

High Density,
High Efficiency
Modular Computing

SGI® ICE Cube® Modular Data Center



KEY FEATURES

Up to 1920U of available space for fully customizable SGI Eco-Logical™ servers and/or storage

Up to 46,080 processing cores or 29.8 petabytes of storage per container

Sophisticated cooling technology enables up to 80% reduction in cooling costs vs traditional data center (PUE < 1.12)

Easy serviceability with direct, aisle-accessible systems

Dual row and universal container models support all SGI server and storage systems

Quick and easy deployments accelerate time to results

Available with SGI servers featuring the latest Intel® Xeon® processors

SGI ICE Cube revolutionizes fundamental data center design principles through its modularity and deployment flexibility, yielding substantial business and technological advantages when compared to the often costly and slow to construct brick-and-mortar data centers of the past.

ICE Cube meets the need for data center facility capacity with a just-in-time approach, minimizing up-front capital costs. Self-contained and fully portable, ICE Cube also cuts operational expenditures by making it easy to attain industry-leading power efficiencies for any type of IT deployment. Multiple container models provide the configurability to address varying IT and site requirements—all while delivering extraordinary density levels of up to 46,080 computational cores or 29.8 petabytes of data storage per container. These many advantages make ICE Cube the ideal data center solution for a wide range of deployment scenarios, augmenting or replacing traditional data centers of any size.

Leading Efficiency

Every ICE Cube data center is a standard 20' or 40' shipping container on the outside. But on the inside, ICE Cube delivers the latest in data center innovation. Based on SGI's proven experience in server, cabinet and power infrastructure, ICE Cube delivers compelling IT density at industry-leading efficiency levels. Capable of achieving a Power Utilization Effectiveness (PUE) rating below 1.12,

its unique cooling technology dramatically reduces cooling costs by as much as 80% over traditional data centers. Some models, in conjunction with SGI's award-winning DC Power technology, eliminate all IT equipment-level fans for further power consumption reductions, maximizing efficiency and reliability.

Broad Compatibility

Multiple ICE Cube models accommodate varying types of IT equipment with ease. Dual row containers are optimized for SGI® Rackable™ half-depth servers and include a large central aisle for ease of serviceability. Dual row containers can also support two cabinets of standard-depth, heterogeneous gear. ICE Cube is also available in several universal models designed for standard-depth systems, supporting all SGI server and storage systems in addition to third-party equipment.

Wide-Ranging Deployment Scenarios

Designed to reduce data center costs, deployment times and maintenance, ICE Cube is ideal for either supplementing or replacing traditional data center facilities. Modular data centers are also compelling as disaster recovery sites, field deployed compute and storage assets, or even to address temporary spikes in IT demand. ICE Cube data centers can be deployed to nearly any location in any environment.



SGI ICE Cube Modular Data Center

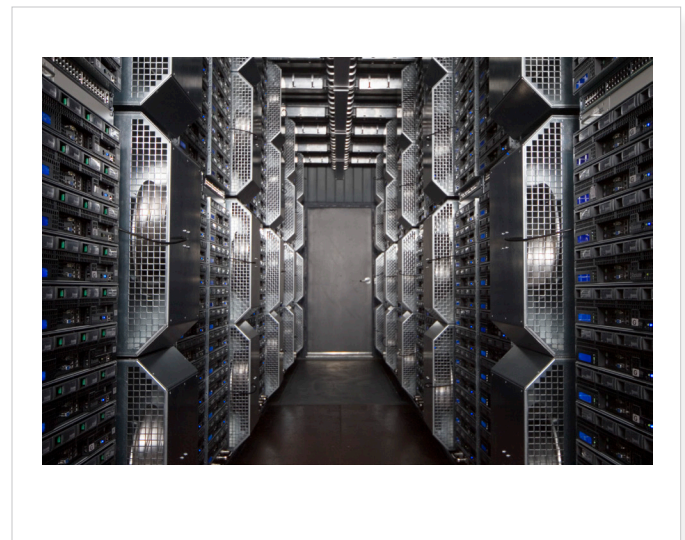
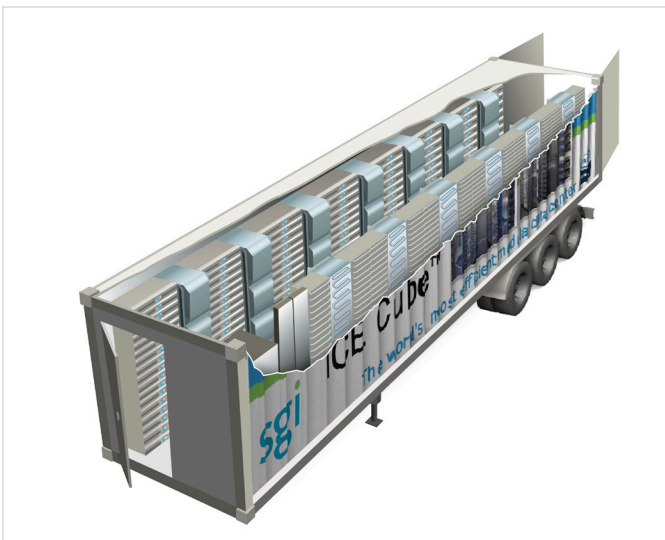
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ICE Cube Models and Specifications

www.sgi.com/icecube

Container Class	Dual Row	Dual Row	Dual Row	Dual Row	Universal	Universal	Universal
Model	IC2012DR	IC4032DR	IC2010HY	IC4026HY	IC4018UR	IC4016UP	IC4024UD
Max. Half-Depth Racks	12 x 55U	32 x 60U	8 x 60U	24 x 60U	N/A	N/A	N/A
Max. Standard-Depth Racks	N/A	N/A	2 x 44U roll-in	2 x 44U roll-in	18 x 44U roll-in	16 x 60U	24 x 49U
Max. Rack U	660	1920	480 + 88	1440 + 88	792	960	1176
Max. Cores*	14,832	43,392	15,072	36,768	27,528	46,080	27,540
Max. Storage**	6.2PB	16.6PB	6.6PB	16.0PB	17.9PB	23.8PB	29.8PB
Cooling	In-row chilled water	In-row chilled water	In-row chilled water	In-row chilled water	In-ceiling chilled water	In-row chilled water	In-row chilled water
Input Power	480/277 VAC	480/277 VAC	415/240 VAC	415/240 VAC	415/240 VAC	415/240 VAC	415/240 VAC
Max. Power/Container	260 kW	1200 kW	540 kW	1000 kW	350 kW	700 kW	350 kW
Max. Power/Rack	22 kW	45 kW	45 kW	45 kW	19 kW	45 kW	14.5 kW
Dimensions (Length x Width x Height)	20' x 8' x 9.5'	40' x 8' x 9.5'	20' x 8' x 9.5'	40' x 8' x 9.5'	40' x 8' x 9.5'	40' x 8' x 9.5'	40' x 8' x 9.5'

* Based on max. 305W power per node. ** With 2TB SATA II drives.



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