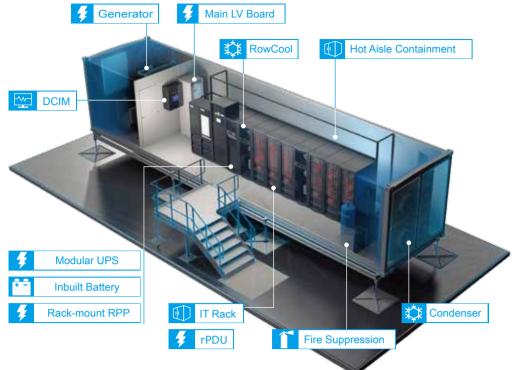
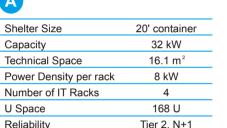
All-in-one Datacenter

Quick deployment for edge computing applications in the IoT world

In this IT intensive world with heavy data traffic, an edge datacenter acts as a caching and data-aggregation point between users and larger datacenters to ease overwhelming IT loads. Following the growing applications of edge computing, Delta is introducing a new generation of containerized datacenters 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.











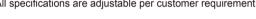
Air-cooled





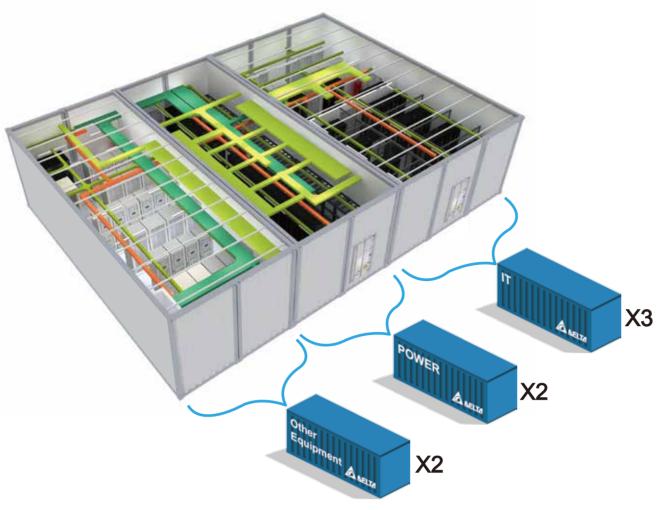


Shelter Size	40' container
Capacity	72 kW
Technical Space	33 m²
Power Density per rack	6 kW
Number of IT Racks	12
U Space	504 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled





Delta's modular containerized datacenter is a smart and flexible architecture suitable for large datacenter 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 datacenter takes 18 to 24 months to build, while a modular datacenter requires only a few weeks or months for deployment. Delta's modular datacenter, 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
Shelte

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

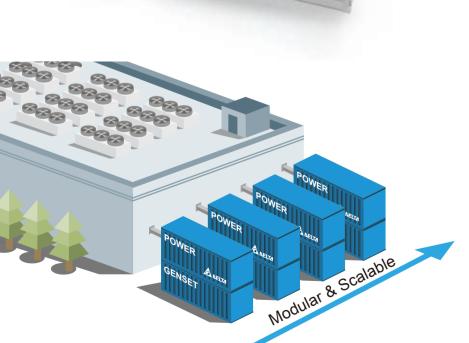
Delta's power container solution for MW datacenter service providers, is:

- Scalable to expand with your business
- Modular to combine with other individual modular subsystems including cooling, service, and IT containers to build a complete containerized datacenter
- Applicable for either ISO or wide-ISO containers





Shelter Size	40' container
Capacity	200-1350 kW
Technical Space	26m²
Reliability	N+1
Cooling Technology	Chilled water
0	or Air-cooled type



F Power Skid for indoor use



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

DELTA

45' container

104 kW

37.1m²

8 kW

13

546 U

Tier 2, N+1

Air-cooled

Shelter Size

Technical Space

Power Density per rack

Number of IT Racks

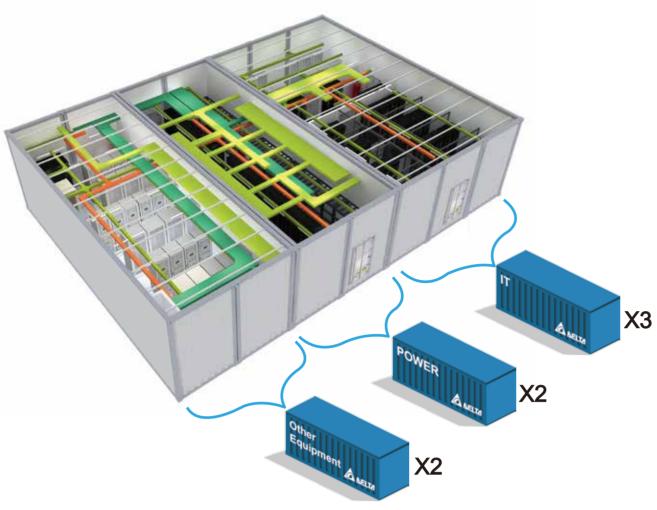
Cooling Technology

Capacity

U Space

Reliability

Highly flexible and scalable architecture for large datacenter applications



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



Delta InfraSuite **Datacenter 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.









