

Sweden Data Center Cooling - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2030

Market Report | 2024-02-17 | 90 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The Sweden data center cooling market reached a value of USD 124.3 million in the previous year, and it is further projected to register a CAGR of 7.4% during the forecast period.

Key Highlights

- -As Sweden has a very cold climate, it makes an attractive location for data centers, offsetting the need for major server cooling systems. However, urban data centers are increasingly important as the 'edge' of the network develops. Cooling-as-a-service is one advantage they have over remote sites, leading to major market demand.
- -The upcoming IT load capacity of the Sweden data center market is expected to reach around 400 MW by 2029. The country's construction of raised floor area is expected to increase to 1.7 million sq. ft by 2029.
- -The country's total number of racks to be installed is expected to reach 87.1K units by 2029. Stockholm is expected to house the maximum number of racks by 2029. There are close to 26 submarine cable systems connecting Sweden, and many are under construction. One such submarine cable that is estimated to start service in 2024 is N0r5ke Viking 2, which stretches over 9,000 km with landing points from Lagunen, Sweden.

Sweden Data Center Cooling Market Trends

IT and Telecom to Hold Significant Share

- In Sweden, data traffic in the mobile networks increased to 3,005 Pbytes in 2022, which was an increase of 28 percent. There

Scotts International, EU Vat number: PL 6772247784

were 12.4 million mobile subscriptions for both voice and data services (smartphones), an increase of 5 percent compared to the previous year. With increasing data traffic, the demand for data construction is increasing, which will increase the demand for cooling solutions.

- Sweden has the European Union's (EU) lowest power price, and much of that power is produced in local hydropower plants that guarantee highly reliable renewable energy. With a carbon footprint as low as 0.04 g CO2 per kWh, many telecom companies are migrating their data from expensive fossil-fueled economies to low-cost clean energy locations like Sweden, leading to market demand.
- The rapidly increasing 4G penetration and the upcoming 5G wave are further adhering telecom vendors to invest in the Swedish data center. Recently, Swedish network provider Net4Mobility, a joint venture between local carriers Tele2 and Telenor, announced plans to connect 90% of the nation's population to its 5G network by the end of 2023. Such developments are expected to result in increasing investments in data processing facilities.
- As of 2019, top technology firms have active sites in Nordic countries, particularly Sweden. This has been credited to a welcoming regulatory environment, stable infrastructure including fiber optic connections, low-cost energy, high availability of renewables, and the benefit of a cooler climate and cooling system requirements.

Liquid Cooling to Hold Significant Growth

- Air cooling is just insufficient to sustain the dependability of IT systems in facilities with exceptionally high-density racks (usually over 30 kW), regardless of how new or optimized they may be. Liquid cooling is not an option but rather a must for such facilities (rack power requirements are approaching 20 kW in many facilities, and many companies are aiming to build racks with requirements of 50 kW or more). Facilities such as STHLM 4 of Conapto (Designrepublic.se) are under construction facilities having high rack density.
- A data center in Sweden has cut its energy bills by a million dollars a year using seawater to cool its servers; Interxion, a collocation company in the Netherlands that rents data center space in 11 countries, uses water pumped from the Baltic Sea to cool the IT equipment at its facilities in Stockholm.
- The Swedish data center region features free cooling. The direct evaporation of water is used to produce humidification with limited energy consumption. This simple, cost-effective method results in a 30 percent reduction in energy costs and 90 percent less water usage than other water-based cooling systems. To provide the needed water for the humidification at the datacenter, a rainwater harvesting method was developed to offset the demand for fresh water.
- The Swedish data center industry has begun to gain attractive investments from hyperscale cloud providers such as Google, Microsoft, and Amazon. In October 2022, Google Cloud announced plans for its first cloud region in Sweden to promote sustainable business transformation.
- In 2021, 54 cloud computing startups and companies were established in Sweden. Extensive use of wireless devices and growing connections to the internet are increasing the demand for online cloud platforms. Such factors are expected to increase the demand for data processing and storage facilities in the cloud segment, leading to demand for liquid cooling.

