

Data Center Cooling Market Report by Solution (Air Conditioning, Chilling Units, Cooling Towers, Economizer Systems, Liquid Cooling Systems, Control Systems, and Others), Services (Consulting, Installation and Deployment, Maintenance and Support), Type of Cooling (Room-Based Cooling, Row-Based Cooling, Rack-Based Cooling), Cooling Technology (Liquid-Based Cooling, Air-Based Cooling), Type of Data Center (Mid-Sized Data Centers, Enterprise Data Centers, Large Data Centers), Vertical (BFSI, IT and Telecom, Research and Educational Institutes, Government and Defense, Retail, Energy, Healthcare, and Others), and Region 2024-2032

<https://marketpublishers.com/r/DA795F5250B0EN.html>

Date: March 2024

Pages: 143

Price: US\$ 3,899.00 (Single User License)

ID: DA795F5250B0EN

Abstracts

The global data center cooling market size reached US\$ 15.2 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 46.6 Billion by 2032, exhibiting a growth rate (CAGR) of 12.8% during 2024-2032. The growing demand for efficient data centers, rising focus on maintaining energy efficiency and sustainability, and increasing proliferation of cloud computing to delegate routine tasks and store massive amounts of data are some of the major factors propelling the market.

Data center cooling, also known as data center air conditioning (AC), refers to the

technology and systems employed to maintain and regulate the temperature and humidity within a data center environment. It can rely on coolants or refrigerants to directly cool servers or components. It also circulates chilled water through pipes and heat exchangers to remove heat from the data center equipment. It prevents equipment overheating and reduces the risk of hardware failures, ensuring the uninterrupted operation of critical services.

At present, the increasing demand for data center cooling solutions, as they help data centers reduce their carbon footprint and lower operational costs, making them more environmentally and financially sustainable, is impelling the growth of the market. Besides this, the rising focus on maintaining the correct temperature and humidity levels as that ensures the servers and networking equipment are operating at their peak performance, and delivering faster response times is contributing to the growth of the market. In addition, the growing proliferation of cloud computing to delegate routine tasks and store massive amounts of data is offering a favorable market outlook. Apart from this, the increasing transition to edge computing, which entails the deployment of data centers closer to end-users for low-latency processing, is supporting the growth of the market. Additionally, the rising adoption of advanced airflow management solutions and containment strategies is bolstering the growth of the market.

Data Center Cooling Market Trends/Drivers:

Growing demand for efficient data centers

The growing demand for efficient data centers is currently exerting a positive influence on the data center cooling market. Besides this, as organizations are expanding their digital infrastructure and embracing cloud computing, the need for data centers is rising. Additionally, data centers are becoming increasingly integral to modern business operations, necessitating their continuous and uninterrupted functionality. Apart from this, to maintain optimal performance and prevent costly downtime, there is a heightened focus on the efficient cooling of these facilities. Moreover, the ongoing technological advancements within the data center industry are driving the need for more robust and efficient cooling solutions. As data centers become denser and more powerful to meet the demands of contemporary computing, the associated heat generation intensifies. To ensure the reliable operation of these high-performance data centers, advanced cooling systems capable of efficiently dissipating heat are imperative.

Rising focus on maintaining energy efficiency and sustainability

At present, the rising focus on maintaining energy efficiency and sustainability is bolstering the growth of the data center cooling market. Companies are increasingly recognizing the economic and environmental benefits of adopting energy-efficient cooling solutions within their data centers. Besides this, data center operators are actively investing in cutting-edge cooling technologies, such as precision cooling systems, liquid cooling solutions, and advanced thermal management techniques. These investments are geared towards optimizing cooling operations, enhancing overall energy efficiency, and lowering carbon footprints. Moreover, there is a continuous push towards utilizing renewable energy sources to power data centers, a development that is presently reshaping the data center cooling landscape. Additionally, by harnessing solar, wind, or other sustainable energy sources, data centers are reducing their reliance on fossil fuels and significantly curbing their greenhouse gas emissions. This strategic shift towards sustainable energy usage is driving innovations in cooling infrastructure as operators strive to maximize the efficiency of their systems and minimize their environmental impact.

