

Delta InfraSuite Series

Vari°ROW

*All-In-One Modular-Data Center,
stress-free expansions from a rack to a row*

The power behind competitiveness



Delta Vari°ROW

The Leader Solution for Better Tomorrow



Let's See What We Do?

Always evolving. Always leading. As micro data center leader, we continuously innovate and optimize our solutions to provide best-in-class energy efficiency and a wide range of flexible configurations. With our cutting-edge solutions, we offer unparalleled performance and reliability, making us the ultimate choice for your data center infrastructure projects.

Why Choose us ?



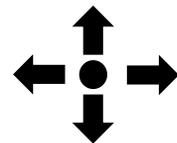
**Easy
Deployment**

Design once and deploy anywhere with this standardized. The Pre-configured structure help to reduce lead-time for construction, compared to the traditional data center.



**Easy
Management**

All-in-one prefabricated modular provides remote monitoring allows you to access the total visibility of critical assets, in order to reducing risk, and operational costs.



**Easy
Expansion**

A stand-alone fully functional solution. You can plan and deploy your IT assets step by step as business grows. Buy small and scale up, Investing only when necessary.

Ideally solutions in different verticals

Delta Vari°ROW support various business verticals



Government & Education



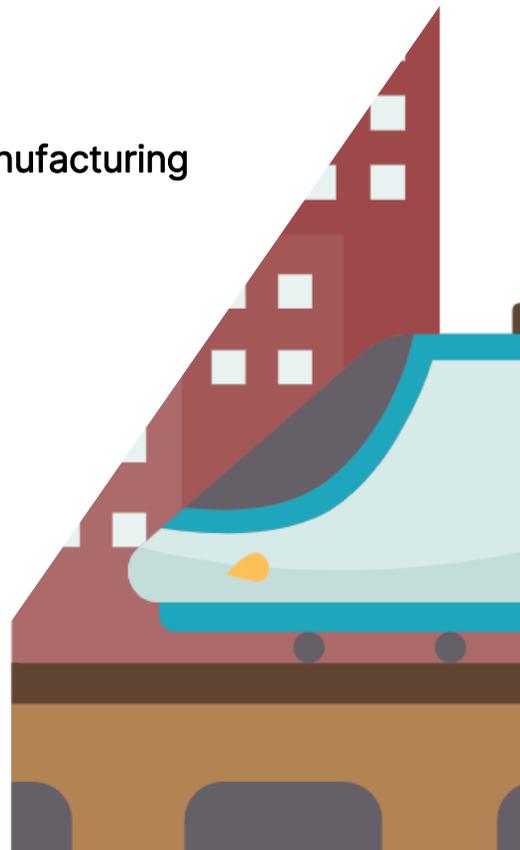
Telecom & Manufacturing



Transportation



Financial



Delta Vari°ROW

Absolutely, ensuring high quality under Delta standards is paramount for meeting customer objectives and maintaining trust in your solutions

Starting with flexible installation, high energy efficiency, and high security.

What we serve

◆ Secured Protection

- IP55 rated IT environment, excellent dust resistance and noise reduction capabilities,
- Anti-condensation design, ensure quiet, secure and stable operation.
- Smart 3in1 (PIN/Finger/Rfid) Door access system, prevent unauthorized entry.
- Real-time equipment status monitoring and alarm, avoid delayed response.

◆ Energy Efficiency

- Various efficient inverter precision air conditioning options provide energy-saving solutions.
- IP55 rated IT environment, allowing internal deployment of fire system, more cost saving.
- Factory prefab & plug-and-play design enable easy deployment and relocation

◆ High Flexibility

- Building block design allows for easy customization and expansion.
- Factory prefab and plug-and-play design enable easy deployment and relocation, reducing setup time and effort.

◆ Smart Monitoring

- Full sensor communication, all-in-one real time monitoring and management center, minimizing downtime.
- Support remote centralized management and constant monitoring, enhancing operational efficiency and flexibility.
- Get the alarm notification or event log report via Email/SMS or mobile app.
(* Require the same network with DCIM for the app)



Delta Vari°ROW

*Booting your power
Optimizing your energy
Building your own sustainable
Going Greener Data Center*



Reduce the material resources

Delta Vari°ROW Offers customizable options within the pre-fabricated framework ensures that clients can tailor the solution to their specific requirements while still benefiting from the streamlined construction process. This approach reflects a forward-thinking strategy that addresses both environmental concerns and customer needs effectively.