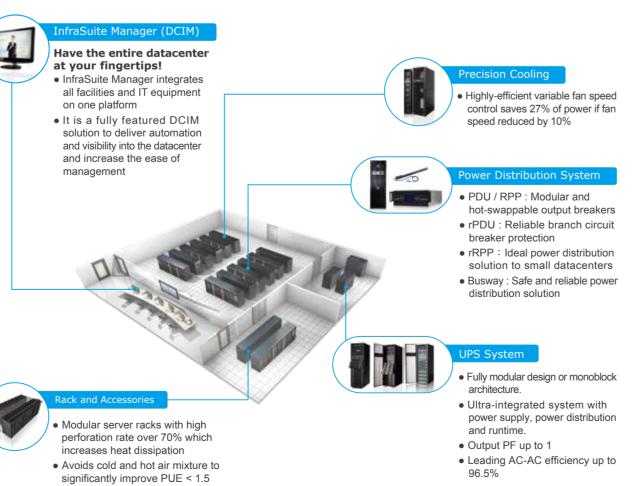
















DELTA

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 datacenter 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 datacenter infrastructure solutions that ensure the continuity of mission critical operations and better total cost of

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Contact in South East Asia

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Delta's Service and Capabilities

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Delta Prefabricated Datacenter Solution Portfolio

• Provides total datacenter life cycle services, including consulting, design, simulation, implementation and after service.

• Offers comprehensive power supply, power distribution, cooling system, modular racks and DCIM solutions for implementation anywhere.

Delta Energy Systems (Singapore) Pte Ltd.

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For further inquiries, please contact datacenter.solution@deltaww.com

• Designs and builds datacenters per customer requirement for the optimal solutions.





Delta InfraSuite **Prefabricated Datacenter Solutions**

www.deltapowersolutions.com

Various Options

- AC or AC/DC converged power solutions
- All-in-one or modularized solutions
- Power container or indoor power skid

• ISO standard 20'/40'/45' or wide-ISO size



		All-in-one Containerized Datacenter			Modular Containerized Datacenter	Power Container		Power Skid	
		A B C		C	D	(3)	(
			THE REAL PROPERTY.					111	
Shelter Size		20' container	40' container	45' container	40' container	40' container		Skid	
Capacity		32 kW	72 kW	104 kW	228 kW	200-1350 kW	ı	Up to 1800 kW	
Technical Space		16.1 m ²	33 m ²	37.1 m ²	201.6 m ²	26.6 m ²		-	
Power Density per rack		8 kW	6 kW	8 kW	3 kW	-		-	
Number of IT Racks		4	12	13	76	-		-	
J 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	N+1		Tier 3	
Cooling Technology		Air-cooled	Air-cooled	Air-cooled	Air-cooled	Chilled water		-	
Dimension-Outer									
	Length	6.058 m	12.192 m	13.716 m	12.192 m	12.192 m		-	
	Width	3 m	3 m	3 m	17.052 m	2.438 m		-	
	Height	2.896 m	2.896 m	2.896 m	2.896 m	2.896 m		-	
Dimension-Inner							Main input and UPS	Branch and STS	Battery
	Length	5.85 m	12 m	13.5 m	12 m	12 m	10.2 m	9.75 m	1.2 m
	Width	2.75 m	2.75 m	2.75 m	16.802 m	2.22 m	11 m	1.848 m	3.99 m
	Height	2.59 m	2.59 m	2.59 m	2.59 m	2.492 m	2.75 m	2.75 m	2.75 m





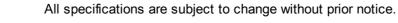
















The power behind competitiveness

Delta InfraSuite Prefabricated Datacenter Solutions



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Delta Prefabricated Datacenter Solution Portfolio

Delta's Service and Capabilities

- Provides total datacenter life cycle services, including consulting, design, simulation, implementation and after service.
- Designs and builds datacenters 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 Datacenter			Modular Containerized Datacenter
		A	B	C	D
			THE REAL PROPERTY.		
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	Power Skid		
((F)	
		77.5	
40' container		Skid	
200-1350 kW	Up to 1800 kW		
26.6 m ²	-		
-	-		
-	-		
-	-		
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
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Values & Benefits



