

Data Center Power Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 197 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The Global Data Center Power market is expected to register a CAGR of 6.58% during the forecast period. The rising adoption of mega data centers is driving the market. Implementing fewer mega data centers depending on their locations can allow a company to enjoy the advantages of certain local benefits, such as low energy prices, a favorable climate, or the availability of alternative energy sources. Virtualization dramatically improves hardware utilization and enables firms to reduce the number of power-consuming servers and storage devices.

Key Highlights

The rising adoption of cloud computing is also aiding market growth, leading to the rise of vast, hyperscale cloud data centers. For instance, in October 2022, Cisco introduced new shared solutions for assisting businesses, webscale firms, and hyperscale firms in delivering richer cloud applications and services while balancing their need for increased bandwidth while consuming less space and power.

Further, the increase in greenfield and brownfield facilities, along with the modular data center deployment, is anticipated to drive the demand for power systems. The emergence of edge computing and expanding facilities in the secondary data center market drive the need for modular and efficient power infrastructure solutions. The market is expected to be transformed by rising electricity costs, carbon emissions, and hyperscale operators' initiatives to integrate renewable energy sources. The facility operators are adopting innovative and efficient power infrastructure to reduce carbon emissions and OPEX costs.

Many data centers around the world are implementing 2N redundant UPS systems to deal with the facility's various feed designs and frequent failure. Factors such as cost, reliability, efficiency, and maintainability impact the adoption of UPS systems and generators in the global market.

The intelligent rack PDU solutions are made to help keep things running smoothly in complex facilities with a lot of racks. Datacenter colocation providers are looking for modern infrastructure solutions that require less maintenance and less

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

space, with 99.99% uptime. These diverse demands are expected to spur vendors to offer innovative power solutions. PDU is the biggest and most established product category in the data center power market, which is expected to register a much more moderate growth level during the forecast period.

However, higher investment is restraining market growth as the primary investment areas are cabling, power facilities, and data center infrastructure management (DCIM) solutions, which require high costs during the initial investment.

Data Center Power Market Trends

The Information Technology Segment is Expected to Hold a Major Market Share

The IT industry requires on-premise private data storage and hyper-scale data centres for its operations, depending on the size of the organization. Additionally, the adoption of cloud storage has increased over the years due to growth among SaaS providers, enabling cloud storage providers to expand their capacities. Hence, the increasing data load requires more power. This creates a requirement for efficient power solutions in IT applications. According to the Data Center Survey recently published by Vertiv, 98% of the participants voted for IT utilization to be above 20% by 2025. This indicates that IT companies are focusing on deploying an efficient power source for their data centres and increasing their utilization rate.

Cloud storage providers, like AWS, Microsoft, and Google, are expanding their storage capabilities to offer more efficient workflows in the cloud. These companies are making investments in hyperscale deals. For instance, in June last year, Amazon Web Services Inc. (AWS) announced the opening of data centers in Israel. The company aims to enable more developers, startups, enterprises, the government, education, and non-profits in the region to run their applications and serve end-users from data centers in the country.

Also, in November last year, AWS announced plans to open an infrastructure region in Alberta, Canada, in late 2023 or early 2024. The new AWS Canada West (Calgary) Region will consist of three availability zones (AZs) at launch and join the existing AWS Canada (Central) Region in Montreal, which also consists of three availability zones. The new AWS Canada West (Calgary) Region will enable even more developers, startups, enterprises, education, government, and non-profits to run their applications and serve end-users from data centers in Canada.

Furthermore, other companies are planning data center expansion in various regions. For instance, in June last year, Stockland, an Australian real-estate firm, announced plans to build a new data center in Sydney. The data center is to have an end value of USD 181 million. Moreover, it will include 6,300 sq m of data halls, 3,215 sq m of office space, and more than 13,000 sq m of electrical and mechanical services. Such developments in the data center industry are anticipated to propel the growth of the data center power market during the forecast period. Some new entrants, like SpaceDC, Keppel Data Centers, and Princeton Digital Group, are also making moves to invest in hyperscale facilities and data center investments.

Although the industry is rapidly adopting the cloud, the dependency on on-premise and hybrid data centers is still significant. These companies are trying to expand their own data storage capacities, which is expected to demand an efficient power solution for data centers. Moreover, the trend of the IT industry's agile and DevOps operational frameworks is increasing the need for more efficient data storage solutions.

The Asia Pacific Region is Expected to Witness a High Market Growth

According to Cloudscene, China currently has 447 data centres and 112 service providers. The presence of a large number of data centres is driving the demand for data centre power systems in the country. Furthermore, the increasing number of new data centre developments and the upgrading of existing data centres are also expected to drive the market's growth.

In April of last year, Apple officially announced the opening of a new data centre in Guizhou, China. Apple and Guizhou-Cloud Big

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Data Industry Co., Ltd. jointly built this data centre. Such new data centre developments in the country are expected to increase demand for data centre power solutions. As most of the data centres are powered by polluting coal, the governments of the affected countries are shifting toward clean and renewable energy sources. China has installed the most significant amount of renewable energy, with solar power reaching over 174 GW and wind power over 184 GW. Furthermore, the surge in investment in data centre development is expected to fuel the demand for data centre power solutions.

