

United States Data Center Power Market - Industry Outlook & Forecast 2023-2028

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Report description:

The U.S. data center power market by investment is expected to grow at a CAGR of 5.89% from 2022 to 2028.

KEY TRENDS

The implementation of modular power infrastructure is set to deliver substantial operational cost savings for data centers over time. These modular systems are highly efficient, requiring less maintenance and offering space-saving advantages compared to conventional power infrastructure. With the growing adoption of intelligent real-time monitoring software, the importance of monitoring in data centers is on the rise. These advanced monitoring solutions incorporate automation and AI features, enabling them to anticipate maintenance requirements, predict component failures, and facilitate seamless automatic switchovers to ensure uninterrupted operations.

The utilization of free cooling techniques witnessed significant growth in recent years, particularly in regions with favorable climatic conditions. Facilities increasingly employ evaporative coolers to fulfill their cooling needs, improving energy efficiency and cost savings. Innovative designs, such as district heating, are expected to gain traction among data centers in states with colder climates. This approach leverages the excess heat generated by data centers, repurposing it for heating purposes, thereby promoting energy efficiency and sustainability.

SEGMENTAL ANALYSIS

-[The U.S. data center power market witnessed substantial expansion owing to the surge in data center construction activities. Operators actively seek innovative, energy-efficient solutions to power their facilities. Significant investments are directed toward UPS systems within the power infrastructure segment. These systems play a crucial role in ensuring continuous and reliable power supply.

-[Notably, the U.S. data center power market saw a rise in adopting UPS systems powered by valve-regulated lead-acid (VRLA) and lithium-ion technologies, reflecting the industry's focus on leveraging advanced UPS solutions to enhance efficiency and

performance.

-[Integrating modular power infrastructure within data centers presents a promising opportunity for long-term cost savings. These modular systems offer enhanced efficiency, lower maintenance requirements, and reduced space utilization, improving operational expenses over time. Facilities can optimize their energy consumption, streamline maintenance processes, and effectively manage their resources by leveraging the advantages of modularity. As a result, the incorporation of modular power infrastructure not only ensures reliable and efficient power delivery and contributes to cost-effective operations.

Segmentation by Electrical Infrastructure

- UPS Systems - Generators - Transfer Switches & Switchgears - PDUs - Other Electrical Infrastructure

Segmentation by UPS System Capacity

-□<=500 kVA -□500-1,000 kVA -□>1,000 kVA

Segmentation by Generator Capacity

-[]0-1.5 MW -[]5-3 MW -[]>=3 MW

Segmentation by Tier Standards

-[]Tier I & II -[]Tier III -[]Tier IV

Segmentation by Geography

- Southeastern U.S. - Midwestern U.S. - Southwestern U.S. - Western U.S. - Northeastern U.S.

VENDOR ANALYSIS

Key Vendors Profiles

-[]ABB -[]Caterpillar

-[]Cummins

- Delta Electronics
- -[Eaton
- -[]Legrand
- -[Rolls-Royce
- Schneider Electric
- -[]STULZ
- -[]Vertiv

Other Prominent Vendors

- AEG Power Solutions - Advanced Energy (ARTESYN) - AMETEK Powervar - Black Box Network Services (AGC Networks) Bloom Energy -[]Borri - Bxterra Power Technology -[]Canovate - Chatsworth Products - Cisco Systems - Controlled Power Company - Cyber Power Systems -[]Dataprobe - Delta Electronics - Detroit Diesel Corporation - EAE Elektrik - Elcom International -[]Enconnex Exide Technologies - Fuji Electric - Generac Power Systems - Hewlett Packard Enterprise (HPE) Hitachi Hi-Rel Power Electronics - HITEC Power Protection -[]INNIO - KOHLER -[]Marathon Power - Mitsubishi Electric - Natron Energy -[]Panduit - Piller Power Systems Plug Power - Riello Elettronica Group -[Rittal -[]Saft - Siemens