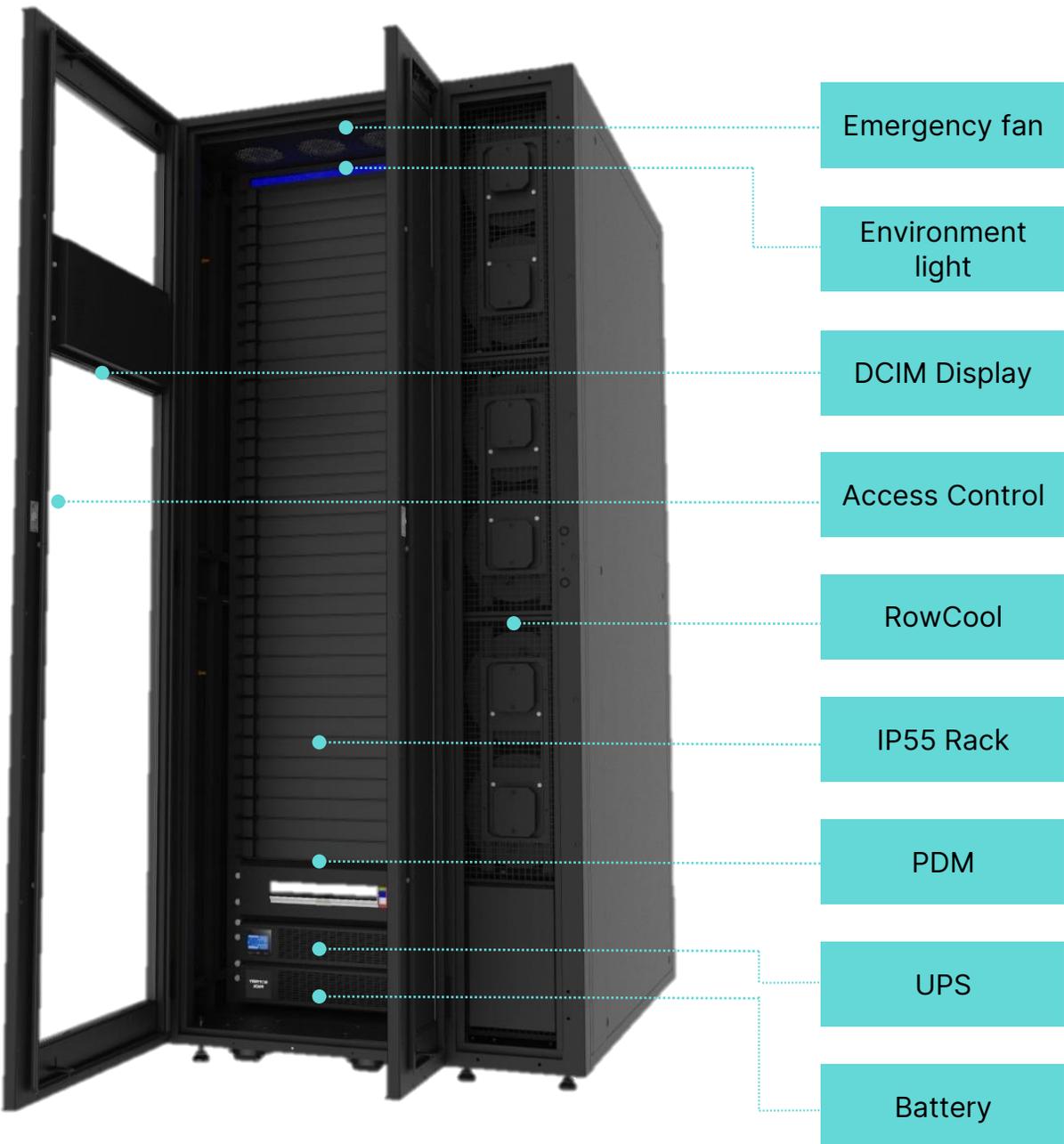
Minimize the use of Energy

Delta Vari°ROW incorporate the air-cooled chambers within the data center itself, you're able to minimize energy waste by focusing cooling efforts precisely where they're needed. By optimizing cooling efficiency in this way, your solution not only reduces operational costs but also contributes to a greener and more sustainable data center infrastructure.

Customize your own desire

Always evolving. Always leading.

To ensure that Delta's modular data centers are not only efficient but also tailored to meet the specific needs of our customers. This commitment to optimization and customization is what sets Delta apart as a leader in the field, driving innovation and excellence in data center solutions.