Quick Deployment



Highly Replicable



Cost Optimized



Flexible & Scalable

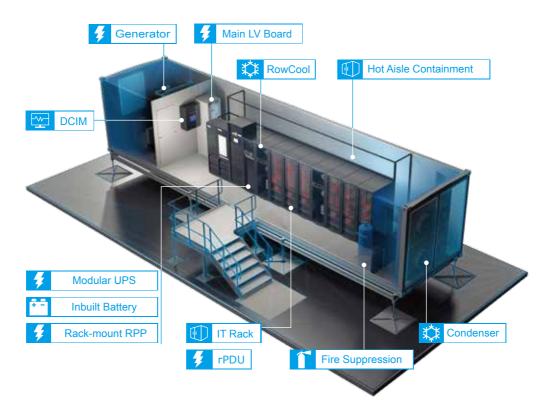




All-in-one Datacenter

Quick deployment for edge computing applications in the IoT world

In this IT intensive world with heavy data traffic, an edge datacenter acts as a caching and data-aggregation point between users and larger datacenters to ease overwhelming IT loads. Following the growing applications of edge computing, Delta is introducing a new generation of containerized datacenters 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.





Shelter Size	20' container
Capacity	32 kW
Technical Space	16.1 m²
Power Density per rack	8 kW
Number of IT Racks	4
U Space	168 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled



Shelter Size	40' container
Capacity	72 kW
Technical Space	33 m²
Power Density per rack	6 kW
Number of IT Racks	12
U Space	504 U
Reliability	Tier 2, N+1
Cooling Technology	Air-cooled



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

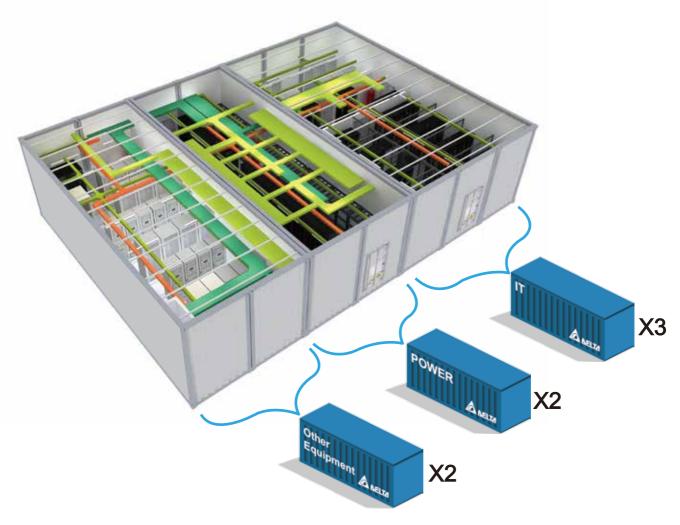
All specifications are adjustable per customer requirement.



Modular Containerized Datacenter

Highly flexible and scalable architecture for large datacenter applications

Delta's modular containerized datacenter is a smart and flexible architecture suitable for large datacenter 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 datacenter takes 18 to 24 months to build, while a modular datacenter requires only a few weeks or months for deployment. Delta's modular datacenter, 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.





40' container
228 kW
201.6 m ²
3 kW
76
3192 U
Tier 2, N+1
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

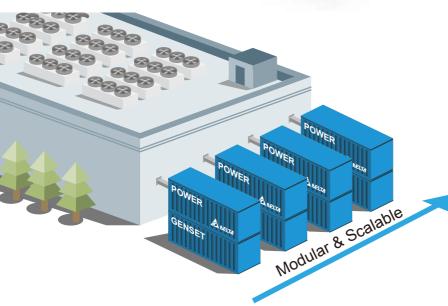
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- Modular to combine with other individual modular subsystems including cooling, service, and IT containers to build a complete containerized datacenter
- Applicable for either ISO or wide-ISO containers

E Power Container



Shelter Size	40' container
Capacity	200-1350 kW
Technical Space	26m²
Reliability	N+1
Cooling Technology	Chilled water
5 07	or Air-cooled type



F Power Skid for indoor use



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



Delta InfraSuite Datacenter 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.

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







Modular Datacenter



Containerized Datacenter



Power Container



DCIM



Cooling



AC Power



Converged Power



InfraSuite Manager (DCIM)

Have the entire datacenter at your fingertips!

- InfraSuite Manager integrates all facilities and IT equipment on one platform
- It is a fully featured DCIM solution to deliver automation and visibility into the datacenter and increase the ease of management

Rack and Accessories

Modular server racks with high

increases heat dissipation

perforation rate over 70% which

Avoids cold and hot air mixture to

significantly improve PUE < 1.5



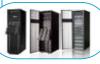
Precision Cooling

 Highly-efficient variable fan speed control saves 27% of power if fan speed reduced by 10%



Power Distribution System

- PDU / RPP : Modular and hot-swappable output breakers
- rPDU : Reliable branch circuit breaker protection
- rRPP: Ideal power distribution solution to small datacenters
- Busway: Safe and reliable power distribution solution



UPS System

- Fully modular design or monoblock architecture.
- Ultra-integrated system with power supply, power distribution and runtime.
- Output PF up to 1
- Leading AC-AC efficiency up to 96.5%

Delta Datacenter Solutions www.deltapowersolutions.com



