

# **Data Center Systems & Infrastructure Market Forecasts to 2032 – Global Analysis By Infrastructure Type (Power Systems, Cooling Systems, Networking Equipment, Storage Systems and Monitoring & Management Systems), Data Center Type, Deployment Mode, Organization Size, End User and By Geography**

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## **Abstracts**

According to Statistics MRC, the Global Data Center Systems & Infrastructure Market is accounted for \$70.3 billion in 2025 and is expected to reach \$160.3 billion by 2032 growing at a CAGR of 12.5% during the forecast period. Data Center Systems & Infrastructure refers to the integrated physical and virtual components that support the storage, processing, and management of data within a centralized facility. It includes servers, networking equipment, cooling systems, power supplies, security mechanisms, and virtualization platforms. These systems ensure high availability, scalability, and resilience for enterprise IT operations, cloud services, and digital applications. Infrastructure design prioritizes energy efficiency, redundancy, and disaster recovery to maintain uninterrupted service. Modern data centers also incorporate automation, software-defined architectures, and edge computing capabilities to meet evolving demands.

Market Dynamics:

Driver:

Cloud Adoption & AI Workloads

Cloud adoption and AI workloads are revolutionizing the data center systems and

infrastructure market, driving demand for high-performance computing, energy-efficient architectures, and scalable storage solutions. Enterprises are modernizing legacy systems to support real-time analytics, automation, and hybrid cloud environments. This shift accelerates innovation in liquid cooling, edge computing, and modular designs, while boosting investments in hyperscale facilities. The result is a dynamic, resilient infrastructure ecosystem that enables faster deployment, optimized costs, and transformative digital capabilities across industries.

Restraint:

### High Operational Costs

High operational costs significantly hinder the growth of the data center systems and infrastructure market by straining profit margins and deterring investment in modernization. Rising energy prices, cooling demands, and skilled labor expenses reduce scalability and delay adoption of advanced technologies. Smaller players struggle to compete, leading to market consolidation and reduced innovation. These cost pressures also slow sustainability transitions, making it harder to meet regulatory and environmental benchmarks.

Opportunity:

### Big Data & IoT Expansion

The rapid expansion of Big Data and IoT is fueling transformative growth in the data center systems and infrastructure market. Rising data volumes and real-time analytics demands are driving investments in scalable storage, edge computing, and high-speed connectivity. This surge accelerates innovation in cooling systems, energy efficiency, and modular architectures. As enterprises prioritize low-latency processing and intelligent automation, data centers evolve into strategic hubs, unlocking new revenue streams and enabling resilient, future-ready digital ecosystems across industries.

Threat:

### Regulatory Pressure

Stringent regulatory pressure can hinder innovation and scalability in the market. Compliance with evolving environmental, cybersecurity, and data sovereignty mandates often demands costly retrofits, delays in deployment, and increased operational

complexity. Smaller players may struggle to meet standards, leading to market consolidation. Uncertainty around future regulations can stall investment decisions, slowing infrastructure upgrades and limiting responsiveness to emerging digital demands across industries.

#### Covid-19 Impact:

The Covid-19 pandemic accelerated digital transformation, driving unprecedented demand for data center systems and infrastructure. Remote work, telehealth, and e-commerce surged, prompting enterprises to scale cloud services and virtual platforms. This led to increased investments in resilient, scalable infrastructure, despite initial supply chain disruptions and construction delays. The crisis highlighted the critical role of data centers in business continuity, catalyzing long-term shifts toward automation, edge computing, and hybrid cloud architectures.

The edge data centers segment is expected to be the largest during the forecast period

The edge data centers segment is expected to account for the largest market share during the forecast period due to rising demand for low-latency processing, real-time analytics, and localized data handling. Their proximity to end-users enables faster content delivery and supports bandwidth-heavy applications like streaming, gaming, and autonomous systems. As IoT and 5G deployments accelerate, enterprises are decentralizing infrastructure to improve responsiveness and reduce core data center loads. This shift positions edge facilities as critical enablers of digital transformation across sectors.

