

Data Center Power Market in US- Industry Outlook and Forecast 2020-2025

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Abstracts

In-depth Analysis and Data-driven Insights on the Impact of COVID-19 Included in this U.S. Data Center Power Market Report

The US data center power market share is expected to grow at a CAGR of over 3% during the period 2019–2025.

South Eastern U.S. is one of the major contributors to the U.S. data center power market. With a power capacity share of over 40%, the region attracted high initial investments, especially Virginia, which witnessed over \$1 billion in 2019. States such as Virginia, Arizona, Illinois, Nevada, California, Texas, Ohio, Tennessee, Iowa, and North Carolina have received significant investments in recent years. Colocation providers are the major investors, accounting over 50% share, with enterprises, hyperscale operators, and government entities contributing to the rest of the investments. North America is likely to dominate the global data center power market with over 50 hyperscale development projects to be operational in the United States and Canada in the coming years. The U.S. market is likely to experience a rise in edge data center computing to deliver services with low latency and high efficiency. There is a significant rise in the number of data centers that run blockchain and cryptocurrency workloads across the U.S. market. These blockchain and cryptocurrency facilities consuming hundreds of megawatts of capacity. This is likely to boost the U.S. power market growth during the forecast period.

The following factors are likely to contribute to the growth of the US data center power market during the forecast period:

Increasing Procurement of Renewable Energy



Emergence of Nickel-Zinc & Prussian Blue Sodium-ion Battery UPS Systems

Use of Fuel Cells in Data Centers

Adoption of DC UPS Systems to Reduce Power Loss

The study considers the present scenario of the US data center power market and its market dynamics for the period 2019?2025. It covers a detailed overview of several market growth enablers, restraints, and trends. The report offers both the demand and supply aspect of the market. It profiles and examines leading companies and other prominent ones operating in the market.

U.S. DATA CENTER POWER MARKET SEGMENTATION

This research report includes a detailed segmentation by power infrastructure, UPS systems, generators, tier standards, and geography. The adoption of lithium-ion batteries is growing significantly during the forecast period as their price will continue to decline. Since most vendors are offering lithium-ion based UPS systems, the market is likely to become highly competitive during the forecast period. The U.S. generator market will continue to grow because of the construction of large and mega facilities. However, with growing concerns over carbon emissions, the use of diesel generators is expected to decline, thereby providing growth opportunities to natural gas generators. The growing complexity of data center infrastructure is propelling the growth of automated switchgear technology. With the increased construction of data centers across the country, the market for transfer switches and switchgears is also expected to grow during the forecast period. The adoption of rack PDUs supporting up to 20 kW will increase with the use of high-performance computing infrastructure in the United States.

Most data centers have a minimum of N+1 power redundancy configuration in their UPS systems in the South-Western U.S. A prominent vendor in the region procured UPS with Eco Mode designed flexibility to support up to 2N+1 redundant configuration. Several facilities in the Mid-western region are equipped with dedicated UPS systems with minimum N+1 power redundancy. Most UPS systems in the Western US are installed with a capacity of 500–750 kVA. Data centers facilities with below 10 MW of power capacity will commonly comprise 500 kVA of capacity per unit, whereas there are facilities with a power capacity above 10 MW that will comprise up to over 750 kVA UPS units in the North Eastern U.S. The application of



Contents

1 RESEARCH METHODOLOGY

2 RESEARCH OBJECTIVES

3 RESEARCH PROCESS

4 SCOPE & COVERAGE

- 4.1 Market Definition
- 4.2 Base Year
- 4.3 Scope of The Study
- 4.4 Market Segments
 - 4.4.1 Market Segmentation by Electrical Infrastructure
 - 4.4.2 Market Segmentation by UPS Systems
 - 4.4.3 Market Segmentation by Generators
 - 4.4.4 Market Segmentation by Tier Standards
 - 4.4.5 Market Segmentation by Geography

5 REPORT ASSUMPTIONS & CAVEATS

- 5.1 Key Caveats
- 5.2 Currency Conversion
- 5.3 Market Derivation

6 MARKET AT A GLANCE

7 INTRODUCTION

7.1 Data Center Site Selection Criteria

8 IMPACT OF COVID-19

- 8.1 Impact of Covid-19 on Data Center Industry
 - 8.1.1 Construction Perspectivity:
 - 8.1.2 Infrastructure Production & Procurement
 - 8.1.3 Data Center Operations
- 8.2 Impact of Covid-19 In Data Center Power Market In US



