

Denmark Data Center Cooling - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2030)

<https://marketpublishers.com/r/DEB79D581DB4EN.html>

Date: July 2024

Pages: 90

Price: US\$ 4,750.00 (Single User License)

ID: DEB79D581DB4EN

Abstracts

The Denmark Data Center Cooling Market size is estimated at USD 70 million in 2024, and is expected to reach USD 86.5 million by 2030, growing at a CAGR of 3.30% during the forecast period (2024-2030).

The increasing demand for cloud computing among SMEs, government regulations for local data security, and growing investments by domestic players are some of the major factors driving the demand for data centers in the country.

Key Highlights

Under Construction IT Load Capacity: The IT load capacity of Denmark's data center rack market is expected to reach 320 MW by 2029.

Under Construction Raised Floor Space: The country's construction of raised floor area is expected to increase to 1.1 million sq. ft by 2029.

Planned Racks: The country's total number of racks installed is expected to reach 63,000 units by 2029. Copenhagen is expected to house the maximum number of racks by 2029. The climate in Denmark is moderate, with precipitation evenly distributed throughout the year. It has an average annual temperature of 8.3 °C and a mean annual precipitation of 746 mm. Depending upon climatic conditions, the DC cooling is done in the DC facilities.

Planned Submarine Cables: There are nearly 30 submarine cable systems connecting Denmark, and many are under construction. One such submarine cable, which was

expected to start service in 2023, is the Digital E4; it stretches over 70 km with landing points from Ronne, Denmark, to Tejn, Denmark.

Denmark Data Center Cooling Market Trends

The IT & Telecommunication Segment Holds the Majority Share

The market in Denmark is driven by rising cloud use across most companies as a result of developing technologies like artificial intelligence, big data, and blockchain. The Munich-based managed cloud services platform Skylink announced in 2021 that it had merged with cVation, giving it a strong foothold in the Danish market. Both businesses were gradually expected to bundle their cloud computing resources in the following months.

The need for cloud solutions continues to grow in Denmark, and the demand for cloud-based data protection and backup solutions is expected to get more robust. In June 2022, Keepit, a cloud backup service with headquarters in Copenhagen, raised USD 22.5 million in debt financing from Silicon Valley Bank (SVB) in association with Vaekstfonden. The platform will use the additional cash to build its SaaS data security platform while developing new products and expanding internationally.

The rising adoption of the cloud across most businesses is driven by new technologies like artificial intelligence, big data, and blockchain. In 2023, TV 2 Denmark, a major Danish national TV station and subscription-based streaming platform, overhauled its cloud infrastructure and built an internal developer platform.

In Telecom, rising 4G adoption and the impending 5G wave are encouraging telecom companies to make investments in the data center market. In 2023, more than 98% of the population in the country was connected via 4G and 5G. Denmark's broadband strategy involves providing 98% of households and businesses with 1 GBPS download speeds by 2025. In Q2 2022, Denmark's 5G availability stood at 36.4%. Such instances in the market are expected to create more need for data centers, boosting the demand for data center cooling infrastructure manufacturers in the coming years.

Liquid-based Cooling is Expected to Be the Fastest Growing Segment

In data centers, liquid cooling offers many benefits, and it is an attractive option for

cooling computing environments with high performance. The use of liquid cooling has been shown to be more energy efficient compared to conventional air conditioning. It reduces the need for overcooling and improves the energy efficiency of data centers by providing precise temperature control.

Technological advancements have helped reduce the water consumption of data centers by more than 15% in tropical climates and 80% in green areas, making liquid cooling easier to maintain, scale up, or be affordable. Energy used for liquid cooling may be recycled to heat buildings and drinking water, while advanced artificial refrigerants can significantly reduce the carbon footprint of air conditioners.

Liquid cooling takes advantage of the space constraints and superior heat transfer properties of water or other liquids to provide efficient and cost-effective cooling of high-density racks up to 3,000 times more efficiently than air. Long proven in mainframe and gaming applications, liquid cooling is increasingly being used to protect rack servers in regional data centers. In July 2022, Iceotope Technologies, an IT cooling solutions firm, joined forces with Intel and Hewlett Packard Enterprise (HPE) to reduce edge data center's energy usage by 30%. The three companies hope to achieve their net zero operations sustainability goals by integrating Iceotope precision cooling technology into edge data centers.

The country's internet penetration increased from 97% in 2017 to 99% in 2021. At the same time, the number of smartphone users increased from 4.75 million in 2017 to 5.47 million in 2021. E-commerce sales in Denmark increased from EUR 19.5 billion in 2019 to USD 21.45 billion in 2020, suggesting that people are now more inclined to prefer cashless transactions, which is expected to have a long-term impact on the market. Such aspects are expected to complement the growth and demand for data processing facilities in the telecom industry, boosting the demand for DC cooling infrastructure in the country.

Denmark Data Center Cooling Industry Overview

The upcoming DC construction projects in the country will increase the demand for data center cooling in the coming years. The market is moderately consolidated. Market players include Iceotope Technologies Limited, Stulz GmbH, Rittal GMBH & Co.KG, Schneider Electric SE, and Vertiv Group Corp. These major players, with a prominent market share, focus on expanding their regional customer base.

April 2024: Carrier Global Corporation partnered with Strategic Thermal Labs to develop direct-to-chip cooling technology. Under this partnership, Carrier will leverage the advancement in direct-to-chip technology and incorporate it into the data center cooling solutions.

December 2023: Vertiv completed the acquisition of Cooltera Ltd, a manufacturer of coolant distribution units (CDU) and secondary fluid networks (SFN). This acquisition is expected to improve the existing DC cooling solutions offered by the company.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

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