Increasing popularity of modular and containerized cooling

At present, the increasing popularity of modular and containerized cooling systems is bolstering the growth of the data center cooling market. Besides this, modular and containerized cooling solutions are continually gaining traction due to their inherent flexibility and scalability. Data center operators are increasingly adopting these systems to cater to their evolving cooling needs, as they can easily expand or reconfigure their cooling infrastructure in response to changing requirements. This ongoing adoption is fostering steady market growth as businesses seek adaptable solutions to efficiently manage their data center thermal management. Furthermore, the ongoing refinement of modular and containerized cooling technologies is leading to improved energy efficiency and sustainability within data centers. Additionally, data center operators are placing a heightened emphasis on reducing energy consumption and environmental impact. These cooling systems are designed with advanced features, such as variable speed fans, intelligent controls, and enhanced insulation to optimize cooling efficiency. This ongoing innovation is positively affecting the data center cooling market by attracting environmentally conscious organizations and helping them meet their sustainability goals.

Data Center Cooling Industry Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global data center cooling market report, along with forecasts at the global, regional, and country levels for 2024-2032. Our report has categorized the market based on solution,

services, type of cooling, cooling technology, type of data center, and vertical.

Breakup by Solution:

Air Conditioning

Chilling Units

Cooling Towers

Economizer Systems

Liquid Cooling Systems

Control Systems

Others

Air conditioning dominates the market

The report has provided a detailed breakup and analysis of the market based on the solution. This includes air conditioning, chilling units, cooling towers, economizer systems, liquid cooling systems, control systems, and others. According to the report, air conditioning represented the largest segment.

Air conditioning in a data center is crucial for maintaining the proper operating conditions for the equipment housed within it. Data centers produce a significant amount of heat due to the operation of servers, storage devices, networking equipment, and other hardware. If this heat is not properly managed and removed, it can lead to equipment failure, reduced performance, and increased energy costs. Data centers often incorporate redundant cooling systems to ensure continuous operation. Besides this, advanced monitoring systems are used to track temperature and humidity levels, airflow, and other environmental factors. This data helps data center operators optimize cooling and identify potential issues.

Breakup by Services:

Consulting

Installation and Deployment

Maintenance and Support

Installation and deployment hold the largest share in the market

A detailed breakup and analysis of the market based on the services has also been provided in the report. This includes consulting, installation and deployment, and maintenance and support. According to the report, installation and deployment

accounted for the largest market share.

The installation and deployment of a data center cooling service is a critical aspect of data center management, as it ensures that the servers and networking equipment operate efficiently and reliably while maintaining optimal temperature and humidity levels. It involves setting up a monitoring and control system to track temperature, humidity, and other environmental factors in real time. It also relies on the installation of the chosen cooling system components, including air conditioners, chillers, cooling towers, fans, and ductwork. It includes the maintenance of detailed documentation of the cooling system, including schematics, configurations, maintenance records, and warranties. Furthermore, it encompasses training of data center staff on the proper operation and maintenance of the cooling system.

Breakup by Type of Cooling:

Room-Based Cooling

Row-Based Cooling

Rack-Based Cooling

Room-based cooling holds the biggest share in the market

A detailed breakup and analysis of the market based on the type of cooling has also been provided in the report. This includes room-based cooling, row-based cooling, and rack-based cooling. According to the report, room-based cooling accounted for the largest market share.

Room-based cooling refers to a method of cooling a specific space or room within a building rather than cooling the entire building or home. This approach is often used to increase energy efficiency and reduce cooling costs by targeting only the areas that need cooling rather than cooling the entire structure. Room-based cooling consists of window air conditioners, ductless mini-split systems, and portable air conditioners, which are movable units that can be placed in any room that needs cooling and typically require a window for venting hot air outside. It also includes swamp coolers, which use the natural cooling effect of evaporating water to cool the air.

Breakup by Cooling Technology:

Liquid-Based Cooling

Air-Based Cooling

Liquid-based cooling holds the maximum share in the market

A detailed breakup and analysis of the market based on the cooling technology has also been provided in the report. This includes liquid-based cooling and air-based cooling. According to the report, liquid-based cooling accounted for the largest market share.

Liquid-based cooling is a highly efficient method of dissipating heat from electronic components, such as computer processors and graphics cards. In a typical liquid cooling setup, a network of tubes or channels carries the cooling fluid to components that generate heat. These components are equipped with water blocks or heat exchangers, which remain in direct contact with the hot surfaces. As the liquid flows over these components, it absorbs the heat and carries it away to a radiator or heat exchanger located outside the system. This process is highly efficient and allows for precise temperature control, making it ideal for overclocking and high-performance computing applications.