Variety of security and monitoring options

The Delta modular data center is a versatile solution tailored to meet the evolving needs of IT professionals. Its design and engineering focus on facilitating seamless expansion, enabling IT teams to effectively plan, scale, and manage their infrastructure as demands grow. The micro-datacenter incorporates critical components essential for reliability, efficiency, and environmental control, including: UPS, PDU, Cooling unit, Emergency fan and sensors

EXPANDABLE MONITORING

Fully integrated HMI screen



MODULAR COOLING

Consistency supply cooled-air within the MDC



EMERGENCY FAN

Automatically turn on when insufficient cooled-air supply

ACCESS CONTROL

Security key lock



RACK PDU

Optimal power distribution in rack

ENVIROPROBE / ENVIRONMENTAL MONITORING SENSOR

Monitor temperature & humidity



EMS 2000

Environment monitoring

MODULAR POWER
RT 5kVA-20kVA UPS



POWER DISTRIBUTION MODULE
Offer superior power protection and monitoring



+ Optional



SURVEILLANCE CAMERA
Monitor the POD containment



PROXIMITY CARD
Secure to access the rack



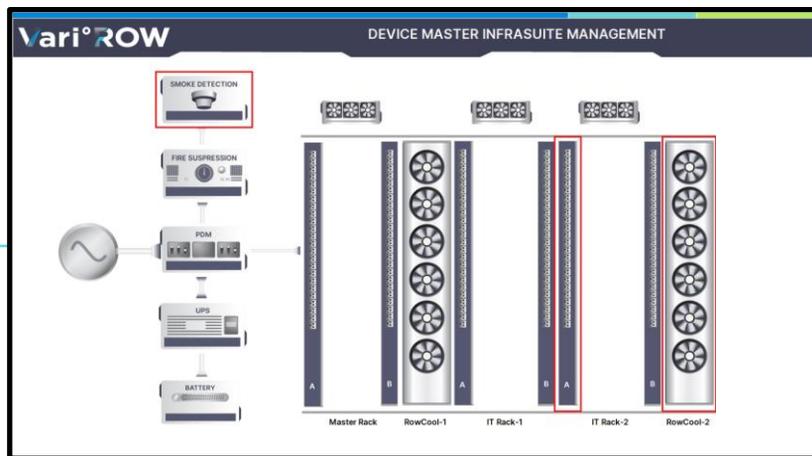
FIRE SUPPRESSION
Fire extinguisher in case of fire

Delta Vari°ROW

Smarter with Device Master Monitoring

Smart Alert & Real-time notification

Vari°ROW provides the real-time alarm notifications and event log reports accessible from anywhere via smartphones or email is a valuable feature that enhances the monitoring and management capabilities of your data center solution.



Allow to access the alarm via mobile app
*Required the same network with DCIM



The notification can be alerted via email or SMS



To receive the event log or alarm history report every week or month
*Depends on setting

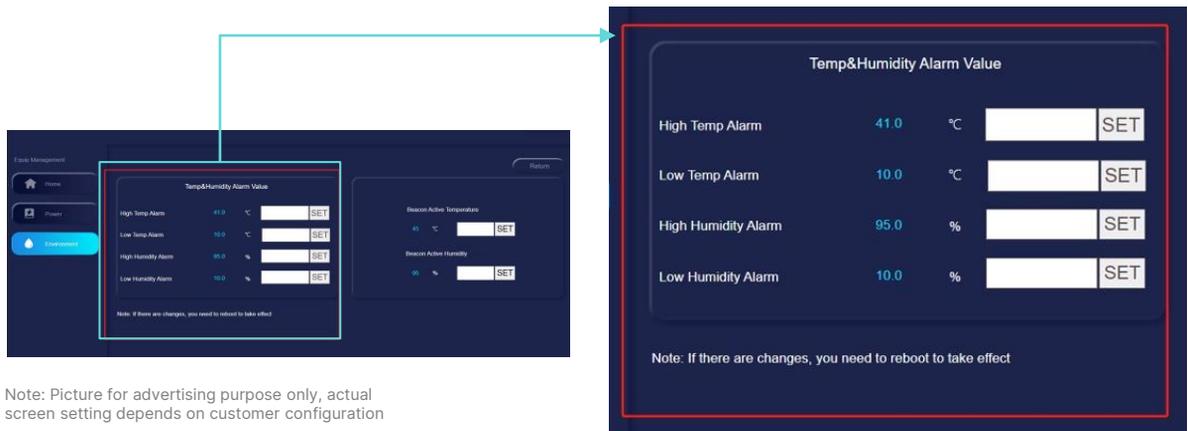
Delta Vari°ROW

Easy monitoring Environment condition

Vari°ROW can integrating environment light functionality into your data center solution to facilitate easy monitoring of environmental conditions within the containment is a clever addition. Here's how it can enhance your offering: Visual Monitoring, Alert System and Enhanced Safety

