



The power behind competitiveness

Delta InfraSuite Prefabricated Data Center Solutions

www.deltathailand.com

 **DELTA**
Smarter. Greener. Together.

About Delta Group

Leading expert in power management and thermal management solutions

Delta Group is the world's leading provider of power management and thermal management solutions, as well as a major source for components, visual displays, industrial automation, networking products, and renewable energy solutions. Delta Group is focused on three main businesses: power electronics, energy management, and smart green life. Delta Group has sales offices worldwide and manufacturing plants in Taiwan, China, Thailand, Japan, Mexico, India, Brazil and Europe.

As a global leader in power electronics, Delta's mission is, "To provide innovative, clean and energy-efficient solutions for a better tomorrow." Delta is committed to environmental protection and has implemented green, lead-free production and recycling and waste management programs for many years.

World no. 1 in Switching Power Supplies, DC Brushless Fans and Telecom Power Systems

153 sales offices and **38** manufacturing facilities worldwide

5-6% of annual sales revenues invested in R&D with over **7,000** engineers

in **61** R&D centers worldwide

Awarded **7,100+** patents and received **47** internationally recognized design awards including iF, Reddot, and the Taiwan Excellence awards.

About Mission Critical Infrastructure Solutions BU

Delta's Mission Critical Infrastructure Solutions (MCIS) business unit has developed a variety of UPS and data center solutions. Positioned as "The power behind competitiveness," the MCIS strives to play an important role in making our customers' businesses and operations more competitive. Our mission is realized by providing highly reliable and efficient power management products, including UPS and data center infrastructure solutions that ensure the continuity of mission critical operations and better total cost of ownership (TCO).

With 40 years of leadership in the core technologies of power electronics, the expert teams at Delta Electronics have developed a new Delta InfraSuite includes power system, rack & accessories, precision cooling, and environment management system. generation of data center infrastructure solutions: InfraSuite.

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Delta Prefabricated Data Center Solution Portfolio

Delta's Service and Capabilities

- Provides total data center life cycle services, including consulting, design, simulation, implementation and after service.
- Designs and builds data centers per customer requirement for the optimal solutions.
- Offers comprehensive power supply, power distribution, cooling system, modular racks and DCIM solutions for implementation anywhere.

	All-in-one Containerized Data Center			Modular Containerized Data Center
	A	B	C	D
Shelter Size	20' container	40' container	45' container	40' container
Capacity	32 kW	72 kW	104 kW	228 kW
Technical Space	16.1 m ²	33 m ²	37.1 m ²	201.6 m ²
Power Density per rack	8 kW	6 kW	8 kW	3 kW
Number of IT Racks	4	12	13	76
U Space	168 U	504 U	546 U	3192 U
Reliability	Tier 2, N+1	Tier 2, N+1	Tier 2, N+1	Tier 2, N+1
Cooling Technology	Air-cooled	Air-cooled	Air-cooled	Air-cooled
Dimension-Outer				
Length	6.058 m	12.192 m	13.716 m	12.192 m
Width	3 m	3 m	3 m	17.052 m
Height	2.896 m	2.896 m	2.896 m	2.896 m
Dimension-Inner				
Length	5.85 m	12 m	13.5 m	12 m
Width	2.75 m	2.75 m	2.75 m	16.802 m
Height	2.59 m	2.59 m	2.59 m	2.59 m

All specifications are subject to change without prior notice.

