IBM Cloud Prefabricated Modular Data Center

Provide the right support for your most critical applications

Highlights

- Enables better flexibility, agility and scalability with a highly customizable data center solution
- Supports cloud, Internet of Things, high-performance computing, edge, social and other highly critical applications
- Facilitates better performance in a more energy-efficient environment

The market is changing and so is the economy transforming IT. However, current data centers, being monolithic, lack the agility the new-age business demands. Harnessing new computing capability through cell-type structures, these data centers need to manage security and compliance—concerns paramount to chief information officers. It is not only important to make a great product, offer a needed service or provide the best solutions, you must also make all of this available on a 24x7 basis or risk losing clients. In addition, your data center must quickly and easily handle business changes and growth with the capability to efficiently adapt to new technologies. Accomplishing all of this in a flexible, reliable and energy-efficient manner is mandatory for your data center to save capital and operating costs. But without the proper design and build expertise, this can be a challenging and cost-intensive effort.

IBM® Cloud Prefabricated Modular Data Center can provide faster deployment, increased energy efficiency, easier expansion and more flexibility. The cloud prefabricated modular data center is not only self-contained, it is also IT-vendor neutral. With a tailored design, it has the protection your data center needs along with the ability to provide for a **cloud-enabled,** hybrid IT environment. IBM can reduce the complexities associated with data centers and enable you to better accomplish your business objectives.

Operating "on the edge" with a flexible, scalable data center

As latency and bandwidth issues continue to grow, a key solution has been to move the data center closer to the users. The cloud prefabricated modular data center helps you confidently expedite this process. IBM gives you the ability to increase your data center's availability

and help keep it running whenever it is needed, in a security-rich and reliable manner. From a prefabricated modular room to a prefabricated modular building or a data center in a shipping container, IBM offers custom solutions, including but not limited to high-density data centers, tailored to your environment and needs. IBM's modular data centers allow you to more easily create or expand your existing data center floor space without major construction disruption or building retrofits as you can do it in nearly any remote location.

Supporting Cloud, IoT, HPC and other critical applications

The Internet of Things (IoT) promises to drive more computing to the edge of a distributed network—closer to where the work is actually done. Cloud service providers need ways to easily make incremental data center capacity available for new services or expansion into new regions. For today's businesses to run these critical applications, you require a well-designed data center built for specific needs. IBM Cloud Prefabricated Modular Data Centers, being highly configurable, easily cater to a myriad of critical applications like cloud computing, high-performance computing (HPC) and IoT. IBM technical specialists can design and implement a solution to help quickly and smoothly deploy significant data processing applications to meet your needs.

Enabling better performance in a robust, physically protected facility

With high-density computing capability, you are able to deliver more compute-processing power to more effectively support your local and remote data processing operations. The cloud prefabricated data center is more reliable and better protected physically and environmentally. This is because of pre-tested data center infrastructure equipment supporting rack-mount and non-rack mount IT, along with a uniquely insulated module(s) to provide climate control. The facility is also designed for robust fire detection and suppression, and can protect against electromagnetic interference (EMI) and radio frequency interference(RFI).

A redundant infrastructure enables you to experience higher availability, improving service levels. Plus, IBM's multiple cooling technologies matched to your specific needs help significantly reduce energy costs. This approach provides a more cost- and energy-efficient data center solution appropriate for almost anywhere in the world regardless of weather conditions.

Prefabricated modular data center specifications:

Container size	20'(6.1m) Lx8'(2.4m)Wx9.5'(2.9m)H 40'(12.2m) Lx8'(2.4m)Wx9.5'(2.9m)H
Non-container size (indoor application)	Starts at 4'(L) x4'(W) x 7.5'(H)
Container insulation	Fully insulated and sealed containers providing protection from external temperature, humidity, smoke, dust, fire, water RFI and EMI
Container security	Access control security systems (magnetic strip reader, biometric scanner or numeric keypad) Closed-circuit television internal (standard) and external (optional)
Container power	Up to 510KW per container or up to 30KW per rack
Power protection	UPS system up to 2200KVA (N+1 or 2N)
Chilled water unit	Up to 200KW
Cooling options (chilled water)	1) IBM rear-door heat exchanger 2) In row/closed couple cooling 3) Overhead fan coil units
Cooling options (direct expansion DX)	4) In row cooling 5) In rack closed couple cooling 6) Overhead fan coils units

IBM cloud prefabricated modular data center features	IBM cloud prefabricated modular data center applications
Robust universal seismic restrained	Remote/branch offices
Managed power distribution unit	Retail outlet
Multiple IT cooling options	Factories
Fire detection and suppression	IOT edge computing
Water and dust tightness with leak detection	Cloud service provider startup and expansion
Thermal insulation	Network functions virtualization
Security door with access control	Government and military
Environmental sensing and monitoring	

Why IBM?

IBM has more than 30 years of global experience helping clients to design, build and run their IT environments and improve their business resiliency. IBM has experience designing and constructing approximately 30 million square feet of floor space in data centers worldwide. IBM uses patent-pending analytics tools and an extensive database of conceptual drawings to help develop fact-based data center requirements. In addition, IBM's strong relationships with local providers can offer clients design and build services for data centers of virtually any size. IBM Site, Facilities and Data Center Services has installed over 1000 modular data centers worldwide for clients and utilizes a very strong ecosystem of global alliance partners and suppliers providing technology and services.

IBM's expertise in technological innovation, design/build, best-practices methodology, highly skilled data center specialists and hands-on experience in designing and supporting data centers can provide the thought leadership necessary to plan for the future while reducing the complexity and risks associated with your new or retrofitted data center. Inherent risks associated with building a new data center facility can be reduced by capitalizing on IBM's project experience and intellectual capital.

For more information

To learn more about the IBM Cloud Prefabricated Modular Data Center, please contact your IBM representative or IBM Business Partner, or visit the following website:
ibm.com/us-en/marketplace/data-center-design-services

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