- [Socomec - [SolarEdge Technologies - [Tripp Lite - [Toshiba - [Virtual Power Systems - [VYCON - [WTI - Western Telematic - [Yanmar (HIMOINSA) - []ZAF Energy Systems - []ZincFive

KEY QUESTIONS ANSWERED:

1. How big is the U.S. data center power market?
2. What is the growth rate of the U.S. data center power market?
3. Who are the key players in the U.S. data center power industry?
4. Which region holds the most significant U.S. data center power market share?
5. How many MW of power capacity is expected to reach the U.S. data center power market by 2028?

Table of Contents:

- 1. REPORT COVERAGE
- 1.1. WHAT'S INCLUDED
- 1.2. SEGMENTAL COVERAGE
- 1.2.1. MARKET SEGMENTATION BY ELECTRICAL INFRASTRUCTURE
- 1.2.2. MARKET SEGMENTATION BY UPS SYSTEM CAPACITY
- 1.2.3. MARKET SEGMENTATION BY GENERATOR SYSTEM CAPACITY
- 1.2.4. MARKET SEGMENTATION BY TIER STANDARD
- 2. MARKET AT A GLANCE
- 3. SEGMENTAL & GEOGRAPHICAL SNAPSHOT
- 4. INFRASTRUCTURE SEGMENTATION
- 5. GEOGRAPHICAL SEGMENTATION
- 6. PREMIUM INSIGHTS
- 6.1. KEY HIGHLIGHTS
- 6.2. KEY TRENDS IN THE MARKET
- 6.3. SEGMENTAL ANALYSIS

7. INTRODUCTION

7.1. OVERVIEW

8. MARKET OPPORTUNITIES & TRENDS

- 8.1. RISE IN RACK POWER DENSITY
- 8.2. SUSTAINABILITY MEASURES ADOPTED BY DATA CENTER OPERATORS
- 8.3. SUSTAINABLE & INNOVATIVE DATA CENTER TECHNOLOGIES
- 8.4. ADOPTION OF ADVANCED UPS BATTERIES
- 8.5. EMERGENCE OF FUEL CELL GENERATORS
- 8.5.1. NOISE COMPARISON

8.5.2. ON-SITE PRODUCTION OF HYDROGEN

8.6. SOFTWARE-DEFINED POWER & DATA CENTER INFRASTRUCTURE AUTOMATION

8.7. DEPLOYMENT OF MICROGRIDS IN DATA CENTERS

9. MARKET GROWTH ENABLERS

9.1. ADOPTION OF CLOUD-BASED SERVICES

9.2. CONTINUED INVESTMENTS BY HYPERSCALE OPERATORS

9.3. TAX & SALES INCENTIVES

9.4. DEVELOPMENT OF DATA CENTER FACILITIES BY COLOCATION OPERATORS

9.5. SHIFT FROM ON-PREMISES TO CLOUD & COLOCATION

10. MARKET RESTRAINTS

10.1. SUPPLY CHAIN DISRUPTIONS

10.2. CARBON EMISSIONS FROM DATA CENTERS

10.3. INCREASED OPEX DUE TO HIGH MAINTENANCE COSTS & INEFFICIENCIES

11. MARKET LANDSCAPE

11.1. MARKET OVERVIEW

11.2. INVESTMENT: MARKET SIZE & FORECAST

11.3. POWER CAPACITY: MARKET SIZE & FORECAST

12. ELECTRICAL INFRASTRUCTURE 12.1. MARKET SNAPSHOT & GROWTH ENGINE 12.2. MARKET OVERVIEW 12.3. UPS SYSTEMS 12.3.1. MARKET OVERVIEW 12.3.2. MARKET SIZE & FORECAST 12.4. GENERATORS 12.4.1. MARKET OVERVIEW 12.4.2. MARKET SIZE & FORECAST 12.5. TRANSFER SWITCHES & SWITCHGEAR 12.5.1. MARKET OVERVIEW 12.5.2. MARKET SIZE & FORECAST 12.6. PDUS 12.6.1. MARKET OVERVIEW 12.6.2. MARKET SIZE & FORECAST 12.7. OTHER ELECTRICAL INFRASTRUCTURE 12.7.1. MARKET OVERVIEW 12.7.2. MARKET SIZE & FORECAST 13. UPS SYSTEM CAPACITY