Various Options

- AC or AC/DC converged power solutions
- ISO standard 20'/40'/45' or wide-ISO size
- All-in-one or modularized solutions
- Power container or indoor power skid



Power Container

E



Power Skid

F



40' container

Skid

200-1350 kW

Up to 1800 kW

26.6 m²

-

-

-

-

-

N+1

Tier 3

Chilled water

-

12.192 m

-

2.438 m

-

2.896 m

-

Main input
and UPS

Branch
and STS

Battery

12 m

10.2 m

9.75 m

1.2 m

2.22 m

11 m

1.848 m

3.99 m

2.492 m

2.75 m

2.75 m

2.75 m

Values & Benefits



Quick Deployment



Highly Replicable



Cost Optimized



Flexible & Scalable

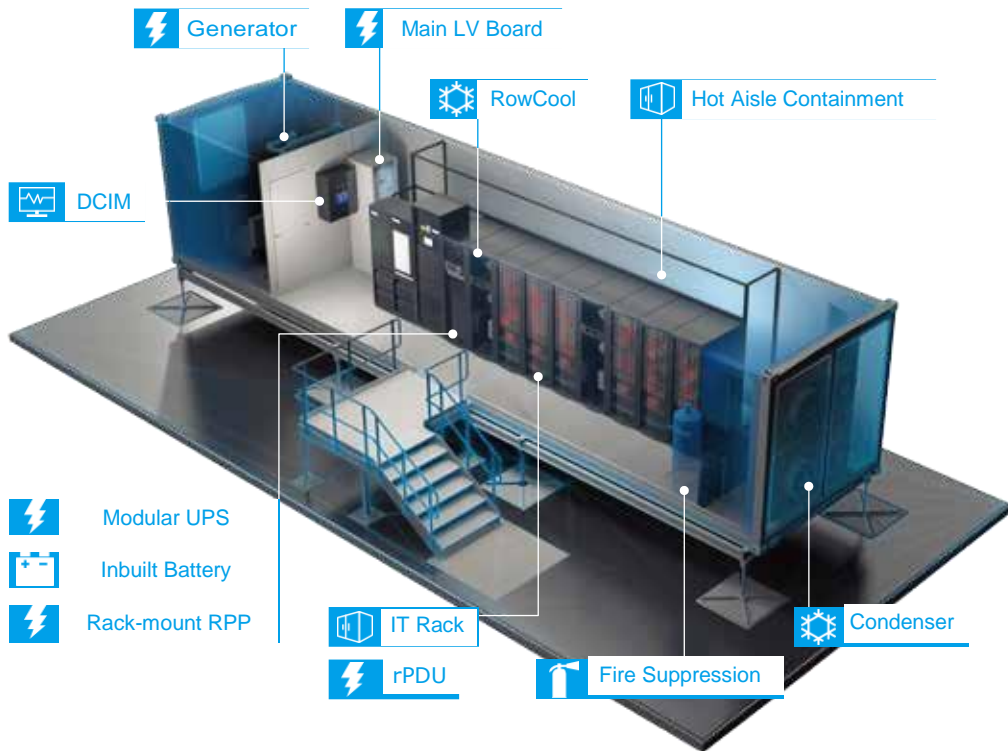


Highly Reliable

All-in-one Containerized Data Center

Quick deployment for edge computing applications in the IoT world

In this IT intensive world with heavy data traffic, an edge data center acts as a caching and data-aggregation point between users and larger data center to ease overwhelming IT loads. Following the growing applications of edge computing, Delta is introducing a new generation of containerized data center with flexible power and cooling designs, quick deployment and scalable capacity for implementation anywhere. The all-in-one design not only provides one stop shopping for customers, but also realizes high system integration and reliability.



A

Shelter Size	20' container
Capacity	32 kW
Technical Space	16.1 m ²
Power Density per rack	8 kW
Number of IT Racks	4
U Space	168 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled



B

Shelter Size	40' container
Capacity	72 kW
Technical Space	33 m ²
Power Density per rack	6 kW
Number of IT Racks	12
U Space	504 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled



