

Data Center Rack Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Solution, Service), By Rack Type (Cabinets/ Enclosed Racks, Open Frame Rack), By Data Center Size (Large Data Centers, Small and Mid-sized Data Centers), By Rack Height (42U and Below, 43U up to 52U, Above 52U), By Industry Vertical (BFSI, Manufacturing, IT & Telecom, Retail, Healthcare, Media & Entertainment, Others), By Region & Competition, 2021-2031F

<https://marketpublishers.com/r/DB76E2D753ECEN.html>

Date: May 2026

Pages: 180

Price: US\$ 4,500.00 (Single User License)

ID: DB76E2D753ECEN

Abstracts

The Global Data Center Rack Market is projected to expand significantly, from USD 4.99 Billion in 2025 to USD 8.47 Billion by 2031, demonstrating a robust 9.22% CAGR. A data center rack serves as a standardized structural frame or enclosure specifically designed to securely house, organize, and protect IT equipment such as servers, storage modules, and networking switches within a data center. The primary impetus for this market growth stems from the exponential increase in global data generation, which in turn drives a critical need for scalable storage infrastructure. Additionally, the rapid proliferation of hyperscale facilities and the growing adoption of high-performance computing to support artificial intelligence workloads are fundamentally propelling the demand for resilient and adaptable rack solutions.

Market Driver

The rapid expansion of hyperscale and cloud computing infrastructures stands as a key

driver for volume growth in the data center rack market. As major technology corporations extensively develop larger facilities for cloud operations, the demand for physical enclosures to house servers scales in direct proportion to facility capacity, fueling a construction boom that requires standardized, quickly deployable rack units. For instance, under-construction activity in primary North American data center markets reached a record high of nearly 3.9 gigawatts in H1 2024, a 69% increase year-over-year, and Microsoft's capital expenditures driven by cloud and AI surged to \$20 billion in the first fiscal quarter of 2024, directly translating into substantial orders for server cabinets. Simultaneously, the surging demand for high-density racks to support AI and high-performance computing (HPC) workloads is significantly reshaping product specifications and increasing unit value. AI applications, utilizing heavier and hotter GPUs, necessitate reinforced structures and integrated liquid cooling manifolds, requiring racks engineered for extreme weight bearing and advanced thermal management, with operators now planning for power densities ranging from 50 kW to 100 kW per rack. This shift moves the market towards specialized, higher-margin rack solutions designed to handle the intense thermal and physical demands of next-generation computing.

Market Challenge

The inability to effectively manage escalating thermal output presents a formidable bottleneck for the Global Data Center Rack Market. As rack power densities rise to accommodate heavy computational workloads, existing legacy infrastructure often reaches its physical limit in dissipating the resulting heat. This thermal ceiling restricts the ability of facility operators to deploy high-density racks at scale, compelling them to artificially limit the amount of IT equipment installed per enclosure. Consequently, the market experiences a deceleration in volume growth, as the demand for advanced rack architecture is physically constrained by the facility's incapacity to maintain safe operating temperatures for the housed equipment. This infrastructure gap forces organizations to pause or delay procurement while attempting to address these deficiencies. In 2025, 34% of data center operators reported that their current cooling solutions were inadequate to meet their facility's needs, underscoring a widespread operational stalling point where the deployment of modern, high-density racks hinges on complex and time-consuming facility retrofits. These delays directly impede market momentum, as the lead time required to upgrade cooling and power systems prevents the immediate installation of new rack units.

Market Trends

A significant market trend is the accelerating transition toward taller and deeper high-density rack enclosures, as next-generation hardware requirements outgrow standard cabinet dimensions. This structural shift is primarily driven by the physical footprint of emerging rack-scale computing platforms that integrate power shelves and manifolds directly into the frame. Manufacturers are designing enclosures with extended depth to accommodate vertical power delivery systems that traditional cabinets cannot house, with industry roadmaps projecting rack densities to exceed 300 kW by 2026, forcing a departure from legacy form factors and allowing for the consolidation of localized power distribution within the rack boundary. Concurrently, the development of ruggedized and compact racks for edge computing is expanding the market into non-traditional environments. As data processing increasingly shifts towards industrial and telecommunication sources, operators require enclosures capable of withstanding harsh conditions such as vibration and dust. These specialized units feature smaller footprints to fit space-constrained locations while ensuring equipment protection; by 2029, 60% of edge computing deployments are expected to involve artificial intelligence, driving the demand for resilient infrastructure in decentralized settings, a trend that prioritizes form-factor flexibility and physical durability over the massive scale typically found in core facilities.

Key Market Players

Schneider Electric SE

Rittal GmbH & Co. KG

Eaton Corporation plc

Vertiv Group Corp.

Dell Technologies Inc.

Emerson Electric Co.

Panduit Corporation

Legrand S.A.