Environment light

Environment light change automatically depends on its setting



Note: Picture for advertising purpose only, actual screen setting depends on customer configuration

Indicator light

Blue : Normal Status

Yellow : General Alarm

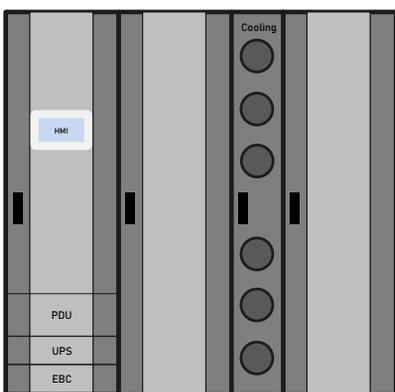
Red : Critical Alarm

Highly Flexible for Future Expansion

Providing options for 600mm and 800mm additional racks further enhances the customization capabilities of your solution, allowing customers to choose the configuration that best suits their specific IT requirements and spatial constraints.



Redundancy support



BASIC N-CONFIGURATION

- Single UPS from 5kVA up to 20kVA.
- Single Row Cooling 5.6kW up to 20kW.
- Single PDU with bypass function.



N+1 OR 2N-CONFIGURATION

- Dual UPS from 5kVA up to 20kVA.
- Dual Row Cooling 5.6kW up to 20kW with N+1 or 2N configuration.
- Single PDU with N+1 or Dual PDU to support dual feeder configuration.

Delta Vari°ROW

Product Snapshot IT load 5 kW configuration guideline



Module	Description	Specification
System power capacity	IT and supporting systems	5 kW
UPS	Capacity	6 kVA
	Redundancy	Optional for 2N & N+1
	Input Power	230 V / 1Ph / 50-60 Hz
Battery	Battery Type	VRLA
	Back up time	14 min (can be extended)
	Battery Pack Qty	2 (can be extended)
Air condition	Cooling Capacity	5.6 kW
	Cooling Type	DX Air Cooled (Split System)
	Cooling Qty	1 (Redundancy Option)
	Input Power	230 V/ 1Ph / 50-60 Hz
Monitoring	Temperature/Humidity	Equipped
	Display	10" Touch Screen IPC
Management	DCIM	Device Master Software (5 nodes)
	Supported Protocols	SNMP / Modbus TCP
Security	Door Access Control (optional)	Finger/PIN/Face scan
	Door Access Control (standard)	Key lock
Power distribution	rPDU	2 * Metered (32A)
	PDM (Optional)	63A 2P/1P
Fire Protection	Rack Mount (Optional)	Novac 1230
Dimension	W x D x H (mm)	600 x 1200 x2000
Useable IT Space	Single UPS	31 RU (Incl. PDM)
	Redundant UPS	23 RU (Incl. PDM)

* For special configuration, please consult with your local Delta Office or Distributor in your area for more information

Delta Vari°ROW

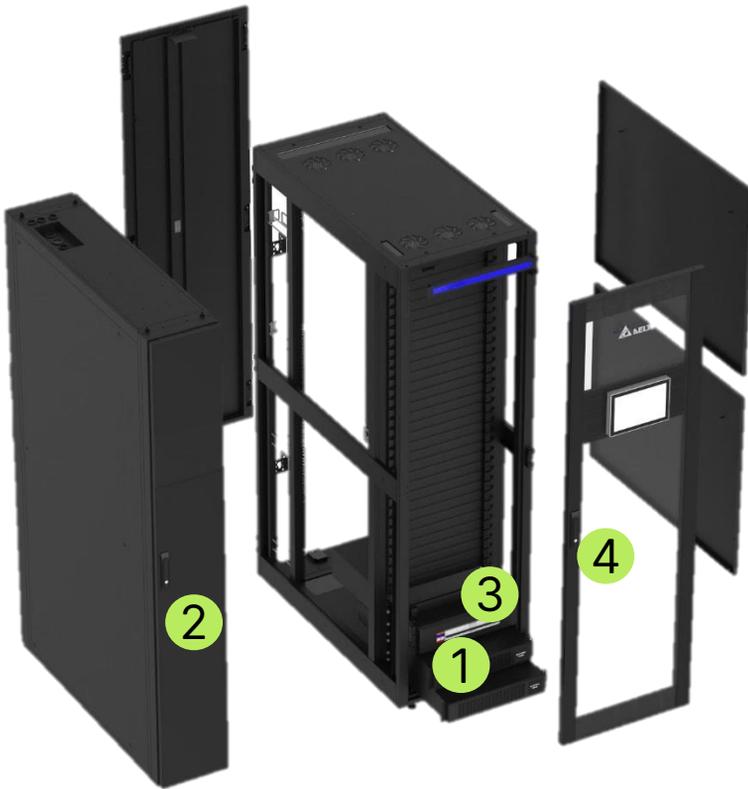
*Product Snapshot
IT load > 5 kW (Max.20kW)
configuration guideline*