13.1. MARKET SNAPSHOT & GROWTH ENGINE
13.2. MARKET OVERVIEW
13.3. <=500 KVA
13.3.1. MARKET OVERVIEW
13.3.2. MARKET SIZE & FORECAST
13.4. 500-1,000 KVA

13.4.1. MARKET OVERVIEW
13.4.2. MARKET SIZE & FORECAST
13.5. >1,000 KVA
13.5.1. MARKET OVERVIEW
13.5.2. MARKET SIZE & FORECAST

14. GENERATOR SYSTEM CAPACITY
14.1. MARKET SNAPSHOT & GROWTH ENGINE
14.2. MARKET OVERVIEW
14.3.1. MARKET OVERVIEW
14.3.2. MARKET SIZE & FORECAST
14.4.1. MARKET OVERVIEW
14.4.2. MARKET SIZE & FORECAST
14.5. >= 3 MW
14.5.1. MARKET OVERVIEW
14.5.2. MARKET SIZE & FORECAST

15. TIER STANDARD
 15.1. MARKET SNAPSHOT & GROWTH ENGINE
 15.2. MARKET OVERVIEW
 15.3.1. MARKET OVERVIEW
 15.3.2. MARKET SIZE & FORECAST
 15.4. TIER III
 15.4.1. MARKET OVERVIEW
 15.4.2. INVESTMENT: MARKET SIZE & FORECAST
 15.5. TIER IV
 15.5.1. MARKET OVERVIEW
 15.5.2. INVESTMENT: MARKET SIZE & FORECAST

16. SOUTHEASTERN US
16.1. MARKET SNAPSHOT & GROWTH ENGINE
16.2. MARKET OVERVIEW
16.3. INVESTMENT: MARKET SIZE & FORECAST
16.3.1. VIRGINIA
16.3.2. GEORGIA
16.3.3. TENNESSEE
16.3.4. FLORIDA
16.3.5. ALABAMA
16.3.6. OTHER STATES
16.4. ELECTRICITY PRICING IN SOUTHEASTERN US
16.5. POWER CAPACITY: MARKET SIZE & FORECAST
16.5.1. VIRGINIA
16.5.2. GEORGIA

16.5.3. TENNESSEE

16.5.4. FLORIDA16.5.5. ALABAMA16.5.6. OTHER STATES16.6. MARKET BY INFRASTRUCTURE

17. MIDWESTERN US

- 17.1. MARKET SNAPSHOT & GROWTH ENGINE
- 17.2. MARKET OVERVIEW
- 17.3. INVESTMENT: MARKET SIZE & FORECAST
- 17.3.1. OHIO
- 17.3.2. ILLINOIS
- 17.3.3. NEBRASKA
- 17.3.4. MISSOURI
- 17.3.5. OTHER STATES
- 17.4. ELECTRICITY PRICING IN MIDWESTERN US
- 17.5. POWER CAPACITY: MARKET SIZE & FORECAST
- 17.5.1. ILLINOIS
- 17.5.2. MINNESOTA
- 17.5.3. OHIO
- 17.5.4. OTHER STATES
- 17.6. MARKET BY INFRASTRUCTURE

18. SOUTHWESTERN US

18.1. MARKET SNAPSHOT & GROWTH ENGINE
18.2. MARKET OVERVIEW
18.3. INVESTMENT: MARKET SIZE & FORECAST
18.3.1. TEXAS
18.3.2. ARIZONA
18.4. ELECTRICITY PRICING IN SOUTHWESTERN US
18.5. POWER CAPACITY: MARKET SIZE & FORECAST
18.5.1. TEXAS
18.5.2. ARIZONA
18.6. MARKET BY INFRASTRUCTURE