9 MARKET OPPORTUNITIES & TRENDS

- 9.1 Increasing Procurement of Renewable Energy
- 9.2 Use of Lithium-Ion Batteries In Data Centers
- 9.3 Emergence of Nickel-Zinc & Prussian Blue Sodium-Ion Battery UPS Systems
- 9.4 Use of Fuel Cells in Data Centers
- 9.5 Software-Defined Power to Monitor & Automate Power Infrastructure
- 9.6 Adoption of DC UPS Systems to Reduce Power Loss
- 9.7 Rising Demand for Edge Data Centers

10 MARKET GROWTH ENABLERS

- 10.1 Colocation Investments Drive Power Infrastructure Procurement
- 10.2 Increase in Hyperscale Data Center Contribution
- 10.3 Adoption of Prefabricated Power Infrastructure
- 10.4 Allocation of Power Resources & Tax Incentives
- 10.5 Growing Rack Power Density

11 MARKET RESTRAINTS

- 11.1 High Maintenance Cost & Inefficiency Increase Opex
- 11.2 Increased Power Outages Due to Equipment Failure
- 11.3 High Cost of Power-Efficient Infrastructure

12 MARKET LANDSCAPE

- 12.1 Market Overview
- 12.2 Market Size & Forecast
- 12.3 Five Forces Analysis
- 12.3.1 Threat of New Entrants
- 12.3.2 Bargaining Power of Suppliers
- 12.3.3 Bargaining Power of Buyers
- 12.3.4 Threat of Substitutes
- 12.3.5 Competitive Rivalry

13 POWER INFRASTRUCTURE

13.1 Market Snapshot & Growth Engine





13.2 Market Overview 13.3 UPS Systems 13.3.1 Market Overview 13.3.2 Market Size & Forecast 13.4 Generators 13.4.1 Market Overview 13.4.2 Market Size & Forecast 13.5 Transfer Switches & Switchgear 13.5.1 Market Overview 13.5.2 Market Size & Forecast **13.6 Power Distribution Units** 13.6.1 Market Overview 13.6.2 Market Size & Forecast 13.7 Other Electrical Infrastructure 13.7.1 Market Overview 13.7.2 Market Size & Forecast

14 UPS SYSTEMS

14.1 Market Snapshot & Growth Engine14.2 Market Overview14.3 1,000 KVA14.5.1 Market Size & Forecast

15 GENERATORS SYSTEMS

15.1 Market Snapshot & Growth Engine15.2 Market Overview15.3 2 MW15.5.1 Market Size & Forecast

16 TIER STANDARDS

16.1 Market Snapshot & Growth Engine
16.2 Market Overview
16.3 TIER I & II
16.3.1 Market Overview
16.3.2 Market Size & Forecast
16.4 TIER III



- 16.4.1 Market Overview 16.4.2 Market Size & Forecast 16.5 TIER IV 16.5.1 Market Overview
- 16.5.2 Market Size & Forecast

17 GEOGRAPHY

- 17.1 Geography Snapshot & Growth Engine
- 17.2 Power Capacity: Snapshot & Growth Engine
- 17.3 Market Overview

18 SOUTH EASTERN US

- 18.1 Market Overview
- 18.2 Investment: Market Size & Forecast
- 18.3 Electricity Pricing In South Eastern US
- 18.4 Power Capacity: Market Size & Forecast
- 18.5 Infrastructure: Market Size & Forecast

19 SOUTH WESTERN US

- 19.1 Market Overview
- 19.2 Investment: Market Size & Forecast
- 19.3 Electricity Pricing in South Western US
- 19.4 Power Capacity: Market Size & Forecast
- 19.5 Infrastructure: Market Size & Forecast

20 MID-WESTERN US

- 20.1 Market Overview
- 20.2 Investment: Market Size & Forecast
- 20.3 Electricity Pricing in Mid-Western US
- 20.4 Power Capacity: Market Size & Forecast
- 20.5 Infrastructure: Market Size & Forecast

21 WESTERN US

21.1 Market Overview



- 21.2 Investment: Market Size & Forecast
- 21.3 Electricity Pricing in Western US
- 21.4 Power Capacity: Market Size & Forecast
- 21.5 Infrastructure: Market Size & Forecast

22 NORTH EASTERN US

- 22.1 Market Overview
- 22.2 Investment: Market Size & Forecast
- 22.3 Electricity Pricing In North Eastern US
- 22.4 Power Capacity: Market Size & Forecast
- 22.5 Infrastructure: Market Size & Forecast