Module	Description	Specification
System power capacity	IT and supporting systems	5-20 kW (up to 40 kW)
	Rack Qty	1 - 8 Racks
UPS	Capacity	6 - 20 kVA
	Redundancy	Optional for 2N & N+1
	Input Power	230 V/1Ph/50-60Hz, 380 V/3Ph/50-60Hz
Battery	Battery Type	VRLA
	Back up time	10 min max (can be extended)
Air condition	Cooling Capacity	5.6 - 40 kW
	Cooling Type	DX Air Cooled (Split System), Row Based
	Cooling Qty	1 (Redundancy Option)
	Input Power	230 V/1Ph/50-60Hz, 380 V/3Ph/50-60Hz
Monitoring	Temperature/Humidity	Equipped
	Display	10" Touch Screen IPC
Management	DCIM	Device Master Software (5 nodes)
	Supported Protocols	SNMP / Modbus TCP
Security	Door Access Control (optional)	Finger/PIN/Face scan
	Door Access Control (standard)	Key lock
Power distribution	rPDU	2 * Metered (32A) per Rack
	PDM (Optional)	125A 3P
Fire Protection	Rack Mount (Optional)	Novec 1230
Dimension	W x D x H (mm)	600-6000 x 1200 x2000
Useable IT Space	Single UPS	To be discussed
	Redundant UPS	To be discussed

* For special configuration, please consult with your local Delta Office or Distributor in your area for more information

Configuration your main components to your Data Center



1

Modular AC UPS



5-20kW On-line double conversion compact UPS and battery configurations provide high efficiency power protection and maximizes valuable RU space. VRLA & Lithium battery options are available.

2

Precision Cooling

Highly integrated precision cooling with factory matched condenser is sized and factory tested for guaranteed compatibility and high reliability.



3

Power Distribution Module

Superior power protection and monitoring, and the flexibility & scalability to match your actual power distribution requirements.



4

Rack Access Control

Flexible access control a wide range of options can be integrated including Key, Biometric, Code and card rack access provides enterprise level data center security for your IT assets.



Product Snapshot: UPS



2U UPS
2U VRLA

Extended Runtime Model



External Battery Cabinet



Hot Swappable Battery & Plug-and-Play Connector

- Hot swappable battery (for continuous operation even when batteries are being replaced)
- Front access for battery replacement
- Battery string design with plastic case
- Plug-and play external battery pack connector (for easy and fast connect external battery pack)
- Various types of communication interfaces, including USB, RS-232, mini slot, REPO/ROO. And in-built dry contacts



Product Snapshot: Cooling



- Variable Speed Scroll compressor with DC inverter
- Variable EC fan for optimum air flow supplying.
- EEV provides precisely pressure control over wide temperature range.
- Built-in oil separator
- Built-in ATS to support 2N input for tier III reliability level (optional)
- Re-heater and humidifier (optional)
- Remote monitoring via MODBUS or SNMP available
- Remote display to support group monitoring.