19. WESTERN US
 19.1. MARKET SNAPSHOT & GROWTH ENGINE
 19.2. MARKET OVERVIEW
 19.3. INVESTMENT: MARKET SIZE & FORECAST
 19.3.1. CALIFORNIA
 19.3.2. NEVADA
 19.3.4. OREGON
 19.3.5. OTHER STATES
 19.4. ELECTRICITY PRICING IN WESTERN US
 19.5. POWER CAPACITY: MARKET SIZE & FORECAST
 19.5.1. CALIFORNIA
 19.5.2. NEVADA

19.5.3. UTAH 19.5.4. OREGON 19.5.5. OTHER STATES 19.6. MARKET BY INFRASTRUCTURE

20. NORTHEASTERN US 20.1. MARKET SNAPSHOT & GROWTH ENGINE 20.2. MARKET OVERVIEW 20.3. INVESTMENT: MARKET SIZE & FORECAST 20.3.1. NEW JERSEY 20.3.2. CONNECTICUT 20.3.3. NEW YORK 20.3.4. PENNSYLVANIA 20.3.5. OTHER STATES 20.4. ELECTRICITY PRICING IN NORTHEASTERN US 20.5. POWER CAPACITY: MARKET SIZE & FORECAST 20.5.1. PENNSYLVANIA 20.5.2. NEW YORK 20.5.3. CONNECTICUT 20.5.4. OTHER STATES 20.6. MARKET BY INFRASTRUCTURE

21. COMPETITIVE LANDSCAPE 21.1. COMPETITION OVERVIEW

22. KEY VENDORS PROFILES 22.1. ABB 22.1.1. BUSINESS OVERVIEW 22.1.2. PRODUCT OFFERINGS 22.2. CATERPILLAR 22.2.1. BUSINESS OVERVIEW 22.2.2. PRODUCT OFFERINGS 22.3. CUMMINS 22.3.1. BUSINESS OVERVIEW 22.3.2. PRODUCT OFFERINGS 22.4. DELTA ELECTRONICS 22.4.1. BUSINESS OVERVIEW 22.4.2. PRODUCT OFFERINGS 22.5. EATON 22.5.1. BUSINESS OVERVIEW 22.5.2. PRODUCT OFFERINGS 22.6. LEGRAND 22.6.1. BUSINESS OVERVIEW 22.6.2. PRODUCT OFFERINGS 22.7. ROLLS-ROYCE 22.7.1. BUSINESS OVERVIEW 22.7.2. PRODUCT OFFERINGS

22.8. SCHNEIDER ELECTRIC 22.8.1. BUSINESS OVERVIEW 22.8.2. PRODUCT OFFERINGS 22.9. STULZ 22.9.1. BUSINESS OVERVIEW 22.9.2. PRODUCT OFFERINGS 22.10. VERTIV 22.10.1. BUSINESS OVERVIEW 22.10.2. PRODUCT OFFERINGS 23. OTHER PROMINENT VENDORS 23.1. AEG POWER SOLUTIONS 23.1.1. BUSINESS OVERVIEW 23.1.2. PRODUCT OFFERINGS 23.2. ADVANCED ENERGY (ARTESYN) 23.2.1. BUSINESS OVERVIEW 23.2.2. PRODUCT OFFERINGS 23.3. AMETEK POWERVAR 23.3.1. BUSINESS OVERVIEW 23.3.2. PRODUCT OFFERINGS 23.4. BLACK BOX NETWORK SERVICES (AGC NETWORKS) 23.4.1. BUSINESS OVERVIEW 23.4.2. PRODUCT OFFERINGS 23.5. BLOOM ENERGY 23.5.1. BUSINESS OVERVIEW 23.5.2. PRODUCT OFFERINGS 23.6. BORRI 23.6.1. BUSINESS OVERVIEW 23.6.2. PRODUCT OFFERINGS 23.7. BXTERRA POWER TECHNOLOGY 23.7.1. BUSINESS OVERVIEW 23.7.2. PRODUCT OFFERINGS 23.8. CANOVATE 23.8.1. BUSINESS OVERVIEW 23.8.2. PRODUCT OFFERINGS 23.9. CHATSWORTH PRODUCTS 23.9.1. BUSINESS OVERVIEW 23.9.2. PRODUCT OFFERINGS 23.10. CISCO SYSTEMS 23.10.1. BUSINESS OVERVIEW 23.10.2. PRODUCT OFFERINGS 23.11. CONTROLLED POWER COMPANY 23.11.1. BUSINESS OVERVIEW 23.11.2. PRODUCT OFFERINGS 23.12. CYBER POWER SYSTEMS 23.12.1. BUSINESS OVERVIEW 23.12.2. PRODUCT OFFERINGS