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

Over the forecast period, the healthcare segment is predicted to witness the highest growth rate due to surging adoption of telemedicine, electronic health records, and AI-powered diagnostics. Data center infrastructure supports secure, scalable storage and processing of sensitive patient data, enabling compliance with stringent regulations. With increasing reliance on real-time analytics, wearable devices, and remote monitoring, healthcare providers are investing in robust IT backbones. This digital pivot is fueling demand for resilient, high-performance data center systems tailored to clinical workflows.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share due to rapid urbanization, digitalization, and cloud adoption across emerging economies. Countries like China, India, and Southeast Asia are witnessing exponential growth in e-commerce, fintech, and smart city initiatives, driving demand for scalable data infrastructure. Government incentives, expanding hyperscale facilities, and rising internet penetration further bolster regional momentum. The region's dynamic tech ecosystem and population scale make it a cornerstone of global data center expansion.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR owing to advanced cloud infrastructure, AI integration, and edge computing deployments. The region's mature digital economy, strong enterprise IT investments, and innovation in software-defined architectures contribute to rapid growth. Regulatory compliance, cybersecurity mandates, and sustainability goals are prompting upgrades in data center design. With hyperscalers and colocation providers expanding aggressively, North America remains a hotbed for next-gen infrastructure evolution and high-performance computing demand.

Key players in the market

Some of the key players in Data Center Systems & Infrastructure Market include Amazon Web Services (AWS), Dell Technologies, Microsoft, Broadcom, Google, Oracle, Meta, IBM, Equinix, Huawei Technologies, Digital Realty, Telehouse, NTT Global Data Centers, GDS Holdings and CyrusOne.

Key Developments:

In April 2025, IBM and Tokyo Electron (TEL) have renewed their collaboration with a five-year agreement to advance semiconductor technologies, focusing on next-generation nodes and chiplet architectures for generative AI applications. The collaboration will leverage IBM's process integration expertise and TEL's cutting-edge equipment, including High NA EUV patterning processes. Research will continue at the Albany NanoTech Complex, a leading semiconductor R&D facility.

In January 2025, Microsoft and OpenAI renewed their strategic partnership to advance AI innovation. Microsoft continues to integrate OpenAI's models into products like Copilot, ensuring exclusive access via Azure. The collaboration includes mutual

revenue sharing and a right of first refusal for new AI infrastructure, supporting OpenAI's research and model training.

#### Infrastructure Types Covered:

Power Systems

Cooling Systems

Networking Equipment

Storage Systems

Racks & Enclosures

Cabling Infrastructure

Monitoring & Management Systems

#### Data Center Types Covered:

Enterprise Data Centers

Edge Data Centers

Colocation Data Centers

Hyperscale Data Centers

#### Deployment Modes Covered:

On-Premises

Cloud-Based

#### Organization Sizes Covered:

Small & Medium Enterprises (SMEs)

Large Enterprises

End Users Covered:

IT & Telecom

Energy & Utilities

Media & Entertainment

Retail & E-commerce

Government & Defense

Manufacturing

Healthcare

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

#### Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

#### South America

Argentina

Brazil

Chile

Rest of South America

#### Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & 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 2024, 2025, 2026, 2028, and 2032
- 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**

### **2 PREFACE**

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
  - 2.4.1 Data Mining
  - 2.4.2 Data Analysis
  - 2.4.3 Data Validation
  - 2.4.4 Research Approach
- 2.5 Research Sources
  - 2.5.1 Primary Research Sources
  - 2.5.2 Secondary Research Sources
  - 2.5.3 Assumptions

### **3 MARKET TREND ANALYSIS**

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 End User Analysis
- 3.7 Emerging Markets
- 3.8 Impact of Covid-19

### **4 PORTERS FIVE FORCE ANALYSIS**

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

### **5 GLOBAL DATA CENTER SYSTEMS & INFRASTRUCTURE MARKET, BY**

*Data Center Systems & Infrastructure Market Forecasts to 2032 – Global Analysis By Infrastructure Type (Power...*

## **INFRASTRUCTURE TYPE**

- 5.1 Introduction
- 5.2 Power Systems
  - 5.2.1 UPS (Uninterruptible Power Supply)
  - 5.2.2 Power Distribution Units (PDUs)
  - 5.2.3 Generators
  - 5.2.4 Switchgear
- 5.3 Cooling Systems
  - 5.3.1 CRAC & CRAH Units
  - 5.3.2 Liquid Cooling Solutions
  - 5.3.3 Chillers
  - 5.3.4 Cooling Towers
- 5.4 Networking Equipment
  - 5.4.1 Routers
  - 5.4.2 Firewalls
  - 5.4.3 Switches
- 5.5 Storage Systems
  - 5.5.1 SAN (Storage Area Network)
  - 5.5.2 DAS (Direct Attached Storage)
  - 5.5.3 NAS (Network Attached Storage)
- 5.6 Racks & Enclosures
- 5.7 Cabling Infrastructure
- 5.8 Monitoring & Management Systems