Breakup by Type of Data Center:

Mid-Sized Data Centers

Enterprise Data Centers

Large Data Centers

Enterprise data centers hold the largest share in the market

A detailed breakup and analysis of the market based on the type of data center has also been provided in the report. This includes mid-sized data centers, enterprise data centers, and large data centers. According to the report, enterprise data centers accounted for the largest market share.

Enterprise data centers are centralized facilities or locations where the IT infrastructure of an organization, including servers, storage devices, networking equipment, and other computing resources, are housed and managed. These data centers play a critical role in the modern business landscape, as they are responsible for hosting and processing the digital information and applications necessary for the operation of the enterprise. Enterprise data centers store vast amounts of digital information, including databases, files, documents, and multimedia content. This data is typically organized and secured to ensure accessibility, integrity, and confidentiality. Enterprise data centers also house servers and computing hardware capable of running applications, virtual machines, and

services required by the organization. These resources can range from traditional physical servers to virtualized environments.

Breakup by Vertical:

BFSI

IT and Telecom

Research and Educational Institutes

Government and Defense

Retail

Energy

Healthcare

Others

IT and telecom hold the largest share in the market

A detailed breakup and analysis of the market based on the vertical has also been provided in the report. This includes BFSI, IT and telecom, research and educational institutes, government and defense, retail, energy, healthcare, and others. According to the report, IT and telecom accounted for the largest market share.

The information technology (IT) and telecom sectors rely heavily on data centers to store and process vast amounts of digital information and provide essential services. Modern data centers often use high-performance computing equipment that generates a considerable amount of heat in a relatively small physical space. Effective cooling is essential to manage the high heat density and prevent equipment overheating. Besides this, cooling systems help maintain consistent and stable environmental conditions, ensuring that servers and other equipment perform at their best. This is critical for meeting the computing demands of the IT and telecom sectors. The IT and telecom sectors often use high-performance computing equipment that generates a considerable amount of heat in a relatively small physical space. Effective cooling is essential to manage the high heat density and prevent equipment overheating.

Breakup by Region:

North America

United States

Canada

Asia Pacific

China
Japan
India
South Korea
Australia
Indonesia
Others
Europe
Germany
France
United Kingdom
Italy
Spain
Russia
Others
Latin America
Brazil
Mexico
Others
Middle East and Africa

Asia Pacific exhibits a clear dominance, accounting for the largest data center cooling market share

The market research report has also provided a comprehensive analysis of all the major regional markets, which include North America (the United States and Canada); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others); Latin America (Brazil, Mexico, and others); and the Middle East and Africa. According to the report, Asia Pacific accounted for the largest market share.

Asia Pacific held the biggest market share due to the increasing digitalization of business processes to improve productivity and reduce manual errors. Besides this, the rising adoption of cloud computing to delegate routine tasks and store vast amounts of data is propelling the growth of the market. Apart from this, the increasing focus on the maintenance of specific temperature ranges to ensure the proper functioning of servers and IT equipment is contributing to the growth of the market. Additionally, the rising proliferation of the Internet of Things (IoT) is supporting the growth of the market.

North America is estimated to expand further in this domain due to the increasing investment from tech companies, cloud service providers, and hyperscale data center operators for constructing efficient data centers.

Competitive Landscape:

Key market players are focusing on offering energy-efficient cooling solutions, including modular and scalable cooling systems, to help data centers reduce their energy consumption and carbon footprint. They are also emphasizing the importance of data analytics and monitoring to optimize cooling efficiency. Top companies are working on providing precision cooling solutions that could adapt to varying data center loads. They are also investing in the development of advanced thermal management technologies, such as liquid cooling solutions, to enhance efficiency and reduce operational costs. Leading companies are leveraging artificial intelligence (AI) and machine learning (ML) to optimize cooling operations, improve energy efficiency, and predict potential cooling issues before they become critical.

The report has provided a comprehensive analysis of the competitive landscape in the market. Detailed profiles of all major companies have also been provided. Some of the key players in the market include:

Airedale International Air Conditioning

Asetek

Black Box Corporation

Climaveneta Climate Technologies

Coolcentric

Emerson Electric

Fujitsu

Hitachi

Netmagic

Nortek Air Solutions, LLC

Rittal

Schneider Electric

STULZ GmbH

Vertiv

Recent Developments:

In July 2023, Airedale International Air Conditioning announced the launch of MultiChill™, a modular, low-GWP, free-cooling heat pump chiller range, which offers flexibility and efficiency as a smaller capacity heat pump chiller with modularity built into

its design.

