

Data Center Infrastructure Market Forecasts to 2032 – Global Analysis By Component (Hardware, Software and Services), Product, Data Center Type, Tier Type, Enterprise Size, End User and By Geography

<https://marketpublishers.com/r/D877F0F2A67CEN.html>

Date: November 2025

Pages: 200

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

ID: D877F0F2A67CEN

Abstracts

According to Statistics MRC, the Global Data Center Infrastructure Market is accounted for \$81.93 billion in 2025 and is expected to reach \$211.41 billion by 2032 growing at a CAGR of 14.5% during the forecast period. Data center infrastructure encompasses the foundational hardware and software components that enable data storage, computation, and management. It consists of servers, network devices, storage units, power supply, cooling systems, and security tools that ensure continuous and efficient operation. Built for reliability and scalability, these infrastructures are essential for supporting digital business needs. Today's data centers increasingly adopt virtualization, cloud integration, and automated management systems to improve performance, resilience, and energy efficiency.

Market Dynamics:

Driver:

AI and high-performance computing (HPC)

The surge in AI workloads, including machine learning and deep learning, requires advanced computational power and optimized architectures. Enterprises are increasingly deploying HPC clusters to handle complex simulations, analytics, and real-time decision-making. This trend is accelerating demand for specialized servers, GPUs, and networking equipment. As industries embrace digital transformation, data centers are evolving into strategic hubs for innovation and scalability. The integration of AI-

driven automation is further enhancing efficiency and reducing latency across operations.

Restraint:

High capital and operational costs

Operational expenses such as energy consumption, cooling, and skilled workforce requirements add to the financial burden. Smaller enterprises often struggle to match the scale of hyperscale providers due to limited resources. Rising electricity costs and sustainability mandates are intensifying financial pressures on operators. Compliance with global standards and certifications also increases expenditure and slows expansion. These challenges collectively act as barriers to rapid adoption and modernization of infrastructure.

Opportunity:

Advanced cooling solutions

Advanced solutions such as liquid cooling, immersion cooling, and AI-optimized thermal management are gaining traction. These systems improve energy efficiency while reducing operational costs and environmental impact. Data centers adopting sustainable cooling approaches are better positioned to meet regulatory and corporate sustainability goals. Emerging markets are particularly receptive to cost-effective and eco-friendly cooling innovations. This opportunity is opening new pathways for vendors to differentiate and expand their offerings globally.

Threat:

Grid instability and natural disasters

Natural disasters such as floods, earthquakes, and hurricanes can severely impact uptime and service reliability. Operators are increasingly investing in backup power systems and disaster recovery strategies to mitigate risks. However, grid instability in certain regions continues to pose challenges for consistent operations. Climate change is intensifying the frequency and severity of such events, raising concerns about resilience. Without robust contingency planning, companies risk downtime, financial losses, and reputational damage.

Covid-19 Impact:

Lockdowns disrupted supply chains, delaying hardware procurement and construction projects. At the same time, reliance on digital platforms surged, driving unprecedented traffic and workload volumes. Operators responded by prioritizing automation, virtualization, and remote monitoring to maintain continuity. The crisis highlighted the importance of resilient and decentralized infrastructure models. Post-pandemic strategies now emphasize sustainability, scalability, and enhanced disaster preparedness across the industry.

The hardware segment is expected to be the largest during the forecast period

The hardware segment is expected to account for the largest market share during the forecast period. Servers, storage devices, and networking equipment form the backbone of data center operations. Rising demand for AI and HPC workloads is fueling investments in high-performance hardware. Innovations in processors, GPUs, and modular systems are enhancing efficiency and scalability. Enterprises are prioritizing hardware upgrades to support cloud migration and digital transformation initiatives.

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. Rising digitalization of medical records and diagnostic imaging is driving demand for secure and scalable storage. AI-powered analytics and telemedicine platforms require robust computing capabilities. Hospitals and research institutions are increasingly investing in cloud-based and HPC-enabled infrastructure. Regulatory compliance and patient data security are further accelerating adoption of advanced systems.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share. Rapid urbanization and digital transformation initiatives are fueling demand for data centers in countries like China, India, and Japan. Governments are investing heavily in IT infrastructure modernization and local manufacturing. The region is witnessing strong adoption of cloud services, AI applications, and e-commerce platforms. Strategic partnerships between global providers and regional firms are enhancing technology transfer and market penetration.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR. The U.S. and Canada are leading in technological innovation, particularly in AI, cloud computing, and HPC. Strong R&D investments and early adoption of advanced infrastructure are driving growth. Regulatory frameworks are supporting faster deployment of next-generation data center technologies. Enterprises are integrating IoT, analytics, and automation to optimize operations and reduce costs.

Key players in the market

Some of the key players in Data Center Infrastructure Market include Equinix, Advanced, Digital Rea, Nvidia, NTT Commu, Huawei Te, China Tele, Hewlett P, Amazon W, Dell Techn, Microsoft, Cisco Syst, Google Clo, Oracle, and IBM.