C

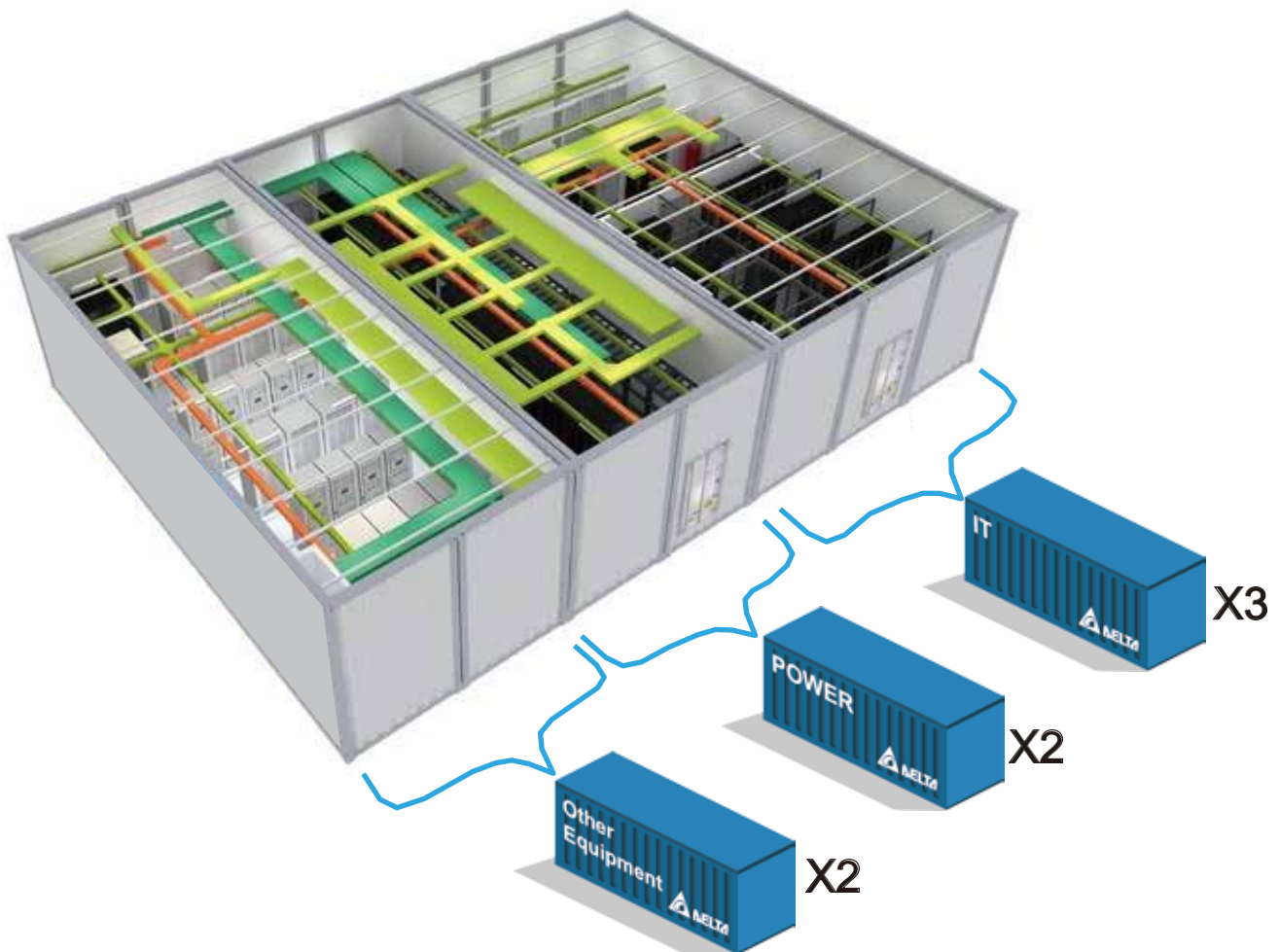
Shelter Size	45' container
Capacity	104 kW
Technical Space	37.1m ²
Power Density per rack	8 kW
Number of IT Racks	13
U Space	546 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled

All specifications are adjustable per customer requirement.