In 2021, Rittal announced its partnership with Stulz to offer one-stop IT infrastructure solutions and create an expanded portfolio of high-quality and precise cooling systems for small and mid-sized data centers.

In 2023, STULZ GmbH announced the launch of its Micro Data Centre, a single rack, all-in-one micro data center solution that combines power protection and distribution, monitoring, cooling, and management with fire protection and security.

Key Questions Answered in This Report

1. What was the size of the global data center cooling market in 2023?
2. What is the expected growth rate of the global data center cooling market during 2024-2032?
3. What are the key factors driving the global data center cooling market?
4. What has been the impact of COVID-19 on the global data center cooling market?
5. What is the breakup of the global data center cooling market based on the solution?
6. What is the breakup of the global data center cooling market based on the services?
7. What is the breakup of the global data center cooling market based on type of cooling?
8. What is the breakup of the global data center cooling market based on the cooling technology?
9. What is the breakup of the global data center cooling market based on the type of data center?
10. What is the breakup of the global data center cooling market based on the vertical?
11. What are the key regions in the global data center cooling market?
12. Who are the key players/companies in the global data center cooling market?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL DATA CENTER COOLING MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY SOLUTION

- 6.1 Air Conditioning
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Chilling Units
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
- 6.3 Cooling Towers

- 6.3.1 Market Trends
- 6.3.2 Market Forecast
- 6.4 Economizer Systems
 - 6.4.1 Market Trends
 - 6.4.2 Market Forecast
- 6.5 Liquid Cooling Systems
 - 6.5.1 Market Trends
 - 6.5.2 Market Forecast
- 6.6 Control Systems
 - 6.6.1 Market Trends
 - 6.6.2 Market Forecast
- 6.7 Others
 - 6.7.1 Market Trends
 - 6.7.2 Market Forecast

7 MARKET BREAKUP BY SERVICES

- 7.1 Consulting
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
- 7.2 Installation and Deployment
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
- 7.3 Maintenance and Support
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast

8 MARKET BREAKUP BY TYPE OF COOLING

- 8.1 Room-Based Cooling
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
- 8.2 Row-Based Cooling
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
- 8.3 Rack-Based Cooling
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast

9 MARKET BREAKUP BY COOLING TECHNOLOGY

9.1 Liquid-Based Cooling

9.1.1 Market Trends

9.1.2 Market Forecast

9.2 Air-Based Cooling

9.2.1 Market Trends

9.2.2 Market Forecast

10 MARKET BREAKUP BY TYPE OF DATA CENTER

10.1 Mid-Sized Data Centers

10.1.1 Market Trends

10.1.2 Market Forecast

10.2 Enterprise Data Centers

10.2.1 Market Trends

10.2.2 Market Forecast

10.3 Large Data Centers

10.3.1 Market Trends

10.3.2 Market Forecast

11 MARKET BREAKUP BY VERTICAL

11.1 BFSI

11.1.1 Market Trends

11.1.2 Market Forecast

11.2 IT and Telecom

11.2.1 Market Trends

11.2.2 Market Forecast

11.3 Research and Educational Institutes

11.3.1 Market Trends

11.3.2 Market Forecast

11.4 Government and Defense

11.4.1 Market Trends

11.4.2 Market Forecast

11.5 Retail

11.5.1 Market Trends

11.5.2 Market Forecast

11.6 Energy

- 11.6.1 Market Trends
- 11.6.2 Market Forecast
- 11.7 Healthcare
 - 11.7.1 Market Trends
 - 11.7.2 Market Forecast
- 11.8 Others
 - 11.8.1 Market Trends
 - 11.8.2 Market Forecast