Key Developments:

In November 2025, IBM and Web Summit today unveiled a new global sports-tech competition proposal. The Sports Tech Startup Challenge will spotlight startups using AI to revolutionize sports from athlete performance and stadium operations to fan engagement with regional events planned for Qatar, Vancouver, and Rio, culminating with global winners being selected during Web Summit Lisbon 2026. Participation will be subject to local laws and official rules to be published before each regional competition.

In October 2025, Cisco announced a major expansion of their collaboration to advance secure AI infrastructure. This initiative is further evidence of Cisco's long-term commitment to driving digital advances across the region, building secure, trusted and high-performance infrastructure for the AI era.

Components Covered:

Hardware

Software

Services

Products Covered:

Power Infrastructure
Cooling Infrastructure
IT Racks & Enclosures
Networking Equipment
DCIM Solutions

Data Center Types Covered:

Cloud Data Centers
Enterprise Data Centers
Colocation Data Centers
Edge & Micro Data Centers

Tier Types Covered:

Tier 1
Tier 2
Tier 3
Tier 4

Enterprise Sizes Covered:

Small & Medium Enterprises (SMEs)

Large Enterprises

End Users Covered:

IT & Telecom

Healthcare

Banking, Financial Services, Insurance (BFSI)

Retail & E-commerce

Government & Defense

Manufacturing

Energy & Utilities

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 Product Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 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 INFRASTRUCTURE MARKET, BY COMPONENT

- 5.1 Introduction
- 5.2 Hardware
 - 5.2.1 Power systems
 - 5.2.2 Cooling systems
 - 5.2.3 Racks & enclosures
 - 5.2.4 Networking equipment
- 5.3 Software
 - 5.3.1 Data Center Infrastructure Management (DCIM)
 - 5.3.2 Monitoring & automation tools
 - 5.3.3 Energy optimization software
- 5.4 Services
 - 5.4.1 Consulting & design
 - 5.4.2 Integration & deployment
 - 5.4.3 Maintenance & support

6 GLOBAL DATA CENTER INFRASTRUCTURE MARKET, BY PRODUCT

- 6.1 Introduction
- 6.2 Power Infrastructure
 - 6.2.1 Backup Systems
 - 6.2.2 Distribution Units
- 6.3 Cooling Infrastructure
 - 6.3.1 Air-based Cooling
 - 6.3.2 Liquid Cooling
- 6.4 IT Racks & Enclosures
- 6.5 Networking Equipment
- 6.6 DCIM Solutions

7 GLOBAL DATA CENTER INFRASTRUCTURE MARKET, BY DATA CENTER TYPE

- 7.1 Introduction
- 7.2 Cloud Data Centers
- 7.3 Enterprise Data Centers
- 7.4 Colocation Data Centers
- 7.5 Edge & Micro Data Centers

8 GLOBAL DATA CENTER INFRASTRUCTURE MARKET, BY TIER TYPE

8.1 Introduction

8.2 Tier

8.3 Tier

8.4 Tier

8.5 Tier

9 GLOBAL DATA CENTER INFRASTRUCTURE MARKET, BY ENTERPRISE SIZE

9.1 Introduction

9.2 Small & Medium Enterprises (SMEs)

9.3 Large Enterprises

10 GLOBAL DATA CENTER INFRASTRUCTURE MARKET, BY END USER

10.1 Introduction

10.2 IT & Telecom

10.3 Healthcare

10.4 Banking, Financial Services, Insurance (BFSI)

10.5 Retail & E-commerce

10.6 Government & Defense

10.7 Manufacturing

10.8 Energy & Utilities

10.9 Other End Users

11 GLOBAL DATA CENTER INFRASTRUCTURE MARKET, BY GEOGRAPHY

11.1 Introduction

11.2 North America

11.2.1 US

11.2.2 Canada

11.2.3 Mexico

11.3 Europe

11.3.1 Germany

11.3.2 UK

11.3.3 Italy

11.3.4 France

11.3.5 Spain

11.3.6 Rest of Europe

11.4 Asia Pacific

11.4.1 Japan

11.4.2 China

11.4.3 India

11.4.4 Australia

11.4.5 New Zealand

11.4.6 South Korea

11.4.7 Rest of Asia Pacific

11.5 South America

11.5.1 Argentina

11.5.2 Brazil

11.5.3 Chile

11.5.4 Rest of South America

11.6 Middle East & Africa

11.6.1 Saudi Arabia

11.6.2 UAE

11.6.3 Qatar

11.6.4 South Africa

11.6.5 Rest of Middle East & Africa

12 KEY DEVELOPMENTS

12.1 Agreements, Partnerships, Collaborations and Joint Ventures

12.2 Acquisitions & Mergers

12.3 New Product Launch

12.4 Expansions

12.5 Other Key Strategies

13 COMPANY PROFILING

13.1 Equinix

13.2 Advanced Micro Devices (AMD)

13.3 Digital Realty

13.4 Nvidia

13.5 NTT Communications

13.6 Huawei Technologies

13.7 China Telecom

13.8 Hewlett Packard Enterprise (HPE)

13.9 Amazon Web Services (AWS)

13.10 Dell Technologies

13.11 Microsoft Azure

13.12 Cisco Systems

13.13 Google Cloud

13.14 Oracle

13.15 IBM

List Of Tables

LIST OF TABLES

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

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

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

Table 4 Global Data Center Infrastructure Market Outlook, By Power systems (2024-2032) (\$MN)