Modular Containerized Data Center

Highly flexible and scalable architecture for large data center applications

Delta's modular containerized data center is a smart and flexible architecture suitable for large data center applications. In addition to the integration of main systems of power, cooling, racks and monitoring, the cold or hot aisle containment also provides superior air flow management to enhance cooling efficiency. A traditional data center takes 18 to 24 months to build, while a modular data center requires only a few weeks or months for deployment. Delta's modular data center, with its fully modular design concept, is flexible and offers pay-as-you-grow with short installation time to meet the rapidly growing needs of data storage and processing.



D

Shelter Size	40' container
Capacity	228 kW
Technical Space	201.6 m ²
Power Density per rack	3 kW
Number of IT Racks	76
U Space	3192 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled

- All specifications are adjustable per customer requirement.
- The IT racks are customized. Number of IT racks may vary per different specifications.

Prefabricated Power Unit

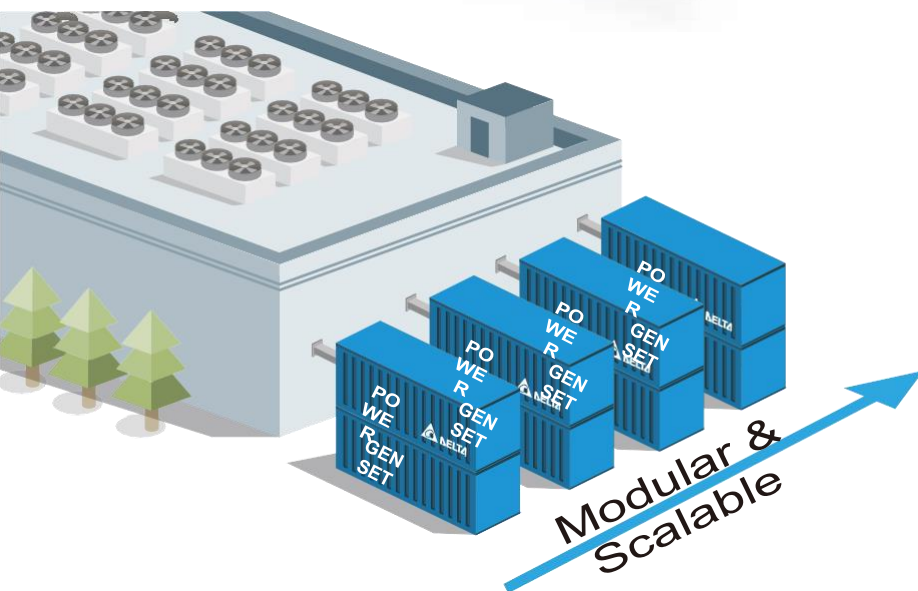
Modular and scalable power solutions for MW data centers

Cloud computing, 4G/5G and media streaming applications are driving the exponential growth of data traffic. IT managers are now facing the challenges of data center scalability for future IT expansion. As a world-leading data center solutions provider, Delta is introducing power container solutions for MW data center applications. The power container solutions feature high scalability to expand along with business growth. The agile and modular architecture can also combine with other individual modular subsystems including cooling, service, and IT containers for a complete containerized data center. Per customer requirements, Delta offers various design options and services for optimal solutions. Delta also provides total data center life cycle services, including consulting, design, simulation, implementation and after service. Delta is the trusted backup power behind large data centers enabling people to enjoy a better digital life.

E Power Container



Shelter Size	40' container
Capacity	200-1350 kW
Technical Space	26m ²
Reliability	N+1
Cooling Technology	Chilled water or Air-cooled type



F Power Skid for indooruse



Capacity	Up to 1800 kW
Reliability	Tier 3
Cooling Technology	Chilled water or Air-cooled type

Delta InfraSuite

Data Center Infrastructure Solutions

Enterprise growth and IT equipment have become so closely linked that planning and building a high performance data room is one of the critical issues for IT managers today.

With 45 years of leadership in the core technologies of power electronics, the expert teams at Delta Electronics have developed a new generation of data center infrastructure solutions: InfraSuite.

Delta InfraSuite includes power system, rack and accessories, precision cooling, and environment management system.