12 MARKET BREAKUP BY REGION

- 12.1 North America
 - 12.1.1 United States
 - 12.1.1.1 Market Trends
 - 12.1.1.2 Market Forecast
 - 12.1.2 Canada
 - 12.1.2.1 Market Trends
 - 12.1.2.2 Market Forecast
- 12.2 Asia Pacific
 - 12.2.1 China
 - 12.2.1.1 Market Trends
 - 12.2.1.2 Market Forecast
 - 12.2.2 Japan
 - 12.2.2.1 Market Trends
 - 12.2.2.2 Market Forecast
 - 12.2.3 India
 - 12.2.3.1 Market Trends
 - 12.2.3.2 Market Forecast
 - 12.2.4 South Korea
 - 12.2.4.1 Market Trends
 - 12.2.4.2 Market Forecast
 - 12.2.5 Australia
 - 12.2.5.1 Market Trends
 - 12.2.5.2 Market Forecast
 - 12.2.6 Indonesia
 - 12.2.6.1 Market Trends
 - 12.2.6.2 Market Forecast
 - 12.2.7 Others
 - 12.2.7.1 Market Trends

- 12.2.7.2 Market Forecast
- 12.3 Europe
 - 12.3.1 Germany
 - 12.3.1.1 Market Trends
 - 12.3.1.2 Market Forecast
 - 12.3.2 France
 - 12.3.2.1 Market Trends
 - 12.3.2.2 Market Forecast
 - 12.3.3 United Kingdom
 - 12.3.3.1 Market Trends
 - 12.3.3.2 Market Forecast
 - 12.3.4 Italy
 - 12.3.4.1 Market Trends
 - 12.3.4.2 Market Forecast
 - 12.3.5 Spain
 - 12.3.5.1 Market Trends
 - 12.3.5.2 Market Forecast
 - 12.3.6 Russia
 - 12.3.6.1 Market Trends
 - 12.3.6.2 Market Forecast
 - 12.3.7 Others
 - 12.3.7.1 Market Trends
 - 12.3.7.2 Market Forecast
- 12.4 Latin America
 - 12.4.1 Brazil
 - 12.4.1.1 Market Trends
 - 12.4.1.2 Market Forecast
 - 12.4.2 Mexico
 - 12.4.2.1 Market Trends
 - 12.4.2.2 Market Forecast
 - 12.4.3 Others
 - 12.4.3.1 Market Trends
 - 12.4.3.2 Market Forecast
- 12.5 Middle East and Africa
 - 12.5.1 Market Trends
 - 12.5.2 Market Breakup by Country
 - 12.5.3 Market Forecast

13 SWOT ANALYSIS

- 13.1 Overview
- 13.2 Strengths
- 13.3 Weaknesses
- 13.4 Opportunities
- 13.5 Threats

14 VALUE CHAIN ANALYSIS

15 PORTERS FIVE FORCES ANALYSIS

- 15.1 Overview
- 15.2 Bargaining Power of Buyers
- 15.3 Bargaining Power of Suppliers
- 15.4 Degree of Competition
- 15.5 Threat of New Entrants
- 15.6 Threat of Substitutes

16 COMPETITIVE LANDSCAPE

- 16.1 Market Structure
- 16.2 Key Players
- 16.3 Profiles of Key Players
 - 16.3.1 Airedale International Air Conditioning
 - 16.3.1.1 Company Overview
 - 16.3.1.2 Product Portfolio
 - 16.3.2 Asetek
 - 16.3.2.1 Company Overview
 - 16.3.2.2 Product Portfolio
 - 16.3.2.3 Financials
 - 16.3.3 Black Box Corporation
 - 16.3.3.1 Company Overview
 - 16.3.3.2 Product Portfolio
 - 16.3.4 Climaveneta Climate Technologies
 - 16.3.4.1 Company Overview
 - 16.3.4.2 Product Portfolio
 - 16.3.5 Coolcentric
 - 16.3.5.1 Company Overview
 - 16.3.5.2 Product Portfolio

- 16.3.6 Emerson Electric
 - 16.3.6.1 Company Overview
 - 16.3.6.2 Product Portfolio
 - 16.3.6.3 Financials
 - 16.3.6.4 SWOT Analysis
- 16.3.7 Fujitsu
 - 16.3.7.1 Company Overview
 - 16.3.7.2 Product Portfolio
 - 16.3.7.3 Financials
 - 16.3.7.4 SWOT Analysis
- 16.3.8 Hitachi
 - 16.3.8.1 Company Overview
 - 16.3.8.2 Product Portfolio
 - 16.3.8.3 Financials
 - 16.3.8.4 SWOT Analysis
- 16.3.9 Netmagic
 - 16.3.9.1 Company Overview
 - 16.3.9.2 Product Portfolio
- 16.3.10 Nortek Air Solutions, LLC
 - 16.3.10.1 Company Overview
 - 16.3.10.2 Product Portfolio
- 16.3.11 Rittal
 - 16.3.11.1 Company Overview
 - 16.3.11.2 Product Portfolio
- 16.3.12 Schneider Electric
 - 16.3.12.1 Company Overview
 - 16.3.12.2 Product Portfolio
- 16.3.13 STULZ GmbH
 - 16.3.13.1 Company Overview
 - 16.3.13.2 Product Portfolio
- 16.3.14 Vertiv
 - 16.3.14.1 Company Overview
 - 16.3.14.2 Product Portfolio

