Internet Data Center Market in China and Hong Kong - Industry Outlook and Forecast 2021-2026

https://marketpublishers.com/r/I45635B69E8BEN.html
Date: May 2021
Pages: 282
Price: US$ 3,750.00 (Single User License)
ID: I45635B69E8BEN

Abstracts

In-depth Analysis and Data-driven Insights on the Impact of COVID-19 Included in this China and Hong Kong Data Center Market Report

The China and Hong Kong data center market by investment is expected to grow at a CAGR of approx. 4% during the period 2020–2026.

The emergence of the 5G network has been a significant boost to the China & Hong Kong edge data center market. China and Hong Kong governments have been actively supporting the improvement of networking infrastructure in their countries. The implementation of 5G has boosted the digital economy, leading to the increased demand for high bandwidth networking infrastructure. Chinese telecom operators in the region are incredibly active in the implementation of 5G infrastructure. Operators such as China Telecom, China Unicom, and China Mobile are the major players in the 5G landscape. Over 700,000 5G sites were built by these three operators in 2020 and are likely to add 600,000 base stations in 2021 for the implementation of 5G network. China Unicom has deployed edge data centers in the region. Turbidite, an edge data center platform, launched in March 2021, develops international-standard edge data centers across APAC countries, including China and Hong Kong. The company is in the process of acquiring and developing carrier-neutral edge data centers that will support enterprises and hyperscale data center developers to establish their presence in the APAC region. It is expected that the number of connected devices will triple by the end of the forecast period, and smart city growth will involve data centers nearer to customer locations. These deployments will continue to drive innovations in the data center power space, with increased modular infrastructure offerings.

The following factors are likely to contribute to the growth of the China and Hong Kong

data center market during the forecast period:

Implementation of 5G driving Edge Data Centers

Smart Cities fueling Data Center Demand

Renewable Energy reducing Power Cost

The rise in AI, Blockchain & Quantum Computing Investment

The study considers the present scenario of the China and Hong Kong data center market and its market dynamics for the period 2020?2026. It covers a detailed overview of several market growth enablers, restraints, and trends. The report offers both the demand and supply aspects of the market. It profiles and examines leading companies and other prominent ones operating in the market.

China and Hong Kong Data Center Market Segmentation

The China and Hong Kong data center market research report includes a detailed segmentation by IT infrastructure, electrical infrastructure, mechanical infrastructure, cooling systems, cooling technique, general construction, tier standards, geography. The China & Hong Kong IT Infrastructure market expects to reach over USD 28 billion in 2026, growing at a CAGR of over 3%. Servers are the major revenue contributor to the market as the growth in data generation is fueling demand for fast processing efficient servers. Servers comprising AI-enabled features such as data analytics, development of AI-enabled applications, flexible deployment of data expect to increase the demand during the forecast period.

The electrical infrastructure market in China & Hong Kong is likely to grow at a CAGR of approx. 4% during 2020–2026. In China & Hong Kong, data centers are designed to be of Tier III and Tier IV standards, with the high deployment of 2N redundant UPS systems, coupled with generators and other infrastructure adopting N+N redundancy. The adoption of Diesel Rotary Uninterruptible Power Supply (DRUPS) systems is growing in the Hong Kong market. DRUPS solutions are likely to witness high demand among data centers, with multiple modules having a total capacity of up to 2 MW and N+N or 2N redundant configurations. The adoption of intelligent PDU solutions such as metered and monitored PDU dominates in terms of investments. The adoption of modular infrastructure solutions in prefabricated data center deployment is increasing, continuing to grow and contributing to the market investment by the end of the forecast period.

In China, most facilities are colocation and adopt a combination of air and water-based cooling techniques to cool facilities; however, a few are built to support free cooling techniques. In Beijing, a majority of data centers are colocation based and adopt a combination of air and water-based cooling techniques to cool down the facility. Most facilities have installed chilled water-cooling systems. The increased use of rack scale converged infrastructure systems in data centers will impact the rack market, affecting rack adoption. In 2020, the China and Hong Kong data center market witnessed a rack capacity of over 1,00,000. Vendors are constantly innovating rack designs to provide airflow perforation (80%), enhance cabling channels, and support more weight capacity.

Several data centers use CRAC and CRAH units to supply cold air and exhaust hot air from the data hall. With data centers now built to handle over 10 MW of IT load, the use of multiple CRAC and CRAH units split across data halls is growing. The market will continue to grow among data centers that use DX or chilled-water cooling solutions. The adoption of chiller units expects to be higher in the market. All high-density data centers in the region depend on chilled water to cool their facilities. Hence, the use of free cooling systems is partially viable in these locations. Data centers in China & Hong Kong are developed to derive benefits from free cooling techniques. The use of evaporative coolers is also gaining traction in these countries, along with the adoption of evaporative cooling systems.

China is leading the greenfield construction of data centers. Hyperscale developments expect to increase the demand for engineering services in China. Most data centers in Beijing have 24X7 onsite support, including security, maintenance, smart hands teams. In addition, facilities are equipped with disaster recovery systems. Due to the limited availability of land, brownfield construction has witnessed growth in Hong Kong, and this trend is likely to continue during the forecast period. Most facilities in China prefer at least four layers of safety, with few engaged in implementing five-layer ones due to the increasing demand for colocation services.

Several mega data center projects are designed to be of Tier III and Tier IV standards in China. Tier III and Tier IV facilities dominate the China and Hong Kong data center market share, expecting to account for USD 4 billion and USD 2 billion, respectively, by 2026. Around 30 data centers in China & Hong Kong fall under the Tier III category. Equinix, GDS Services Ltd, Global Switch, and China Unicom are major vendors developing Tier III standards facilities. Several facilities in China have received Tier IV

Certification for design from the Uptime Institute. These facilities generate more revenue for the market, with focused investment on highly efficient cooling systems. Tier IV facilities involve the adoption of 2N+1 cooling units.