## **6 GLOBAL DATA CENTER SYSTEMS & INFRASTRUCTURE MARKET, BY DATA CENTER TYPE**

- 6.1 Introduction
- 6.2 Enterprise Data Centers
- 6.3 Edge Data Centers
- 6.4 Colocation Data Centers
- 6.5 Hyperscale Data Centers

## **7 GLOBAL DATA CENTER SYSTEMS & INFRASTRUCTURE MARKET, BY DEPLOYMENT MODE**

- 7.1 Introduction
- 7.2 On-Premises

### 7.3 Cloud-Based

## **8 GLOBAL DATA CENTER SYSTEMS & INFRASTRUCTURE MARKET, BY ORGANIZATION SIZE**

### 8.1 Introduction

### 8.2 Small & Medium Enterprises (SMEs)

### 8.3 Large Enterprises

## **9 GLOBAL DATA CENTER SYSTEMS & INFRASTRUCTURE MARKET, BY END USER**

### 9.1 Introduction

### 9.2 IT & Telecom

### 9.3 Energy & Utilities

### 9.4 Media & Entertainment

### 9.5 Retail & E-commerce

### 9.6 Government & Defense

### 9.7 Manufacturing

### 9.8 Healthcare

### 9.9 Other End Users

## **10 GLOBAL DATA CENTER SYSTEMS & INFRASTRUCTURE MARKET, BY GEOGRAPHY**

### 10.1 Introduction

### 10.2 North America

#### 10.2.1 US

#### 10.2.2 Canada

#### 10.2.3 Mexico

### 10.3 Europe

#### 10.3.1 Germany

#### 10.3.2 UK

#### 10.3.3 Italy

#### 10.3.4 France

#### 10.3.5 Spain

#### 10.3.6 Rest of Europe

### 10.4 Asia Pacific

#### 10.4.1 Japan

- 10.4.2 China
- 10.4.3 India
- 10.4.4 Australia
- 10.4.5 New Zealand
- 10.4.6 South Korea
- 10.4.7 Rest of Asia Pacific
- 10.5 South America
  - 10.5.1 Argentina
  - 10.5.2 Brazil
  - 10.5.3 Chile
  - 10.5.4 Rest of South America
- 10.6 Middle East & Africa
  - 10.6.1 Saudi Arabia
  - 10.6.2 UAE
  - 10.6.3 Qatar
  - 10.6.4 South Africa
  - 10.6.5 Rest of Middle East & Africa

## **11 KEY DEVELOPMENTS**

- 11.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 11.2 Acquisitions & Mergers
- 11.3 New Product Launch
- 11.4 Expansions
- 11.5 Other Key Strategies

## **12 COMPANY PROFILING**

- 12.1 Amazon Web Services (AWS)
- 12.2 Dell Technologies
- 12.3 Microsoft
- 12.4 Broadcom
- 12.5 Google
- 12.6 Oracle
- 12.7 Meta
- 12.8 IBM
- 12.9 Equinix
- 12.10 Huawei Technologies
- 12.11 Digital Realty

- 12.12 Telehouse
- 12.13 NTT Global Data Centers
- 12.14 GDS Holdings
- 12.15 CyrusOne

## List Of Tables

### LIST OF TABLES

Table 1 Global Data Center Systems & Infrastructure Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Data Center Systems & Infrastructure Market Outlook, By Infrastructure Type (2024-2032) (\$MN)

Table 3 Global Data Center Systems & Infrastructure Market Outlook, By Power Systems (2024-2032) (\$MN)

Table 4 Global Data Center Systems & Infrastructure Market Outlook, By UPS (Uninterruptible Power Supply) (2024-2032) (\$MN)

Table 5 Global Data Center Systems & Infrastructure Market Outlook, By Power Distribution Units (PDUs) (2024-2032) (\$MN)

Table 6 Global Data Center Systems & Infrastructure Market Outlook, By Generators (2024-2032) (\$MN)

Table 7 Global Data Center Systems & Infrastructure Market Outlook, By Switchgear (2024-2032) (\$MN)

Table 8 Global Data Center Systems & Infrastructure Market Outlook, By Cooling Systems (2024-2032) (\$MN)