List Of Tables

LIST OF TABLES

Table 1: Global: Data Center Cooling Market: Key Industry Highlights, 2023 and 2032

Table 2: Global: Data Center Cooling Market Forecast: Breakup by Solution (in Million US\$), 2024-2032

Table 3: Global: Data Center Cooling Market Forecast: Breakup by Services (in Million US\$), 2024-2032

Table 4: Global: Data Center Cooling Market Forecast: Breakup by Type of Cooling (in Million US\$), 2024-2032

Table 5: Global: Data Center Cooling Market Forecast: Breakup by Cooling Technology (in Million US\$), 2024-2032

Table 6: Global: Data Center Cooling Market Forecast: Breakup by Type of Data Center (in Million US\$), 2024-2032

Table 7: Global: Data Center Cooling Market Forecast: Breakup by Vertical (in Million US\$), 2024-2032

Table 8: Global: Data Center Cooling Market Forecast: Breakup by Region (in Million US\$), 2024-2032

Table 9: Global: Data Center Cooling Market: Competitive Structure

Table 10: Global: Data Center Cooling Market: Key Players

List Of Figures

LIST OF FIGURES

- Figure 1: Global: Data Center Cooling Market: Major Drivers and Challenges
- Figure 2: Global: Data Center Cooling Market: Sales Value (in Billion US\$), 2018-2023
- Figure 3: Global: Data Center Cooling Market: Breakup by Solution (in %), 2023
- Figure 4: Global: Data Center Cooling Market: Breakup by Services (in %), 2023
- Figure 5: Global: Data Center Cooling Market: Breakup by Type of Cooling (in %), 2023
- Figure 6: Global: Data Center Cooling Market: Breakup by Cooling Technology (in %), 2023
- Figure 7: Global: Data Center Cooling Market: Breakup by Type of Data Center (in %), 2023
- Figure 8: Global: Data Center Cooling Market: Breakup by Vertical (in %), 2023
- Figure 9: Global: Data Center Cooling Market: Breakup by Region (in %), 2023
- Figure 10: Global: Data Center Cooling Market Forecast: Sales Value (in Billion US\$), 2024-2032
- Figure 11: Global: Data Center Cooling (Air Conditioning) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 12: Global: Data Center Cooling (Air Conditioning) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 13: Global: Data Center Cooling (Chilling Units) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 14: Global: Data Center Cooling (Chilling Units) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 15: Global: Data Center Cooling (Cooling Towers) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 16: Global: Data Center Cooling (Cooling Towers) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 17: Global: Data Center Cooling (Economizer Systems) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 18: Global: Data Center Cooling (Economizer Systems) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 19: Global: Data Center Cooling (Liquid Cooling Systems) Market: Sales Value (in Million US\$), 2018 & 2023
- Figure 20: Global: Data Center Cooling (Liquid Cooling Systems) Market Forecast: Sales Value (in Million US\$), 2024-2032
- Figure 21: Global: Data Center Cooling (Control Systems) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 22: Global: Data Center Cooling (Control Systems) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 23: Global: Data Center Cooling (Other Solutions) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 24: Global: Data Center Cooling (Other Solutions) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 25: Global: Data Center Cooling (Consulting) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 26: Global: Data Center Cooling (Consulting) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 27: Global: Data Center Cooling (Installation and Deployment) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 28: Global: Data Center Cooling (Installation and Deployment) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 29: Global: Data Center Cooling (Maintenance and Support) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 30: Global: Data Center Cooling (Maintenance and Support) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 31: Global: Data Center Cooling (Room-Based Cooling) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 32: Global: Data Center Cooling (Room-Based Cooling) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 33: Global: Data Center Cooling (Row-Based Cooling) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 34: Global: Data Center Cooling (Row-Based Cooling) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 35: Global: Data Center Cooling (Rack-Based Cooling) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 36: Global: Data Center Cooling (Rack-Based Cooling) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 37: Global: Data Center Cooling (Liquid-Based Cooling) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 38: Global: Data Center Cooling (Liquid-Based Cooling) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 39: Global: Data Center Cooling (Air-Based Cooling) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 40: Global: Data Center Cooling (Air-Based Cooling) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 41: Global: Data Center Cooling (Mid-Sized Data Centers) Market: Sales Value