23.13. DATAPROBE 23.13.1. BUSINESS OVERVIEW 23.13.2. PRODUCT OFFERINGS 23.14. DELTA ELECTRONICS 23.14.1. BUSINESS OVERVIEW 23.14.2. PRODUCT OFFERINGS 23.15. DETROIT DIESEL CORPORATION 23.15.1. BUSINESS OVERVIEW 23.15.2. PRODUCT OFFERINGS 23.16. EAE ELEKTRIK 23.16.1. BUSINESS OVERVIEW 23.16.2. PRODUCT OFFERINGS 23.17. ELCOM INTERNATIONAL 23.17.1. BUSINESS OVERVIEW 23.17.2. PRODUCT OFFERINGS 23.18. ENCONNEX 23.18.1. BUSINESS OVERVIEW 23.18.2. PRODUCT OFFERINGS 23.19. EXIDE TECHNOLOGIES 23.19.1. BUSINESS OVERVIEW 23.19.2. PRODUCT OFFERINGS 23.20. FUJI ELECTRIC 23.20.1. BUSINESS OVERVIEW 23.20.2. PRODUCT OFFERINGS 23.21. GENERAC POWER SYSTEMS 23.21.1. BUSINESS OVERVIEW 23.21.2. PRODUCT OFFERINGS 23.22. HEWLETT PACKARD ENTERPRISE (HPE) 23.22.1. BUSINESS OVERVIEW 23.22.2. PRODUCT OFFERINGS 23.23. HITACHI HI-REL POWER ELECTRONICS 23.23.1. BUSINESS OVERVIEW 23.23.2. PRODUCT OFFERINGS 23.24. HITEC POWER PROTECTION 23.24.1. BUSINESS OVERVIEW 23.24.2. PRODUCT OFFERINGS 23.25. INNIO 23.25.1. BUSINESS OVERVIEW 23.25.2. PRODUCT OFFERINGS 23.26. KOHI FR 23.26.1. BUSINESS OVERVIEW 23.26.2. PRODUCT OFFERINGS 23.27. MARATHON POWER 23.27.1. BUSINESS OVERVIEW 23.27.2. PRODUCT OFFERINGS 23.28. MITSUBISHI ELECTRIC 23.28.1. BUSINESS OVERVIEW