Product Snapshot: Power Distribution Module



Key Features: PDM

- Compact rack mount design, minimum height 3U, seamless integration into rack installation.
- All in one design managing all the power distribution of UPS, cooling and IT branches.
- Built in UPS manual by-pass line for easier online maintenance.
- Support PUE calculation with power meters of main power input and UPS power output.
- Built in surge protection.
- Flexible customization adjusting breakers and power line path.
- Support 2N dual loop design by customization

Product Snapshot: Rack Power Distribution Unit

Key Features: Basic PDU

- Tool-less installation in Delta's standard rack cabinets
- Brackets included for mounting in other brands' rack cabinets
- Vertical or horizontal mounting method
- Branch circuit breaker protection

Key Features: Metered PDU

- Tool-less installation in Delta's standard rack cabinets
- Brackets included for mounting in other brands' rack cabinets
- Zero-U installation saving valuable rack space
- LED current (rms value) display and overload warning indicator
- Optional SNMP card for remote monitoring



IT Rack Master & Slave



Master Rack

Slave Rack

To prevent or reduce heat transfer between objects in thermal contact or within the range of radiative influence, built-in sheet metal and thermal insulation are commonly employed

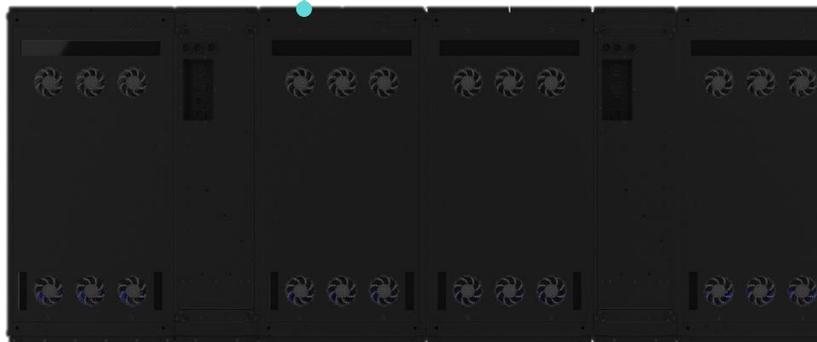
Tempered glass for master and slave rack

Emergency fan

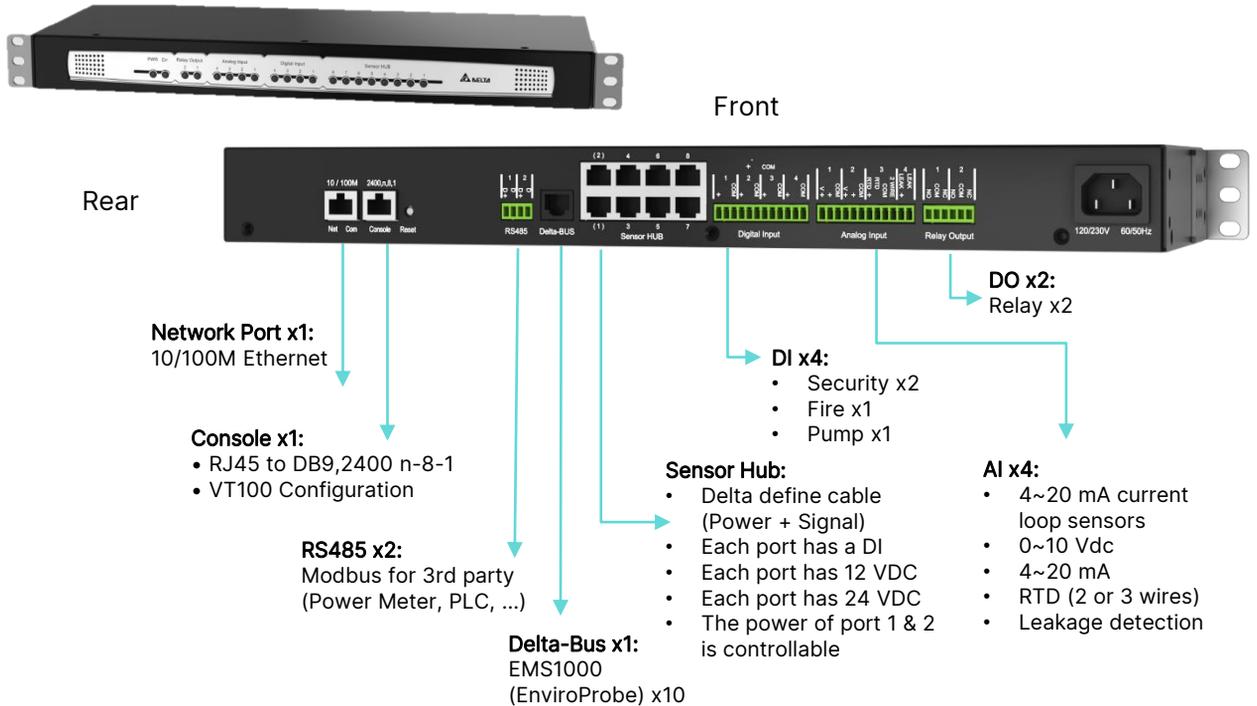
Built-in emergency fan automatically activates when the supply air cooling is not sufficient to prevent IT rack outage, helping to maintain optimal operating conditions for your equipment.