Sweden Data Center Cooling Industry Overview

Sweden's data center cooling market has evolved into a highly consolidated industry with a notable competitive edge in recent years. Key players, including Submer Technologies, FlaktGroup Holding GmbH, Excool Ltd., and others, dominate the market with a significant share. These major players are keen on expanding their customer base across the region and employ strategic collaborative initiatives to bolster their market share and enhance profitability.

In May 2022, STULZ made a significant announcement by introducing its innovative CyberCoolFree Cooling Booster. This

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

groundbreaking free cooling module is designed to deliver environmentally friendly cooling solutions for data centers and industrial applications. The CyberCoolFree Cooling Booster stands out as a versatile, high-performance solution, enabling the harnessing of the substantial cost-saving potential of free cooling in both new and existing systems. Its implementation not only enhances operational reliability and extends equipment lifespan but also contributes to reducing CO2 emissions. This development represents a major stride towards sustainable and efficient cooling solutions in the data center industry.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

- 1 INTRODUCTION
- 1.1 Study Assumption & Market Definition
- 1.2 Scope of the Study
- 2 Research Methodology
- 3 Executive Summary
- 4 Market Dynamics
- 4.1 Market Overview
- 4.2 Market Drivers
- 4.2.1 Development of IT Infrastructure in the Country
- 4.2.2 Emergence of Green Data Centers
- 4.3 Market Restraints
- 4.3.1 Adaptability Requirements and Power Outages
- 4.4 Value Chain / Supply Chain Analysis
- 4.5 Industry Attractiveness Porter's Five Forces Analysis
- 4.5.1 Threat of New Entrants
- 4.5.2 Bargaining Power of Buyers/Consumers
- 4.5.3 Bargaining Power of Suppliers
- 4.5.4 Threat of Substitute Products
- 4.5.5 Intensity of Competitive Rivalry
- 4.6 Assessment of COVID-19 Impact

5 MARKET SEGMENTATION

- 5.1 Cooling Technology
- 5.1.1 Air-based Cooling
- 5.1.2 Liquid-based Cooling
- 5.1.3 Evaporative Cooling
- 5.2 End-User
- 5.2.1 IT & Telecommunication
- 5.2.2 BFSI
- 5.2.3 Government
- 5.2.4 Media & Entertainment
- 5.2.5 Other End-Users

Scotts International, EU Vat number: PL 6772247784

6 COMPETITIVE LANDSCAPE

- 6.1 Company Profiles
- 6.1.1 Submer Technologies S.L.
- 6.1.2 FlaktGroup Holding GmbH
- 6.1.3 Excool Ltd.
- 6.1.4 Stulz GmbH
- 6.1.5 Rittal GMBH & Co.KG
- 6.1.6 Schneider Electric SE
- 6.1.7 Daikin Applied Europe S.p.A
- 6.1.8 Green Revolution Cooling Inc.
- 6.1.9 Munters Group AB
- 6.1.10 ebm-papst Group
- 7 INVESTMENT ANALYSIS
- 8 MARKET OPPORTUNITIES AND FUTURE TRENDS



Sweden Data Center Cooling - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2030

Market Report | 2024-02-17 | 90 pages | Mordor Intelligence

	ith Scotts International:	
- Print this form		
_ ·	elevant blank fields and sign	
Send as a scan	ned email to support@scotts-international.com	
ORDER FORM:		
Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
	VAT	
	Total	
*Please circle the relev		
□** VAT will be added	ant license option. For any questions please contact support@scotts-international.com or 0048 603 39	94 346.
	ant license option. For any questions please contact support@scotts-international.com or 0048 603 39 at 23% for Polish based companies, individuals and EU based companies who are unable to provide a	
E 'llk	at 23% for Polish based companies, individuals and EU based companies who are unable to provide a	
Email*		
Email* First Name*	at 23% for Polish based companies, individuals and EU based companies who are unable to provide a	
	at 23% for Polish based companies, individuals and EU based companies who are unable to provide a very serious pro	
First Name*	at 23% for Polish based companies, individuals and EU based companies who are unable to provide a very serious pro	
First Name* Job title*	Phone* Last Name*	
First Name* Job title* Company Name*	Phone* Last Name* EU Vat / Tax ID / NIP number*	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

Signature

Scotts International. EU Vat number: PL 6772247784