23.28.2. PRODUCT OFFERINGS 23.29. NATRON ENERGY 23.29.1. BUSINESS OVERVIEW 23.29.2. PRODUCT OFFERINGS 23.30. PANDUIT 23.30.1. BUSINESS OVERVIEW 23.30.2. PRODUCT OFFERINGS 23.31. PILLER POWER SYSTEMS 23.31.1. BUSINESS OVERVIEW 23.31.2. PRODUCT OFFERINGS 23.32. PLUG POWER 23.32.1. BUSINESS OVERVIEW 23.32.2. PRODUCT OFFERINGS 23.33. RIELLO ELETTRONICA GROUP 23.33.1. BUSINESS OVERVIEW 23.33.2. PRODUCT OFFERINGS 23.34. RITTAL 23.34.1. BUSINESS OVERVIEW 23.34.2. PRODUCT OFFERINGS 23.35. SAFT 23.35.1. BUSINESS OVERVIEW 23.35.2. PRODUCT OFFERINGS 23.36. SIEMENS 23.36.1. BUSINESS OVERVIEW 23.36.2. PRODUCT OFFERINGS 23.37. SOCOMEC 23.37.1. BUSINESS OVERVIEW 23.37.2. PRODUCT OFFERINGS 23.38. SOLAREDGE TECHNOLOGIES 23.38.1. BUSINESS OVERVIEW 23.38.2. PRODUCT OFFERINGS 23.39. TRIPP LITE 23.39.1. BUSINESS OVERVIEW 23.39.2. PRODUCT OFFERINGS 23.40. TOSHIBA 23.40.1. BUSINESS OVERVIEW 23.40.2. PRODUCT OFFERINGS 23.41. VIRTUAL POWER SYSTEMS 23.41.1. BUSINESS OVERVIEW 23.41.2. PRODUCT OFFERINGS 23.42. VYCON 23.42.1. BUSINESS OVERVIEW 23.42.2. PRODUCT OFFERINGS 23.43. WTI-WESTERN TELEMATIC 23.43.1. BUSINESS OVERVIEW 23.43.2. PRODUCT OFFERINGS 23.44. YANMAR (HIMOINSA)

23.44.1. BUSINESS OVERVIEW 23.44.2. PRODUCT OFFERINGS 23.45. ZAF ENERGY SYSTEMS 23.45.1. BUSINESS OVERVIEW 23.45.2. PRODUCT OFFERINGS 23.46. ZINCFIVE 23.46.1. BUSINESS OVERVIEW 23.46.2. PRODUCT OFFERINGS

24. REPORT SUMMARY 24.1. KEY TAKEAWAYS

25. QUANTITATIVE SUMMARY 25.1. US DATA CENTER POWER MARKET 25.1.1. OVERVIEW: MARKET SIZE & FORECAST 25.1.2. ELECTRICAL INFRASTRUCTURE: MARKET SIZE & FORECAST 26. MARKET SEGMENTS 26.1. UPS SYSTEM CAPACITY 26.1.1. OVERVIEW: MARKET SIZE & FORECAST 26.2. GENERATOR SYSTEM CAPACITY 26.2.1. OVERVIEW: MARKET SIZE & FORECAST 26.3. TIER STANDARD 26.3.1. OVERVIEW: MARKET SIZE & FORECAST 26.4. GEOGRAPHY 26.4.1. INVESTMENT: MARKET SIZE & FORECAST 26.4.2. POWER CAPACITY: MARKET SIZE & FORECAST 26.5. SOUTHEASTERN US 26.5.1. MARKET SIZE & FORECAST 26.5.2. INFRASTRUCTURE: MARKET SIZE & FORECAST 26.6. WESTERN US 26.6.1. MARKET SIZE & FORECAST 26.6.2. INFRASTRUCTURE: MARKET SIZE & FORECAST 26.7. SOUTHWESTERN US 26.7.1. MARKET SIZE & FORECAST 26.7.2. INFRASTRUCTURE: MARKET SIZE & FORECAST 26.8. MIDWESTERN US 26.8.1. MARKET SIZE & FORECAST 26.8.2. INFRASTRUCTURE: MARKET SIZE & FORECAST 26.9. NORTHEASTERN US 26.9.1. MARKET SIZE & FORECAST 26.9.2. INFRASTRUCTURE: MARKET SIZE & FORECAST 27. APPENDIX

27.1. LIST OF ABBREVIATIONS 27.2. CURRENCY CONVERSION



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