Table 9 Global Data Center Systems & Infrastructure Market Outlook, By CRAC & CRAH Units (2024-2032) (\$MN)

Table 10 Global Data Center Systems & Infrastructure Market Outlook, By Liquid Cooling Solutions (2024-2032) (\$MN)

Table 11 Global Data Center Systems & Infrastructure Market Outlook, By Chillers (2024-2032) (\$MN)

Table 12 Global Data Center Systems & Infrastructure Market Outlook, By Cooling Towers (2024-2032) (\$MN)

Table 13 Global Data Center Systems & Infrastructure Market Outlook, By Networking Equipment (2024-2032) (\$MN)

Table 14 Global Data Center Systems & Infrastructure Market Outlook, By Routers (2024-2032) (\$MN)

Table 15 Global Data Center Systems & Infrastructure Market Outlook, By Firewalls (2024-2032) (\$MN)

Table 16 Global Data Center Systems & Infrastructure Market Outlook, By Switches (2024-2032) (\$MN)

Table 17 Global Data Center Systems & Infrastructure Market Outlook, By Storage Systems (2024-2032) (\$MN)

Table 18 Global Data Center Systems & Infrastructure Market Outlook, By SAN

(Storage Area Network) (2024-2032) (\$MN)

Table 19 Global Data Center Systems & Infrastructure Market Outlook, By DAS (Direct Attached Storage) (2024-2032) (\$MN)

Table 20 Global Data Center Systems & Infrastructure Market Outlook, By NAS (Network Attached Storage) (2024-2032) (\$MN)

Table 21 Global Data Center Systems & Infrastructure Market Outlook, By Racks & Enclosures (2024-2032) (\$MN)

Table 22 Global Data Center Systems & Infrastructure Market Outlook, By Cabling Infrastructure (2024-2032) (\$MN)

Table 23 Global Data Center Systems & Infrastructure Market Outlook, By Monitoring & Management Systems (2024-2032) (\$MN)

Table 24 Global Data Center Systems & Infrastructure Market Outlook, By Data Center Type (2024-2032) (\$MN)

Table 25 Global Data Center Systems & Infrastructure Market Outlook, By Enterprise Data Centers (2024-2032) (\$MN)

Table 26 Global Data Center Systems & Infrastructure Market Outlook, By Edge Data Centers (2024-2032) (\$MN)

Table 27 Global Data Center Systems & Infrastructure Market Outlook, By Colocation Data Centers (2024-2032) (\$MN)

Table 28 Global Data Center Systems & Infrastructure Market Outlook, By Hyperscale Data Centers (2024-2032) (\$MN)

Table 29 Global Data Center Systems & Infrastructure Market Outlook, By Deployment Mode (2024-2032) (\$MN)

Table 30 Global Data Center Systems & Infrastructure Market Outlook, By On-Premises (2024-2032) (\$MN)

Table 31 Global Data Center Systems & Infrastructure Market Outlook, By Cloud-Based (2024-2032) (\$MN)

Table 32 Global Data Center Systems & Infrastructure Market Outlook, By Organization Size (2024-2032) (\$MN)

Table 33 Global Data Center Systems & Infrastructure Market Outlook, By Small & Medium Enterprises (SMEs) (2024-2032) (\$MN)

Table 34 Global Data Center Systems & Infrastructure Market Outlook, By Large Enterprises (2024-2032) (\$MN)

Table 35 Global Data Center Systems & Infrastructure Market Outlook, By End User (2024-2032) (\$MN)

Table 36 Global Data Center Systems & Infrastructure Market Outlook, By IT & Telecom (2024-2032) (\$MN)

Table 37 Global Data Center Systems & Infrastructure Market Outlook, By Energy & Utilities (2024-2032) (\$MN)

Table 38 Global Data Center Systems & Infrastructure Market Outlook, By Media & Entertainment (2024-2032) (\$MN)

Table 39 Global Data Center Systems & Infrastructure Market Outlook, By Retail & E-commerce (2024-2032) (\$MN)

Table 40 Global Data Center Systems & Infrastructure Market Outlook, By Government & Defense (2024-2032) (\$MN)

Table 41 Global Data Center Systems & Infrastructure Market Outlook, By Manufacturing (2024-2032) (\$MN)

Table 42 Global Data Center Systems & Infrastructure Market Outlook, By Healthcare (2024-2032) (\$MN)

Table 43 Global Data Center Systems & Infrastructure Market Outlook, By Other End Users (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

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