(in Million US\$), 2018 & 2023

Figure 42: Global: Data Center Cooling (Mid-Sized Data Centers) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 43: Global: Data Center Cooling (Enterprise Data Centers) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 44: Global: Data Center Cooling (Enterprise Data Centers) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 45: Global: Data Center Cooling (Large Data Centers) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 46: Global: Data Center Cooling (Large Data Centers) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 47: Global: Data Center Cooling (BFSI) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 48: Global: Data Center Cooling (BFSI) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 49: Global: Data Center Cooling (IT and Telecom) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 50: Global: Data Center Cooling (IT and Telecom) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 51: Global: Data Center Cooling (Research and Educational Institutes) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 52: Global: Data Center Cooling (Research and Educational Institutes) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 53: Global: Data Center Cooling (Government and Defense) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 54: Global: Data Center Cooling (Government and Defense) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 55: Global: Data Center Cooling (Retail) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 56: Global: Data Center Cooling (Retail) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 57: Global: Data Center Cooling (Energy) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 58: Global: Data Center Cooling (Energy) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 59: Global: Data Center Cooling (Healthcare) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 60: Global: Data Center Cooling (Healthcare) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 61: Global: Data Center Cooling (Other Verticals) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 62: Global: Data Center Cooling (Other Verticals) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 63: North America: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 64: North America: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 65: United States: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 66: United States: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 67: Canada: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 68: Canada: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 69: Asia Pacific: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 70: Asia Pacific: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 71: China: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 72: China: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 73: Japan: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 74: Japan: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 75: India: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 76: India: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 77: South Korea: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 78: South Korea: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 79: Australia: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 80: Australia: Data Center Cooling Market Forecast: Sales Value (in Million

US\$), 2024-2032

Figure 81: Indonesia: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 82: Indonesia: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 83: Others: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 84: Others: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 85: Europe: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 86: Europe: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 87: Germany: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 88: Germany: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 89: France: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 90: France: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 91: United Kingdom: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 92: United Kingdom: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 93: Italy: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 94: Italy: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 95: Spain: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 96: Spain: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 97: Russia: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 98: Russia: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 99: Others: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 100: Others: Data Center Cooling Market Forecast: Sales Value (in Million US\$),

2024-2032

Figure 101: Latin America: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 102: Latin America: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 103: Brazil: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 104: Brazil: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 105: Mexico: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 106: Mexico: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 107: Others: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 108: Others: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 109: Middle East and Africa: Data Center Cooling Market: Sales Value (in Million US\$), 2018 & 2023

Figure 110: Middle East and Africa: Data Center Cooling Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 111: Global: Data Center Cooling Industry: SWOT Analysis

Figure 112: Global: Data Center Cooling Industry: Value Chain Analysis

Figure 113: Global: Data Center Cooling Industry: Porter's Five Forces Analysis

I would like to order

Product name: Data Center Cooling Market Report by Solution (Air Conditioning, Chilling Units, Cooling Towers, Economizer Systems, Liquid Cooling Systems, Control Systems, and Others), Services (Consulting, Installation and Deployment, Maintenance and Support), Type of Cooling (Room-Based Cooling, Row-Based Cooling, Rack-Based Cooling), Cooling Technology (Liquid-Based Cooling, Air-Based Cooling), Type of Data Center (Mid-Sized Data Centers, Enterprise Data Centers, Large Data Centers), Vertical (BFSI, IT and Telecom, Research and Educational Institutes, Government and Defense, Retail, Energy, Healthcare, and Others), and Region 2024-2032

Product link: <https://marketpublishers.com/r/DA795F5250B0EN.html>

Price: US\$ 3,899.00 (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/DA795F5250B0EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:

Last name:

Email:

Company:

Address:

City:

Zip code:

Country:

Tel:

Fax:

Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970