

## **Malaysia 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 Malaysia data center cooling market reached a value of USD 307.2 million in the previous year, and it is further projected to register a CAGR of 11.1% during the forecast period.

#### Key Highlights

- The most recent recommendation for most classes of information technology (IT) equipment is a temperature between 18 and 27 degrees Celsius. Malaysia's mean annual temperature is 25.4C. There is relatively little seasonal variability in average monthly temperature, ranging one degree Celsius between a minimum of 24.9C in January and a maximum of 25.9C in May.
- Manufacturers are increasingly considering hire-based equipment procurement strategies to address weather-based uncertainty without limiting purchasing power. Such a factor leads to a major driving demand for data center cooling solutions.
- The upcoming IT load capacity of the Malaysia data center market is expected to reach around 1.3K MW by 2029. The country's construction of raised floor area is expected to increase to 7.8 million sq. ft by 2029.
- The country's total number of racks to be installed is expected to reach 388K units by 2029. Cyberjaya-Kuala Lumpur is expected to house the maximum number of racks by 2029.
- There are close to 25 submarine cable systems connecting Malaysia, and many are under construction. One such submarine cable that is estimated to start service in 2024 is SEA-H2X, which stretches over 5,000 Kilometers with landing points from Kuching, Malaysia.

#### Malaysia Data Center Cooling Market Trends

IT and Telecom to Hold Significant Share

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scott's-international.com

www.scott's-international.com

- The demand for efficient and sustainable cooling solutions has surged as the digital landscape expands and data centers increase. The demand for data centers is experiencing rapid growth, driven primarily by the telecom sector's need to deliver content, mobile, and cloud services. Ensuring the continued operation of these facilities is crucial. Interconnecting data centers and providing WAN connectivity are vital to network requirements, resulting in high storage resources and energy consumption, necessitating data center cooling.
- The WAN connectivity market in Malaysia is still in its early stages of development. Telekom Malaysia (TM), the established fixed-line provider in the country, introduced this service in November 2018, offering its customers a choice between two vendors. Although there are smaller telecom companies, value-added resellers, and system integrators like RedTone, ViewQwest, Netpoleon, LNS, and BreitKom operating in the market, its primary competitor, Maxis, only entered the SD-WAN market in 2019.
- Efficient management of thermal loads within telecom facilities and electronic enclosures is essential. Liquid cooling is a viable alternative to ambient air cooling due to its high heat-carrying capacity. Water, for instance, can carry about 3,500 times more heat than air. By employing economizer-based data center liquid cooling with advanced metal interfaces, cooling energy can be reduced to a mere 5% of the total energy consumed by the data center. This not only saves energy but also contributes to a reduction in carbon dioxide (CO2) emissions.
- With the 5G technology, the consumption rate is expected to increase, along with the need for effective data storage facilities in the industry. The development of digital infrastructures, such as data centers, is central to enabling 5G applications. With this, various investors are signing an agreement for the 5G launch.
- For instance, in November 2022, Malaysian telcos Celcom and DiGi approved the merger agreement. Once the two companies are fully merged, the new entity will be one of the largest carriers in Malaysia, with over 20 million subscribers. Such initiatives are increasing the data center construction in the country, leading to cooling solutions.
- Overall, with the company's increased investment in data centers, the need for efficient cooling solutions to ensure uninterrupted operations and data protection is vital. Such instances in the telecommunication sector are leading to rapid expansion and increasing data demands, fueling the growth of the data center cooling market in the country.

#### Liquid Cooling to Hold Significant Growth

- As countries are racing against time to mitigate the devastating consequences of climate change, future infrastructure must be designed to limit increases in temperature to no more than 2C above pre-industrial levels. In Malaysia, the development of smart district cooling systems is pivotal to improving the management of energy demands.
- District cooling produces chilled water centrally for distribution to nearby facilities through a network of insulated pipes to achieve efficient air conditioning of buildings and data centers. Using district cooling instead of using individual air conditioning systems can significantly reduce the usage of energy to somewhere in the range of 20% to 40%. The reduction in terms of energy usage translates into CO savings. In Malaysia, the trend of adoption of such solutions is expected to grow significantly during the forecast period.
- In Malaysia, ENGIE has been managing Pendinginan Megajana, a joint venture between ENGIE Services Malaysia and Cyberview, providing round-the-clock chilled water for air conditioning to 51 buildings in Cyberjaya township's data centers, malls, and office towers.
- The Malaysian data center market continues to see increased investments with AirTrunk, a hyperscale data center provider, announcing its entry into the country with a planned 150+ megawatt( MW) data center. Malaysia recently witnessed several large companies, including Equinix and Google, announcing plans to build more hyperscale data centers as well.
- These providers are using liquid cooling technology to reduce their data center power heat consumption. Sustainable innovations include a landmark cooling solution that utilizes a combination of indirect evaporative cooling (IEC) and direct-to-chip liquid cooling technology. The liquid cooling technology enables AirTrunk customers to deploy high-density racks, reducing energy

**Scotts International. EU Vat number: PL 6772247784**

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

www.scotts-international.com

consumption by up to 20%.

- Furthermore, cloud storage use has expanded over the years as SaaS provider expansion has enabled cloud storage providers to expand their capacity, which is likely to raise demand for liquid data center cooling systems. Cloud storage companies like Microsoft, AWS, and Google are expanding their storage capacity to enable more efficient cloud workflow, which will lead to major demand for liquid cooling.

## Malaysia Data Center Cooling Industry Overview

The Malaysia Data Center Cooling market has witnessed significant consolidation among key players, resulting in a heightened competitive landscape in recent years. Among the prominent players in this market are Right Power Technology Sdn Bhd, Alfa Laval, Huawei Technologies Co., Ltd., and others. These industry leaders, boasting substantial market shares, are dedicated to expanding their customer base across the region. They employ strategic collaborative initiatives to enhance both their market share and overall profitability.

In March 2022, Johnson Controls made a noteworthy move by utilizing its Silent-Aire solutions to introduce the industry's pioneering hyperscale data center platform, specifically designed to assist cloud providers in meeting ambitious sustainability goals. The Johnson Controls Data Center Solutions platform offers innovative solutions geared towards conserving water and reducing energy consumption. These solutions include air-cooled chillers, liquid cooling systems, combination air handler units, environmentally-friendly refrigerants prepared for future adoption, and prefabricated modular data centers. This strategic development marks a significant advancement in the data center cooling sector, aligning with the growing emphasis on sustainability and efficiency within the 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 Increasing Volume of Digital Data

###### 4.2.2 Emergence of Green and Renewable 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

**Scotts International. EU Vat number: PL 6772247784**

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

www.scotts-international.com

- 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

## 6 COMPETITIVE LANDSCAPE

- 6.1 Company Profiles
  - 6.1.1 Right Power Technology Sdn Bhd
  - 6.1.2 Alfa Laval Corporate AB
  - 6.1.3 Huawei Technologies Co., Ltd.
  - 6.1.4 Schneider Electric SE
  - 6.1.5 Johnson Controls International PLC (York International)
  - 6.1.6 Fujitsu General Limited
  - 6.1.7 Munters Group AB
  - 6.1.8 GreenBay CES
  - 6.1.9 Vertiv Group Corp.
  - 6.1.10 Rittal GMBH & Co.KG

## 7 INVESTMENT ANALYSIS

## 8 MARKET OPPORTUNITIES AND FUTURE TRENDS

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

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

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

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned 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 relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-03-03"/>
		Signature	

**Scotts International. EU Vat number: PL 6772247784**

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

www.scotts-international.com