Intel Corporation

Chatsworth Products, Inc.

Report Scope

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

Data Center Rack Market, By Component

Solution

Service

Data Center Rack Market, By Rack Type

Cabinets/ Enclosed Racks

Open Frame Rack

Data Center Rack Market, By Data Center Size

Large Data Centers

Small

Mid-sized Data Centers

Data Center Rack Market, By Rack Height

42U and Below

43U up to 52U

Above 52U

Data Center Rack Market, By Industry Vertical

BFSI

Manufacturing

IT & Telecom

Retail

Healthcare

Media & Entertainment

Others

Data Center Rack 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

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 Data Center Rack Market.

Available Customizations:

Global Data Center Rack 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).

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 DATA CENTER RACK MARKET OUTLOOK

- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.2. Market Share & Forecast
 - 5.2.1. By Component (Solution, Service)
 - 5.2.2. By Rack Type (Cabinets/ Enclosed Racks, Open Frame Rack)
 - 5.2.3. By Data Center Size (Large Data Centers, Small, Mid-sized Data Centers)
 - 5.2.4. By Rack Height (42U and Below, 43U up to 52U, Above 52U)

5.2.5. By Industry Vertical (BFSI, Manufacturing, IT & Telecom, Retail, Healthcare, Media & Entertainment, Others)

5.2.6. By Region

5.2.7. By Company (2025)

5.3. Market Map

6. NORTH AMERICA DATA CENTER RACK MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Component

6.2.2. By Rack Type

6.2.3. By Data Center Size

6.2.4. By Rack Height

6.2.5. By Industry Vertical

6.2.6. By Country

6.3. North America: Country Analysis

6.3.1. United States Data Center Rack 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 Component

6.3.1.2.2. By Rack Type

6.3.1.2.3. By Data Center Size

6.3.1.2.4. By Rack Height

6.3.1.2.5. By Industry Vertical

6.3.2. Canada Data Center Rack 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 Component

6.3.2.2.2. By Rack Type

6.3.2.2.3. By Data Center Size

6.3.2.2.4. By Rack Height

6.3.2.2.5. By Industry Vertical

6.3.3. Mexico Data Center Rack 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 Component
- 6.3.3.2.2. By Rack Type
- 6.3.3.2.3. By Data Center Size
- 6.3.3.2.4. By Rack Height
- 6.3.3.2.5. By Industry Vertical

7. EUROPE DATA CENTER RACK MARKET OUTLOOK

7.1. Market Size & Forecast

- 7.1.1. By Value

7.2. Market Share & Forecast

- 7.2.1. By Component
- 7.2.2. By Rack Type
- 7.2.3. By Data Center Size
- 7.2.4. By Rack Height
- 7.2.5. By Industry Vertical
- 7.2.6. By Country

7.3. Europe: Country Analysis

7.3.1. Germany Data Center Rack 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 Component
 - 7.3.1.2.2. By Rack Type
 - 7.3.1.2.3. By Data Center Size
 - 7.3.1.2.4. By Rack Height
 - 7.3.1.2.5. By Industry Vertical

7.3.2. France Data Center Rack 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 Component
 - 7.3.2.2.2. By Rack Type
 - 7.3.2.2.3. By Data Center Size
 - 7.3.2.2.4. By Rack Height
 - 7.3.2.2.5. By Industry Vertical

7.3.3. United Kingdom Data Center Rack 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 Component
 - 7.3.3.2.2. By Rack Type
 - 7.3.3.2.3. By Data Center Size
 - 7.3.3.2.4. By Rack Height
 - 7.3.3.2.5. By Industry Vertical
- 7.3.4. Italy Data Center Rack 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 Component
 - 7.3.4.2.2. By Rack Type
 - 7.3.4.2.3. By Data Center Size
 - 7.3.4.2.4. By Rack Height
 - 7.3.4.2.5. By Industry Vertical
- 7.3.5. Spain Data Center Rack 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 Component
 - 7.3.5.2.2. By Rack Type
 - 7.3.5.2.3. By Data Center Size
 - 7.3.5.2.4. By Rack Height
 - 7.3.5.2.5. By Industry Vertical