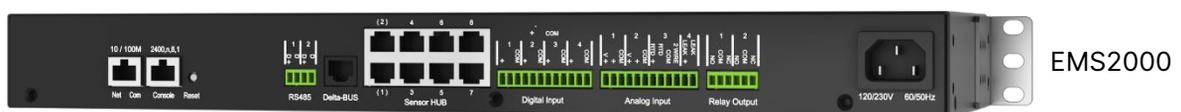
Built-in emergency fan installs in every master and slave rack for preventing the insufficient supply air (6 unit/rack)



Product Snapshot Environment monitoring, EMS2000



Product Snapshot Environment monitoring, EnviroProbe



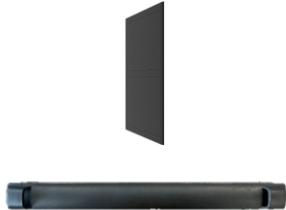
* Connecting EnviroProbes with Enviro Station can expand the scope of the monitored area. Max 10 pcs

Backlit LCD display



Key Features:

- Monitoring temperature, humidity of the environment
- InfraSuite Manager software for remote monitoring and recording
- Work with EnviroStation (EMS2000) to support SNMP communication protocol

Vari°POD® PART NUMBER & ACCESSORIES	MODEL NAME	ILLUSTRATION
MASTER & IT RACK		
<u>MASTER RACK CABINET*</u>		
MASTER RACK CABINET, 42U (W x D): 600 x 1200 MM	MAS-600-42-12	
MASTER RACK CABINET, 42U (W x D): 800 x 1200 MM	MAS-800-42-12	
<u>IT RACK CABINET**</u>		
IT RACK CABINET, 42U (W x D): 600 x 1200 MM	IT-600-42-12	
IT RACK CABINET, 42U (W x D): 800 x 1200 MM	IT-800-42-12	
<u>RACK ACCESSORIES</u>		
SIDE DOOR FOR MASTER RACK WITH SHEET METAL& THERMAL INSULATION)	SD42U-MAS	
BLANKING PANEL	BP1U	
<p>*MASTER RACK (INCLUDING CABINET,CABLE MANAGEMENT,ENVIRONMENTAL LIGHT AND BLANKING PANELS, FRONT CUTOUT FOR MONITORING HOST MOUNTING)</p> <p>**IT RACK (INCLUDING CABINET,CABLE MANAGEMENT,ENVIRONMENTAL LIGHT AND BLANKING PANELS)</p>		
UNINTERRUPTED POWER SUPPLY (UPS)		
<u>UNINTERRUPTED POWER SUPPLY (UPS)</u>		
Delta RT SERIES 5kVA/5kW(2U)-1P ON-LINE UPS WITH 2 EBC, BACKUP TIME: 19 MIN	RT-5K	
Delta RT SERIES 6kVA/6kW(2U)-1P ON-LINE UPS with 2 EBC, BACKUP TIME 14.5 MIN	RT-6K	
Delta RT SERIES 8kVA/8kW(2U)-1P ON-LINE UPS with 2 EBC, BACKUP TIME: 9.6 MIN	RT-8K	
Delta RT SERIES 10kVA/10kW(2U)-1P ON-LINE UPS with 2 EBC, BACKUP TIME: 7.4 MIN	RT-10K	
Delta RT SERIES 10kVA/10kW(2U)-3P ON-LINE UPS with 2 EBC, BACKUP TIME: 7.4 MIN	RT-10K3P	
Delta RT SERIES 15kVA/15kW(2U)-3P ON-LINE UPS with 4 EBC, BACKUP TIME: 17.2 MIN	RT-15K3P	
Delta RT SERIES 20kVA/20kW(2U)-3P ON-LINE UPS with 4 EBC, BACKUP TIME: 11.8 MIN	RT-20K3P	
EBC CHASSIS (GEN.2 FOR RT 5-20kVA - 3U)	BBU201B109035	