By IT Infrastructure

- Servers
- Storage
- Network

By Electrical Infrastructure

- UPS Systems
- Generators
- Transfer Switches and Switchgears
- PDUs
- Other Electrical Infrastructures

By Mechanical Infrastructure

- Cooling Systems
  - CRAC & CRAH Units
  - Chiller Units
  - Cooling Towers, Dry Coolers, & Condensers
  - Economizers and Evaporative Coolers, and Other Units
  - Racks

+44 20 8123 2220
info@marketpublishers.com

Other Mechanical Infrastructure

Other Cooling Units

Racks

Others Mechanical Infrastructure

By Cooling Technique

Air-based Cooling Technique

Liquid-based Cooling Technique

By General Construction

Core and Shell Development

Installation and Commissioning Services

Engineering and Building Designs

Physical Security

DCIM/BMS

By Tier Standards

Tier I &II

Tier III

Tier IV

INSIGHTS BY GEOGRAPHY

China accounts for the highest revenue share, expecting to constitute over USD 5.6 billion by 2026. The data center market in China is growing YOY aided by the strong growth in internet connectivity across the country and an increasing number of submarine cable deployments connecting the country. Data center demand in China will exceed supply due to the rising demand for cloud-based services, big data analytics, and IoT. The high demand for data centers is likely to boost the development of colocation facilities and prompt regional cloud service providers to establish multiple availability zones in China. The installation of 5G in Beijing is driving the construction of edge and colocation data centers. The government has planned to develop a pilot trade zone for big data exchange and digital trade in Beijing. The increased focus on digital industrialization, industry digitization, data valuation, digital governance, and digital trade development is likely to influence China's market growth.

By Geography

- China
  - Beijing
  - Shanghai
  - Other Cities
- Hong Kong

INSIGHTS BY VENDORS

China & Hong Kong is one of the most developed data center markets. The data center market in China and Hong Kong is still witnessing growth in terms of investment from global and local data center operators. Due to the COVID-19 pandemic, the data generation significantly increased this derived investment in data centers. Vendors are offering innovative solutions for data centers to improve efficiency of data centers. The market is likely to witness the entry of new players that provide DCIM solutions, installation & commissioning services, and physical security services. The success of new entrants mainly depends on their market expertise and understanding of local regulations. The Princeton Digital Group, GDS Services, and BDx invested in the region

+44 20 8123 2220
info@marketpublishers.com

in 2020. These providers are either building data centers or acquiring existing facilities to create a foundation for expansion in the future years.

Key Data Center Critical (IT) Infrastructure Providers

- Hewlett Packard Enterprise (HPE)
- Cisco Systems
- Dell Technologies
- Hitachi Vantara Corporation
- Huawei Technologies
- IBM
- Inspur
- Lenovo
- Quanta Cloud Technology (Quanta Computer)

Key Data Center Support Infrastructure Providers

- ABB
- Vertiv
- Caterpillar
- Cummins
- Delta Electronics
- Eaton
- Fuji Electric

+44 20 8123 2220
info@marketpublishers.com

Schneider Electric

HITEC Power Protection

Mitsubishi Electric Corporation

Legrand

Rittal

Rolls-Royce Power Systems

AIRSYS

Shenzhen Kstar Science and Technology

Key Data Center Investors

Apple

AirTrunk Operating

Amazon Web Services (AWS)

21Vianet

BDx

Chayora

China Unicom

Chindata

CITIC Telcom International Holdings

Equinix

+44 20 8123 2220
info@marketpublishers.com

GDS Services

Global Switch

OneAsia Network

Telekomunikasi Indonesia (Persero)

PCCW Global Solutions

Princeton Digital Group

SUNeVision (iAdvantage)

Shanghai AtHub

Shanghai Qnet Networking Technology

Tencent Holdings

Tenglong Holdings Group (Tamron)

Key Construction Constructors

Arup Group

Aurecom Group

AWP Architects

BYME Engineering (HK)

Chung Hing Engineers Group

DSCO Group

Faithful+Gould

Gammon Construction

ISG

Studio One Design

NTT Global Data Centers

KEY QUESTIONS ANSWERED

1. How big is the China and Hong Kong Data Center market size?
2. What is the growth of Tier III data centers in China and Hong Kong?
3. What is the growth rate of the China and Hong Kong Data Center Market?
4. What are the new investment opportunities in the data center market?
5. Who are the key players in the China and Hong Kong data center market?

Contents

+44 20 8123 2220
info@marketpublishers.com

15 MECHANICAL INFRASTRUCTURE

16 COOLING SYSTEMS

17 COOLING TECHNIQUE

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

25 PROMINENT SUPPORT INFRASTRUCTURE PROVIDERS

27 PROMINENT DATA CENTER INVESTORS

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

28 REPORT SUMMARY

29 QUANTITATIVE SUMMARY

+44 20 8123 2220
info@marketpublishers.com

30 APPENDIX

30.1 Abbreviations

+44 20 8123 2220
info@marketpublishers.com

List Of Exhibits

LIST OF EXHIBITS

List Of Tables

LIST OF TABLES

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Internet Data Center Market in China and Hong Kong - Industry Outlook and Forecast 2021-2026

Product link: https://marketpublishers.com/r/I45635B69E8BEN.html

Price: US$ 3,750.00 (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/I45635B69E8BEN.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

Custumer 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