8. ASIA PACIFIC DATA CENTER RACK MARKET OUTLOOK

- 8.1. Market Size & Forecast
 - 8.1.1. By Value
- 8.2. Market Share & Forecast
 - 8.2.1. By Component
 - 8.2.2. By Rack Type
 - 8.2.3. By Data Center Size
 - 8.2.4. By Rack Height
 - 8.2.5. By Industry Vertical
 - 8.2.6. By Country
- 8.3. Asia Pacific: Country Analysis
 - 8.3.1. China Data Center Rack 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 Component
 - 8.3.1.2.2. By Rack Type
 - 8.3.1.2.3. By Data Center Size
 - 8.3.1.2.4. By Rack Height
 - 8.3.1.2.5. By Industry Vertical
- 8.3.2. India Data Center Rack 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 Component
 - 8.3.2.2.2. By Rack Type
 - 8.3.2.2.3. By Data Center Size
 - 8.3.2.2.4. By Rack Height
 - 8.3.2.2.5. By Industry Vertical
- 8.3.3. Japan Data Center Rack 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 Component
 - 8.3.3.2.2. By Rack Type
 - 8.3.3.2.3. By Data Center Size
 - 8.3.3.2.4. By Rack Height
 - 8.3.3.2.5. By Industry Vertical
- 8.3.4. South Korea Data Center Rack 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 Component
 - 8.3.4.2.2. By Rack Type
 - 8.3.4.2.3. By Data Center Size
 - 8.3.4.2.4. By Rack Height
 - 8.3.4.2.5. By Industry Vertical
- 8.3.5. Australia Data Center Rack 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 Component
- 8.3.5.2.2. By Rack Type
- 8.3.5.2.3. By Data Center Size
- 8.3.5.2.4. By Rack Height
- 8.3.5.2.5. By Industry Vertical

9. MIDDLE EAST & AFRICA DATA CENTER RACK MARKET OUTLOOK

9.1. Market Size & Forecast

- 9.1.1. By Value

9.2. Market Share & Forecast

- 9.2.1. By Component
- 9.2.2. By Rack Type
- 9.2.3. By Data Center Size
- 9.2.4. By Rack Height
- 9.2.5. By Industry Vertical
- 9.2.6. By Country

9.3. Middle East & Africa: Country Analysis

9.3.1. Saudi Arabia Data Center Rack 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 Component
 - 9.3.1.2.2. By Rack Type
 - 9.3.1.2.3. By Data Center Size
 - 9.3.1.2.4. By Rack Height
 - 9.3.1.2.5. By Industry Vertical

9.3.2. UAE Data Center Rack 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 Component
 - 9.3.2.2.2. By Rack Type
 - 9.3.2.2.3. By Data Center Size
 - 9.3.2.2.4. By Rack Height
 - 9.3.2.2.5. By Industry Vertical

9.3.3. South Africa Data Center Rack 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 Component
- 9.3.3.2.2. By Rack Type
- 9.3.3.2.3. By Data Center Size
- 9.3.3.2.4. By Rack Height
- 9.3.3.2.5. By Industry Vertical

10. SOUTH AMERICA DATA CENTER RACK MARKET OUTLOOK

10.1. Market Size & Forecast

- 10.1.1. By Value

10.2. Market Share & Forecast

- 10.2.1. By Component
- 10.2.2. By Rack Type
- 10.2.3. By Data Center Size
- 10.2.4. By Rack Height
- 10.2.5. By Industry Vertical
- 10.2.6. By Country

10.3. South America: Country Analysis

10.3.1. Brazil Data Center Rack 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 Component
 - 10.3.1.2.2. By Rack Type
 - 10.3.1.2.3. By Data Center Size
 - 10.3.1.2.4. By Rack Height
 - 10.3.1.2.5. By Industry Vertical

10.3.2. Colombia Data Center Rack 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 Component
 - 10.3.2.2.2. By Rack Type
 - 10.3.2.2.3. By Data Center Size
 - 10.3.2.2.4. By Rack Height
 - 10.3.2.2.5. By Industry Vertical

10.3.3. Argentina Data Center Rack 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 Component
 - 10.3.3.2.2. By Rack Type
 - 10.3.3.2.3. By Data Center Size
 - 10.3.3.2.4. By Rack Height
 - 10.3.3.2.5. By Industry Vertical

11. MARKET DYNAMICS

- 11.1. Drivers
- 11.2. Challenges

12. MARKET TRENDS & DEVELOPMENTS

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

13. GLOBAL DATA CENTER RACK 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. Schneider Electric SE
 - 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. Rittal GmbH & Co. KG
- 15.3. Eaton Corporation plc

- 15.4. Vertiv Group Corp.
- 15.5. Dell Technologies Inc.
- 15.6. Emerson Electric Co.
- 15.7. Panduit Corporation
- 15.8. Legrand S.A.
- 15.9. Intel Corporation
- 15.10. Chatsworth Products, Inc.

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER

I would like to order

Product name: Data Center Rack Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Solution, Service), By Rack Type (Cabinets/ Enclosed Racks, Open Frame Rack), By Data Center Size (Large Data Centers, Small and Mid-sized Data Centers), By Rack Height (42U and Below, 43U up to 52U, Above 52U), By Industry Vertical (BFSI, Manufacturing, IT & Telecom, Retail, Healthcare, Media & Entertainment, Others), By Region & Competition, 2021-2031F

Product link: <https://marketpublishers.com/r/DB76E2D753ECEN.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/DB76E2D753ECEN.html>