+357 96 030922
info@marketpublishers.com

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

https://marketpublishers.com/r/CB37AE81198EEN.html
Date: July 2024
Pages: 90
Price: US$ 4,750.00 (Single User License)
ID: CB37AE81198EEN

Abstracts

The Canada Data Center Cooling Market size is estimated at USD 345.5 million in 2024, and is expected to reach USD 680.20 million by 2030, growing at a CAGR of 12.5% 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 the Canadian data center rack market is expected to reach 1,150 MW by 2029.

Under Construction Raised Floor Space: The country's construction of raised floor area is expected to increase to 5.1 million sq. ft by 2029.

Planned Racks: The country's total number of racks to be installed is expected to reach 289,000 units by 2029. Quebec is expected to house the maximum number of racks by 2029.

On Canada's east and west coasts, average high temperatures are recorded in the low 20°C, while between the coasts, the average summer high temperature varies from 25 °C to 30 °C, with temperatures in some interior locations occasionally exceeding 40 °C. Depending upon climatic conditions, DC cooling is done in the DC facilities.

+357 96 030922
info@marketpublishers.com

Planned Submarine Cables: There are close to 16 submarine cable systems connecting Canada, and many are under construction. One such submarine cable, which is estimated to start service in 2025, is Sednalink Fibre; it stretches over 2,104 km with landing points from Goose Bay, Newfoundland, Canada, to Iqaluit, Nunavut, Canada.

Canada Data Center Cooling Market Trends

The IT & Telecommunication Segment Holds the Majority Share

The COVID-19 pandemic impacted companies that entered the digital transformation early, either by offering digital products and services or by leveraging digital processes, more economically than their peers that gradually embraced digital transformation.

In the early days of the pandemic, after years of increasing adoption, public cloud adoption became mainstream. Canada's public cloud market revenues are expected to reach an amount of USD 5,213.5 million, an increase of 46.42%, from 2023 to 2027. Revenue is expected to grow to USD 16.4 billion by 2027 for the fourth year in a row. The public cloud market revenue has increased steadily in recent years.

Cloud storage in Canada is growing due to the growing demand for cost-effective data backup, storage, and protection across all businesses and the need to manage data generated by the increasing use of mobiles.

Cloud infrastructure offers capabilities such as increased scalability and flexibility to offer minimal downtime. Enterprises are migrating from traditional complex infrastructures to cloud infrastructures, and data center usage is expected to increase during the forecast period.

Telecommunications have evolved and started using a hybrid cloud structure, which combines both public and private cloud structures. The usage of this hybrid cloud structure helps telecommunication companies manage the sudden surge in traffic. The implementation of hybrid cloud services helps the telecom industry deploy its cloud services instantly, leading to lower downtime. The increased bandwidth speeds raised data consumption on mobiles from 1.5 GB in 2016 to 5.2 GB in 2023; the consumption is expected to reach around 8.6 GB by 2029. 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.

+357 96 030922
info@marketpublishers.com

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.

Technologies such as Artificial Intelligence and Machine Learning are integrated into liquid cooling systems to optimize cooling efficiency and anticipate maintenance needs. They facilitate the efficient operation of data centers and help to reduce their downtime.

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.

The country plans to develop more smart cities in the future, integrating IoT, blockchain, AI, and other cutting-edge technologies, resulting in more significant data generation. According to the Government of Canada's Smart Cities Challenge launched in 2017, more than 225 municipalities expressed an inclination to explore the plan's advantages by filing their applications, demonstrating interest in developing more smart regions in the future.

The above instances would further be bolstered by the emergence of 5G services in smartphones and other faster network technologies, promoting wider deployment of smart devices controlled by apps in smartphones. The number of 5G users is expected to increase from 7% in 2021 to about 62% by 2025, further contributing to data consumption and network evolution over the forecast period. Such improvements in the market propel the growth of data centers and, consequently, the demand for DC cooling

+357 96 030922
info@marketpublishers.com

infrastructure in the country.

Canada 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 Canadian data center cooling market is moderately fragmented. Major market players include Rittal GMBH & Co.KG, Schneider Electric SE, Vertiv Group Corp., Mitsubishi Electric Hydronics & IT Cooling Systems SpA, and Asetek A/S. 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

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Canada Data Center Cooling - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2030)

Product link: https://marketpublishers.com/r/CB37AE81198EEN.html

Price: US$ 4,750.00 (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/CB37AE81198EEN.html