

# **Global Distributed Energy Resource Management System Market Size Study, by Component (Software [Virtual Power Plant, Analytics, Management & Control], Service), by Application (Solar PV Units, Energy Storage Systems, Wind Generation Units, EV Charging Stations, Others), by End User (Commercial, Industrial, Residential), and Regional Forecasts 2022-2032**

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## **Abstracts**

The global Distributed Energy Resource Management System (DERMS) market is valued at USD 0.51 billion in 2023 anticipated to exhibit robust growth at CAGR 18.80% from 2024-2032, driven by the accelerating adoption of renewable energy solutions, stringent environmental policies, and the increasing need for energy efficiency and grid modernization. DERMS platforms enable seamless integration, monitoring, and optimization of distributed energy resources such as solar panels, wind turbines, energy storage systems, and electric vehicle charging stations. This technological framework not only optimizes energy distribution but also supports real-time decision-making, enhancing reliability and reducing operational costs.

Rapid digitalization, coupled with advancements in machine learning and analytics, has empowered energy providers to deploy predictive models, facilitating enhanced resource allocation and energy consumption management. For instance, cloud-based DERMS solutions offer scalable frameworks that reduce deployment costs while ensuring robust data security and accessibility.

In the wake of decarbonization initiatives, the market is witnessing a surge in demand

for technologies that promote environmental sustainability. For example, virtual power plants (VPPs) integrated with DERMS enable utilities to optimize distributed energy flows, enhancing grid resilience while incorporating renewable energy sources. Additionally, the adoption of blockchain in DERMS is emerging as a transformative trend, providing secure and transparent energy transaction records.

Geographically, North America leads the DERMS market due to early adoption and supportive government policies promoting clean energy. Europe is expected to grow significantly, fueled by ambitious renewable energy targets and investments in smart grid infrastructure. Meanwhile, the Asia-Pacific region is witnessing rapid adoption due to rising energy demands and proactive governmental reforms in energy management.

Major industry players such as ABB, Siemens, Schneider Electric, and Mitsubishi Electric are actively innovating and collaborating to offer integrated DERMS solutions. For instance, the acquisition of Smarter Grid Solutions by Mitsubishi Electric underscores the strategic efforts to strengthen DERMS capabilities and expand the global footprint.

Major market players included in this report are:

ABB

GE Digital

Siemens

Schneider Electric

ENGIE Group

Mitsubishi Electric Power Products, Inc.

Itron Inc.

Emerson Electric Co.

Oracle

Spirae, LLC

The detailed segments and sub-segments of the market are explained below:

#### By Component

Software

Virtual Power Plant

Analytics

Management & Control

Service

#### By Application

Solar PV Units

Energy Storage Systems

Wind Generation Units

EV Charging Stations

Others

#### By End User

Commercial

Industrial

Residential

### By Region:

North America: U.S., Canada

Europe: UK, Germany, France, Italy, Spain, ROE

Asia-Pacific: China, India, Japan, South Korea, Australia, RoAPAC

Latin America: Brazil, Mexico, RoLATAM

Middle East & Africa: Saudi Arabia, South Africa, RoMEA

### Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

### Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

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.

Demand-side and supply-side analysis of the market.

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