Italy

10.2.5 Spain

10.2.6 Netherlands

10.2.7 Belgium

10.2.8 Sweden

10.2.9 Switzerland

10.2.10 Poland

10.2.11 Rest of Europe

10.3 Asia Pacific

10.3.1 China

10.3.2 Japan

10.3.3 India

10.3.4 South Korea

10.3.5 Australia

10.3.6 Indonesia

10.3.7 Thailand

10.3.8 Malaysia

- 10.3.9 Singapore
- 10.3.10 Vietnam
- 10.3.11 Rest of Asia Pacific
- 10.4 South America
 - 10.4.1 Brazil
 - 10.4.2 Argentina
 - 10.4.3 Colombia
 - 10.4.4 Chile
 - 10.4.5 Peru
 - 10.4.6 Rest of South America
- 10.5 Rest of the World (RoW)
 - 10.5.1 Middle East
 - 10.5.1.1 Saudi Arabia
 - 10.5.1.2 United Arab Emirates
 - 10.5.1.3 Qatar
 - 10.5.1.4 Israel
 - 10.5.1.5 Rest of Middle East
 - 10.5.2 Africa
 - 10.5.2.1 South Africa
 - 10.5.2.2 Egypt
 - 10.5.2.3 Morocco
 - 10.5.2.4 Rest of Africa

11 STRATEGIC MARKET INTELLIGENCE

- 11.1 Industry Value Network and Supply Chain Assessment
- 11.2 White-Space and Opportunity Mapping
- 11.3 Product Evolution and Market Life Cycle Analysis
- 11.4 Channel, Distributor, and Go-to-Market Assessment

12 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 12.1 Mergers and Acquisitions
- 12.2 Partnerships, Alliances, and Joint Ventures
- 12.3 New Product Launches and Certifications
- 12.4 Capacity Expansion and Investments
- 12.5 Other Strategic Initiatives

13 COMPANY PROFILES

- 13.1 Schneider Electric
- 13.2 Johnson Controls International plc
- 13.3 Eaton Corporation
- 13.4 Honeywell International Inc.
- 13.5 ABB Ltd.
- 13.6 IBM Corporation
- 13.7 Siemens AG
- 13.8 FNT GmbH
- 13.9 Vertiv Holdings Co.
- 13.10 Socomec Group
- 13.11 Cisco Systems, Inc.
- 13.12 Panduit Corp.
- 13.13 Delta Electronics, Inc.
- 13.14 Huawei Technologies Co., Ltd.
- 13.15 Emerson Electric Co.

List Of Tables

LIST OF TABLES

Table 1 Global Data Center Power Monitoring & Analytics Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Data Center Power Monitoring & Analytics Market Outlook, By Component (2023-2034) (\$MN)

Table 3 Global Data Center Power Monitoring & Analytics Market Outlook, By Hardware (2023-2034) (\$MN)

Table 4 Global Data Center Power Monitoring & Analytics Market Outlook, By PDUs & Meters (2023-2034) (\$MN)

Table 5 Global Data Center Power Monitoring & Analytics Market Outlook, By Sensors (2023-2034) (\$MN)

Table 6 Global Data Center Power Monitoring & Analytics Market Outlook, By Software (2023-2034) (\$MN)

Table 7 Global Data Center Power Monitoring & Analytics Market Outlook, By Analytics Platforms (2023-2034) (\$MN)

Table 8 Global Data Center Power Monitoring & Analytics Market Outlook, By Dashboards & Reporting (2023-2034) (\$MN)

Table 9 Global Data Center Power Monitoring & Analytics Market Outlook, By Services (2023-2034) (\$MN)

Table 10 Global Data Center Power Monitoring & Analytics Market Outlook, By Consulting (2023-2034) (\$MN)

Table 11 Global Data Center Power Monitoring & Analytics Market Outlook, By Integration & Deployment (2023-2034) (\$MN)

Table 12 Global Data Center Power Monitoring & Analytics Market Outlook, By Support & Maintenance (2023-2034) (\$MN)

Table 13 Global Data Center Power Monitoring & Analytics Market Outlook, By Monitoring Type (2023-2034) (\$MN)

Table 14 Global Data Center Power Monitoring & Analytics Market Outlook, By Real-Time Monitoring (2023-2034) (\$MN)

Table 15 Global Data Center Power Monitoring & Analytics Market Outlook, By Circuit Monitoring (2023-2034) (\$MN)

Table 16 Global Data Center Power Monitoring & Analytics Market Outlook, By Environmental Monitoring (2023-2034) (\$MN)

Table 17 Global Data Center Power Monitoring & Analytics Market Outlook, By Other Monitoring Types (2023-2034) (\$MN)

Table 18 Global Data Center Power Monitoring & Analytics Market Outlook, By

Deployment Mode (2023-2034) (\$MN)

Table 19 Global Data Center Power Monitoring & Analytics Market Outlook, By On-Premises (2023-2034) (\$MN)

Table 20 Global Data Center Power Monitoring & Analytics Market Outlook, By Cloud/SaaS (2023-2034) (\$MN)

Table 21 Global Data Center Power Monitoring & Analytics Market Outlook, By Application (2023-2034) (\$MN)

Table 22 Global Data Center Power Monitoring & Analytics Market Outlook, By Energy Management (2023-2034) (\$MN)

Table 23 Global Data Center Power Monitoring & Analytics Market Outlook, By Capacity Planning (2023-2034) (\$MN)

Table 24 Global Data Center Power Monitoring & Analytics Market Outlook, By Asset Management (2023-2034) (\$MN)

Table 25 Global Data Center Power Monitoring & Analytics Market Outlook, By Predictive Analytics (2023-2034) (\$MN)

Table 26 Global Data Center Power Monitoring & Analytics Market Outlook, By Other Applications (2023-2034) (\$MN)

Table 27 Global Data Center Power Monitoring & Analytics Market Outlook, By End User (2023-2034) (\$MN)

Table 28 Global Data Center Power Monitoring & Analytics Market Outlook, By Enterprise Data Centers (2023-2034) (\$MN)

Table 29 Global Data Center Power Monitoring & Analytics Market Outlook, By Colocation Data Centers (2023-2034) (\$MN)

Table 30 Global Data Center Power Monitoring & Analytics Market Outlook, By Cloud Data Centers (2023-2034) (\$MN)

Table 31 Global Data Center Power Monitoring & Analytics Market Outlook, By Hyperscale Data Centers (2023-2034) (\$MN)

Table 32 Global Data Center Power Monitoring & Analytics Market Outlook, By Other End Users (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

I would like to order

Product name: Data Center Power Monitoring & Analytics Market Forecasts to 2034 – Global Analysis By Component (Software Solutions and Services), Monitoring Type, Deployment Mode, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/D911934E8403EN.html>

Price: US\$ 4,150.00 (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/D911934E8403EN.html>