23 COMPETITIVE LANDSCAPE

23.1 Competition Overview

24 KEY VENDOR PROFILES

- 24.1 ABB
 - 24.1.1 Business Overview
 - 24.1.2 Product Offerings
- 24.1.3 Key News
- 24.2 Caterpillar
 - 24.2.1 Business Overview
- 24.2.2 Product Offerings
- 24.2.3 Key News
- 24.3 Cummins
 - 24.3.1 Business Overview
 - 24.3.2 Product Offerings
- 24.3.3 Key News
- 24.4 Eaton
 - 24.4.1 Business Overview
 - 24.4.2 Product Offerings
 - 24.4.3 Key News
- 24.5 Schneider Electric
 - 24.5.1 Business Overview
 - 24.5.2 Product Offerings
 - 24.5.3 Key News



24.6 Vertiv

- 24.6.1 Business Overview
- 24.6.2 Product Offerings
- 24.6.3 Key News

25 OTHER PROMINENT VENDORS

- 25.1 AEG Power Systems
 25.1.1 Business Overview
 25.1.2 Product Offerings
 25.2 Artesyn Embedded Technology (Aligned Energy)
 25.2.1 Business Overview
 25.2.2 Product Offerings
 25.2.3 Key News
- 25.3 Black Box Networks Services (AGC Networks)
 - 25.3.1 Business Overview
 - 25.3.2 Product Offerings
 - 25.3.3 Key News
- 25.4 Bloom Energy (Fuel Cells)
- 25.4.1 Business Overview
- 25.4.2 Product Offerings
- 25.5 Chatsworth Products
 - 25.5.1 Business Overview
- 25.5.2 Product Offerings
- 25.6 Cisco Systems
 - 25.6.1 Business Overview
- 25.6.2 Product Offerings
- 25.7 Controlled Power Company
- 25.7.1 Business Overview
- 25.7.2 Product Offerings
- 25.8 Crenlo
- 25.8.1 Business Overview
- 25.8.2 Product Offerings
- 25.9 Cyber Power Systems
- 25.9.1 Business Overview
- 25.9.2 Product Offerings
- 25.10 Delta Group
- 25.10.1 Business Overview
- 25.10.2 Product Offerings



25.10.3 Key News 25.11 Detroit Diesel 25.11.1 Business Overview 25.11.2 Product Offerings 25.12 Euro-Diesel (KINOLT) 25.12.1 Business Overview 25.12.2 Product Offerings 25.13 Fuji Electric 25.13.1 Business Overview 25.13.2 Product Offerings 25.14 Generac Power Systems 25.14.1 Business Overview 25.14.2 Product Offerings 25.15 Hewlett Packard Enterprise (HPE) 25.15.1 Business Overview 25.15.2 Product Offerings 25.16 Hitachi Hi-Rel Power Electronics 25.16.1 Business Overview 25.16.2 Product Offerings 25.17 Hitech Power Protection 25.17.1 Business Overview 25.17.2 Product Offerings 25.18 Hitzinger 25.18.1 Business Overview 25.18.2 Product Offerings 25.19 Kohler (SDMO) 25.19.1 Business Overview 25.19.2 Product Offerings 25.20 Legrand 25.20.1 Business Overview 25.20.2 Product Offerings 25.21 Mitsubishi 25.21.1 Business Overview 25.21.2 Product Offerings 25.22 MTU On Site Energy (Rolls-Royce Power Systems AG) 25.22.1 Business Overview 25.22.2 Product Offerings 25.23 Natron Energy 25.23.1 Business Overview





25.23.2 Product Offerings 25.23.3 Key News 25.24 Panduit 25.24.1 Business Overview 25.24.2 Product Offerings 25.25 Piller Power Systems 25.25.1 Business Overview 25.25.2 Product Offerings 25.26 Pramac 25.26.1 Business Overview 25.26.2 Product Offerings 25.27 Riello UPS 25.27.1 Business Overview 25.27.2 Product Offerings 25.27.3 Key News 25.28 Rittal 25.28.1 Business Overview 25.28.2 Product Offerings 25.29 Socomec 25.29.1 Business Overview 25.29.2 Product Offerings 25.30 Toshiba 25.30.1 Business Overview 25.30.2 Product Offerings 25.31 Virtual Power Systems 25.31.1 Market Overview 25.31.2 Product Offerings 25.32 Yanmar Group (HIMOINSA) 25.32.1 Business Overview 25.32.2 Product Offerings 25.33 ZAF Energy Systems ("ZAF") 25.33.1 Business Overview 25.33.2 Product Offerings 25.33.3 Key News 25.34 ZincFive 25.34.1 Business Overview 25.34.2 Product Offerings