Vari°POD® PART NUMBER & ACCESSORIES	MODEL NAME	ILLUSTRATION
COOLING		
<i>ROWCOOLING</i>		
ROWCOOL 5.6 kW WITH REHEAT	HCH-0530R-MDC	
ROWCOOL 5.6 kW WITH REHEAT & HUMIDIFIER	HCH-0530RH-MDC	
CONDENSER FOR 5.6 kW	HSF-A008	
ROWCOOL 7.6 kW WITH REHEAT	HCH-0730R-MDC	
ROWCOOL 7.6 kW WITH REHEAT & HUMIDIFIER	HCH-0730RH-MDC	
CONDENSER FOR 7.6 kW	HSF-A012	
ROWCOOL 12.8 kW WITH REHEAT	HCH-1230R-MDC	
ROWCOOL 12.8 kW WITH REHEAT & HUMIDIFIER	HCH-1230RH-MDC	
CONDENSER FOR 12.8 kW	HSF-A018	
ROWCOOL 17.6 kW WITH REHEAT	HCH-1730R-MDC	
ROWCOOL 17.6 kW WITH REHEAT & HUMIDIFIER	HCH-1730RH-MDC	
CONDENSER FOR 17.6 kW	HSF-A024	
ROWCOOL 21.2 kW WITH REHEAT	HCH-2030R-MDC	
ROWCOOL 21.2 kW WITH REHEAT & HUMIDIFIER	HCH-2030RH-MDC	
CONDENSER FOR 21.2 kW	HSF-A032	
ROWCOOL 25.1 kW WITH REHEAT	HCH-2530R-MDC	
ROWCOOL 25.1 kW WITH REHEAT & HUMIDIFIER	HCH-2530RH-MDC	
CONDENSER FOR 25.1 kW	HSF-A038	
ROWCOOL 31.1 kW WITH REHEAT	HCH-3030R-MDC	
ROWCOOL 31.1 kW WITH REHEAT & HUMIDIFIER	HCH-3030RH-MDC	
CONDENSER FOR 31.1 kW	HSF-A042	

Vari°POD® PART NUMBER & ACCESSORIES	MODEL NAME	ILLUSTRATION
POWER DISTRIBUTION MODULE (PDM)		
<i>POWER DISTRIBUTION MODULE (PDM)</i>		
PDM, 63A/1P, SIZE: 3U. 1* UPS, 1* COOLING, 1*UPS BYPASS, 2* PDU.	PDM-063N	
PDM, 63A/2P, SIZE: 3U. 1* UPS, 1*COOLING, 1*UPS BYPASS, 2* PDU, AND 1*SURGE PROTECTION.	PDM-063W	
PDM, 63A/1P, SIZE: 3U. 1* UPS, 1*COOLING, 1*UPS BYPASS, 2* PDU,AND 1*SURGE PROTECTION.	PDM-063S	
PDM, 63A/3P, SIZE: 6U. 2* UPS, 2*COOLING, 1*UPS BYPASS, 4* PDU,AND 1*SURGE PROTECTION.	PDM-063T	
PDM, 80A/3P, SIZE: 9U. 2* UPS, 2*COOLING, 1*UPS BYPASS, 8* PDU,AND 1*SURGE PROTECTION.	PDM-080T	
SMART PDM RACK MOUNT, 100A/3P, SIZE: 9U. 2* UPS, 3*COOLING, 1*UPS BYPASS, 12* PDU, and 1*SURGE PROTECTION	PDM-100T	
PDM, 125A/3P, SIZE: 9U. 2* UPS, 4*COOLING, 1*UPS BYPASS, 20* PDU,AND 1*SURGE PROTECTION.	PDM-125T	

FIRE EXTINGUISHER

FIRE EXTINGUISHER

FIRE EXTINGUISHER (NOVEC 1230, for 1-2 rack)	NOVEC-3U-1	
FIRE EXTINGUISHER (NOVEC 1230, for 4-6 rack)	NOVEC-6U-4	
FIRE EXTINGUISHER (NOVEC 1230, for 8-10 rack)	NOVEC-6U-8	

Rack Power Distribution Unit (rPDU)

BASIC RACK PDU

1U rPDU (16A, 1 Phase) IEC320 C13(12), PLUG: IEC309-16A-3W	PDU7311	
0U rPDU (32A, 1 Phase) IEC320 C19 (4), IEC320 C13 (24),	PDU5315	
PLUG: IEC309-32A-3W		

Monitoring screen

MONITORING SCREEN

HMI 10.1" 1280*800 8GB TOUCH SCREEN WB	HMI-510IPC	
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More Information