Further, the Japanese government has announced its plan to subsidize 50% of the building costs for new zero-carbon-emissions data centers and upgrade existing facilities as part of a new USD 7.3 billion initiative to innovate the industry and reduce carbon emissions.

According to a study by DataSpan, in up to 55% of data centers, energy consumption is used to run cooling and ventilation systems. Thus, to reduce carbon emissions and the amount of energy used by data centers, mainly required to maintain server-suited temperatures, Japan is planning to build more facilities in its colder regions. In November last year, AirTrunk opened its first data center in Japan to support the growing number of companies in the country shifting to the cloud. The company has built a 300MW data center campus in Inzai and is set to begin operations with a 60MW phase.

Colt also launched its third Inzai data center last year, a 27 MW facility next to its existing two Inzai buildings. In turn, it is expected to create lucrative opportunities for the country's data center power solution market.

Japan has a tremendous impetus for green power, and a lot of activity toward an improved regulatory framework to buy green power on the market is expected to be witnessed. Market vendors seek to work with third-party providers on green energy in Japan. Players like Google, Microsoft, and Digital Realty are looking for other companies to fund renewable power through power purchase agreements to build solar and wind farms.

Data Center Power Market Competitor Analysis

The Data Center Power market is highly fragmented, with multiple vendors present. Players are adopting several strategies, such as mergers and acquisitions (M&A), collaborations, partnerships, etc. Various initiatives are being undertaken by governmental bodies as well as private data center construction, which is creating intense competition. Key players are Schneider Electric SE, Fujitsu Ltd., Cisco Technology Inc., etc. Recent developments in the market are:

In October 2022, Equinix, Inc., a digital infrastructure business, unveiled a plan for a USD 74 million International Business Exchange (IBX) data center in the heart of Jakarta. Equinix's growth will allow Indonesian companies, as well as multinationals with a presence in Indonesia, to utilize their trusted platform to connect together and integrate the foundational infrastructure that will drive their enterprises.

In January 2022, Tripp Lite by Eaton introduced practical options for connecting and controlling network equipment in demanding industrial environments, such as factories and warehouses. The new managed and lite-managed industrial Gigabit Ethernet switches have an IP30-rated ruggedized metal case that can withstand vibration, shock, and the low and high temperatures often found on the factory floor. The switches also offer protection from electrostatic discharge (ESD), which can interfere with normal operation. A rail clip is included to allow mounting to standard 35 mm DIN rail.

Additional Benefits:

The market estimate (ME) sheet in Excel format
3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions and Market Definition

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

4.1 Market Overview

4.2 Market Drivers

4.2.1 Rising Adoption of Mega Data Centers and Cloud Computing

4.2.2 Increasing Demand to Reduce Operational Costs

4.3 Market Restraints

4.3.1 High Cost of Installation and Maintenance

4.4 Industry Attractiveness - Porter's Five Forces Analysis

4.4.1 Threat of New Entrants

4.4.2 Bargaining Power of Buyers

4.4.3 Bargaining Power of Suppliers

4.4.4 Threat of Substitute Products

4.4.5 Intensity of Competitive Rivalry

4.5 Assessment of the Impact of COVID-19 on the Market

5 TECHNOLOGY SNAPSHOT

6 MARKET SEGMENTATION

6.1 By Type

6.1.1 Solutions

6.1.1.1 Power Distribution Unit

6.1.1.2 UPS

6.1.1.3 Busway

6.1.1.4 Other Solutions

6.1.2 Services

6.1.2.1 Consulting

6.1.2.2 System Integration

6.1.2.3 Professional Service

6.2 By End-user Application

6.2.1 Information Technology

6.2.2 Manufacturing

6.2.3 BFSI

6.2.4 Government

6.2.5 Telecom

6.2.6 Other End-user Applications

6.3 By Data Center Size

6.3.1 Small and Medium

6.3.2 Large

6.4 By Geography

6.4.1 North America

6.4.1.1 United States

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.4.1.2 Canada
- 6.4.2 Europe
 - 6.4.2.1 United Kingdom
 - 6.4.2.2 Germany
 - 6.4.2.3 France
 - 6.4.2.4 Italy
 - 6.4.2.5 Spain
 - 6.4.2.6 Rest of Europe
- 6.4.3 Asia-Pacific
 - 6.4.3.1 China
 - 6.4.3.2 Japan
 - 6.4.3.3 Australia
 - 6.4.3.4 Singapore
 - 6.4.3.5 India
 - 6.4.3.6 Rest of Asia-Pacific
- 6.4.4 Rest of the World

7 COMPETITIVE LANDSCAPE

- 7.1 Company Profiles
 - 7.1.1 Schneider Electric SE
 - 7.1.2 Fujitsu Ltd
 - 7.1.3 Cisco Technology Inc.
 - 7.1.4 ABB Ltd
 - 7.1.5 Eaton Corporation
 - 7.1.6 Tripp Lite
 - 7.1.7 Rittal GmbH & Co. KG
 - 7.1.8 Schleifenbauer
 - 7.1.9 Vertiv Co.
 - 7.1.10 Legrand SA
 - 7.1.11 Black Box Corporation

8 INVESTMENT ANALYSIS

9 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Data Center Power Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 197 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-03-01"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