Table 5 Global Data Center Infrastructure Market Outlook, By Cooling systems (2024-2032) (\$MN)

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

Table 7 Global Data Center Infrastructure Market Outlook, By Networking equipment (2024-2032) (\$MN)

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

Table 9 Global Data Center Infrastructure Market Outlook, By Data Center Infrastructure Management (DCIM) (2024-2032) (\$MN)

Table 10 Global Data Center Infrastructure Market Outlook, By Monitoring & automation tools (2024-2032) (\$MN)

Table 11 Global Data Center Infrastructure Market Outlook, By Energy optimization software (2024-2032) (\$MN)

Table 12 Global Data Center Infrastructure Market Outlook, By Services (2024-2032) (\$MN)

Table 13 Global Data Center Infrastructure Market Outlook, By Consulting & design (2024-2032) (\$MN)

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

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

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

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

Table 18 Global Data Center Infrastructure Market Outlook, By Backup Systems

(2024-2032) (\$MN)

Table 19 Global Data Center Infrastructure Market Outlook, By Distribution Units

(2024-2032) (\$MN)

Table 20 Global Data Center Infrastructure Market Outlook, By Cooling Infrastructure

(2024-2032) (\$MN)

Table 21 Global Data Center Infrastructure Market Outlook, By Air-based Cooling

(2024-2032) (\$MN)

Table 22 Global Data Center Infrastructure Market Outlook, By Liquid Cooling

(2024-2032) (\$MN)

Table 23 Global Data Center Infrastructure Market Outlook, By IT Racks & Enclosures

(2024-2032) (\$MN)

Table 24 Global Data Center Infrastructure Market Outlook, By Networking Equipment

(2024-2032) (\$MN)

Table 25 Global Data Center Infrastructure Market Outlook, By DCIM Solutions

(2024-2032) (\$MN)

Table 26 Global Data Center Infrastructure Market Outlook, By Data Center Type

(2024-2032) (\$MN)

Table 27 Global Data Center Infrastructure Market Outlook, By Cloud Data Centers

(2024-2032) (\$MN)

Table 28 Global Data Center Infrastructure Market Outlook, By Enterprise Data Centers

(2024-2032) (\$MN)

Table 29 Global Data Center Infrastructure Market Outlook, By Colocation Data Centers

(2024-2032) (\$MN)

Table 30 Global Data Center Infrastructure Market Outlook, By Edge & Micro Data Centers (2024-2032) (\$MN)

Table 31 Global Data Center Infrastructure Market Outlook, By Tier Type (2024-2032) (\$MN)

Table 32 Global Data Center Infrastructure Market Outlook, By Tier 1 (2024-2032) (\$MN)

Table 33 Global Data Center Infrastructure Market Outlook, By Tier 2 (2024-2032) (\$MN)

Table 34 Global Data Center Infrastructure Market Outlook, By Tier 3 (2024-2032) (\$MN)

Table 35 Global Data Center Infrastructure Market Outlook, By Tier 4 (2024-2032) (\$MN)

Table 36 Global Data Center Infrastructure Market Outlook, By Enterprise Size (2024-2032) (\$MN)

Table 37 Global Data Center Infrastructure Market Outlook, By Small & Medium Enterprises (SMEs) (2024-2032) (\$MN)

Table 38 Global Data Center Infrastructure Market Outlook, By Large Enterprises (2024-2032) (\$MN)

Table 39 Global Data Center Infrastructure Market Outlook, By End User (2024-2032) (\$MN)

Table 40 Global Data Center Infrastructure Market Outlook, By IT & Telecom (2024-2032) (\$MN)

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

Table 42 Global Data Center Infrastructure Market Outlook, By Banking, Financial Services, Insurance (BFSI) (2024-2032) (\$MN)

Table 43 Global Data Center Infrastructure Market Outlook, By Retail & E-commerce (2024-2032) (\$MN)

Table 44 Global Data Center Infrastructure Market Outlook, By Government & Defense (2024-2032) (\$MN)

Table 45 Global Data Center Infrastructure Market Outlook, By Manufacturing (2024-2032) (\$MN)

Table 46 Global Data Center Infrastructure Market Outlook, By Energy & Utilities (2024-2032) (\$MN)

Table 47 Global Data Center 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.

I would like to order

Product name: Data Center Infrastructure Market Forecasts to 2032 – Global Analysis By Component (Hardware, Software and Services), Product, Data Center Type, Tier Type, Enterprise Size, End User and By Geography

Product link: <https://marketpublishers.com/r/D877F0F2A67CEN.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/D877F0F2A67CEN.html>