26 REPORT SUMMARY



26.1 KEY TAKEAWAYS

27 QUANTITATIVE SUMMARY

- 27.1 Overall Market
- 27.2 Market by Infrastructure
- 27.3 UPS Market
- 27.4 Generator Market
- 27.5 Tier Standards
- 27.6 Geography: Investment
- 27.7 Geography: Power Capacity
- 27.8 North Eastern US
 - 27.8.1 Overall Market
- 27.8.2 Market by Infrastructure
- 27.9 South Eastern US
 - 27.9.1 Overall Market
 - 27.9.2 Market by Infrastructure
- 27.10 Mid-Western US
 - 27.10.1 Overall Market
- 27.10.2 Market by Infrastructure
- 27.11 South Western US
- 27.11.1 Overall Market
- 27.11.2 Market by Infrastructure
- 27.12 Western US
- 27.12.1 Overall Market
- 27.12.2 Market by Infrastructure

28 APPENDIX

28.1 Abbreviations



List Of Exhibits

LIST OF EXHIBITS

Exhibit 1 Segmentation of Data Center Power Market in US Exhibit 2 Market Size Calculation Approach 2019 Exhibit 3 Impact of Increasing Procurement of Renewable Energy Exhibit 4 Renewable Energy Usage by Hyperscale Data Center Providers 2019 Exhibit 5 Renewable Energy Purchases by Hyperscale Data Center Providers 2019 Exhibit 6 Impact of Use of Lithium-ion Batteries in Data Centers Exhibit 7 Impact of Emergence of Nickel-Zinc & Prussian Blue Sodium-ion Battery UPS Systems Exhibit 8 Evolution of Battery Technologies in Data Center Exhibit 9 Impact of Use of Fuel Cells in Data Centers Exhibit 10 Impact of Software-defined Power to Monitor & Automate Power Infrastructure Exhibit 11 Impact of Adoption of DC UPS Systems to Reduce Power Loss Exhibit 12 Impact of Rising Demand for Edge Data Centers Exhibit 13 Impact of Colocation Investments Drive Power Infrastructure Procurement Exhibit 14 Number of Colocation Projects US Sub-Regions (2019) Exhibit 15 Number of Colocation Projects with Top States in US 2019 Exhibit 16 Impact of Increase in Hyperscale Data Center Contribution Exhibit 17 Number of Hyperscale Projects by US Sub-Regions (2019) Exhibit 18 Number of Hyperscale Projects in US by States (2019) Exhibit 19 Impact of Adoption of Prefabricated Power Infrastructure Exhibit 20 Impact of Allocation of Power Resources & Tax Incentives Exhibit 21 Impact of Growing Rack Power Density Exhibit 22 Impact of High Maintenance Cost & Inefficiency Increase OPEX Exhibit 23 UPS System CAPEX vs OPEX Exhibit 24 Impact of Increased Power Outages Due to Equipment Failure Exhibit 25 Impact of High Cost of Power-efficient Infrastructure Exhibit 26 Data Center Power Market in US 2019?2025 (\$ billion) Exhibit 27 Data Center Power Market in the US by Power Capacity 2019–2025 (MW) Exhibit 28 US Data Center Power Capacity Share by Sub-Regions (%) Exhibit 29 Five Forces Analysis 2019 Exhibit 30 Incremental Growth by Power Infrastructure 2019 & 2025 Exhibit 31 Data Center Power Infrastructure Overview 2019 Exhibit 32 Data Center UPS Systems Market in US 2019?2025 (\$ billion)



Exhibit 34 Data Center Transfer Switches & Switchgears Market in US 2019?2025 (\$ billion) Exhibit 35 Data Center PDU Market in US 2019?2025 (\$ billion) Exhibit 36 Data Center Other Power Infrastructure Market in US 2019?2025 (\$ billion) Exhibit 37 Incremental Growth by UPS Systems 2019 & 2025 Exhibit 38 Data Center UPS Systems Market in US by Capacity 2019 & 2025 (%) Exhibit 39 Data Center 1,000 kVA UPS Market in US 2019?2025 (\$ billion) Exhibit 42 Incremental Growth by Generator Systems 2019 & 2025 Exhibit 43 Data Center Generator Market Share by Power Capacity 2019 & 2025 (%) Exhibit 44 Data Center 2 MW Generator Market in US 2019?2025 (\$ billion) Exhibit 47 Incremental Growth by Tier Standards 2019 & 2025 Exhibit 48 Overview of Tier Standards Exhibit 49 Tier I & Tier II Data Center Power Market in US 2019–2025 (\$ billion) Exhibit 50 Tier III Data Center Power Market in US 2019–2025 (\$ billion) Exhibit 51 Tier III Facilities in US Sub-Regions in 2019 Exhibit 52 Tier IV Data Center Power Market in US 2019?2025 (\$ billion) Exhibit 53 Tier IV Facilities in US Sub-Regions in 2019 Exhibit 54 Incremental Growth by Geography 2019?2025 Exhibit 55 Incremental Growth in US by Power Capacity 2019?2025 (MW) Exhibit 56 US Data Center Power Market Investment Share by Sub-Regions in 2019 & 2025 (%) Exhibit 57 Data Center Power Market in South Eastern US 2019?2025 (\$ million) Exhibit 58 Electricity Pricing in South Eastern US 2018–2019 (Cents per kW) Exhibit 59 Data Center Power Market in South Eastern US by Power Capacity 2019–2025 (MW) Exhibit 60 Data Center Power Infrastructure Market in South Eastern US 2019–2025 (\$ million) Exhibit 61 Data Center Power Market in South Western US 2019–2025 (\$ million) Exhibit 62 Electricity Pricing in South Western US 2018–2019 (Cents per kW) Exhibit 63 Data Center Power Market in South Western US by Power Capacity 2019–2025 (MW) Exhibit 64 Data Center Power Infrastructure Market in South Western US 2019–2025 (\$ million) Exhibit 65 Data Center Power Market in Mid-Western US 2019–2025 (\$ million) Exhibit 66 Electricity Pricing in Mid-Western US 2018–2019 (Cents per kW) Exhibit 67 Data Center Power Market in Mid-Western US by Power Capacity 2019–2025 (MW)

Exhibit 68 Data Center Power Infrastructure Market in Mid-Western US 2019–2025 (\$ million)



Exhibit 69 Data Center Power Market in Western US 2019–2025 (\$ million) Exhibit 70 Electrical Pricing in Western US 2018–2019 (Cents per kW)

Exhibit 71 Data Center Power Market in Western US by Power Capacity 2019–2025 (MW)

Exhibit 72 Data Center Power Infrastructure Market in Western US 2019–2025 (\$ million)

Exhibit 73 Data Center Power Market in North Eastern US 2019–2025 (\$ million)

Exhibit 74 Electrical Pricing in North Eastern US 2018–2019 (Cents per kW)

Exhibit 75 Data Center Power Market in North Eastern US by Power Capacity 2019–2025 (MW)

Exhibit 76 Data Center Power Infrastructure Market in North Eastern US 2019–2025 (\$ million)



List Of Tables

LIST OF TABLES

Table 1 Key Caveats Table 2 Currency Conversion 2013?2019 Table 3 Data Center Site Selection Criteria Table 4 Impact of COVID-19 Pandemic in Data Center Power Market in US Table 5 Comparison of Lithium-ion & VRLA Batteries in UPS Systems Table 6 ABB: Major Product Offerings Table 7 Caterpillar: Major Product Offerings Table 8 Cummins: Major Product Offerings Table 9 Eaton: Major Product Offerings Table 10 Schneider Electric: Major Product Offerings Table 11 Vertiv: Major Product Offerings Table 12 Data Center Power Market in US 2019?2025 (\$ billion) Table 13 Data Center Power Infrastructure Market in US 2019?2025 (\$ billion) Table 14 Data Center UPS Market in US 2019?2025 (\$ billion) Table 15 Data Center Generator Market in US 2019?2025 (\$ billion) Table 16 Data Center Power Market in US by Tier Standards 2019?2025 (\$ billion) Table 17 Data Center Power Market in US by Regions 2019?2025 (\$ million) Table 18 Data Center Power Market in US by Regions 2019?2025 (MW) Table 19 Data Center Power Market in North Eastern US 2019?2025 Table 20 Data Center Power Infrastructure Market in North Eastern US 2019?2025 (\$ million) Table 21 Data Center Power Market in South Eastern US 2019?2025 Table 22 Data Center Power Infrastructure Market in South Eastern US 2019?2025 (\$ million) Table 23 Data Center Power Market in Mid-Western US 2019?2025 Table 24 Data Center Power Infrastructure Market in Mid-Western US 2019?2025 (\$ million) Table 25 Data Center Power Market in South Western US 2019?2025 Table 26 Data Center Power Infrastructure Market in South Western US 2019?2025 (\$million) Table 27 Data Center Power Market in Western US 2019?2025 Table 28 Data Center Power Infrastructure Market in Western US 2019?2025 (\$ million)



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