Rittal – The System.

Faster – better – everywhere.

Edge in a Box (EiB)

Preconfigured Package Solutions



ENCLOSURES | POWER DISTRIBUTION | CLIMATE CONTROL | IT INFRASTRUCTURE | SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

www.rittal.ca

RITTAL

Technology Features:

RACK

- Sealed rack with glazed front door and steel rear door
- Load capacity up to 1500 kgs supports the heaviest hardware
- Guaranteed compatibility with any EIA-310-D compliant IT equipment
- Simple assembly with tool-free technology



POWER

- Power Distribution Units
- Supplied: A single basic 208V PDU pre-installed in each cabinet (A feed only)
  - Vertical or Horizontal (model dependent)
- Option: Upgrade to Smart or Switched, Single or Three Phase, 20 to 60 Amps



COOLING

- Roof mounted cooling unit: Up to 2kW, R134a, 230V
- Side mounted air conditioner: Up to 5kW, R134a, 380-480V
- LCP DX: Capacity from 3-12kW, R410a, 208V - Includes outdoor condenser unit
- LCP CW - Capacity up to 60kW, chilled water, 208V 2~ or 230V 1~
  - Maximum energy efficiency thanks to EC fan technology



MONITORING & ACCESS CONTROL

- CMC III system: Monitor internal and external threats
- Temperature and humidity sensors
- Vandalism: Manage access to the rack
- Electronic locking with keypad and network access
- Integration with Rittal RiZone or third party software via SNMP/OPC-UA protocols



FIRE DETECTION & SUPPRESSION

- Compact system utilizing a 1U rack footprint
- Automatic extinguishing with the innovative extinguisher gas NOVEC 1230
- Early fire detection
- Master and expansion daisy-chaining
- Option: Automatic door opening kit for front and rear doors



Edge in a Box - Roof Mount Cooling - 2kW - 24U Enclosure

Low Density Cooling



Cabinet Material:
– Enclosure: Carbon steel
– Viewing window: Single-pane safety glass, 0.12” (3.0 mm)

Surface Finish:
– Enclosure frame, interior installation: Dipcoat-primed

Doors and roof:
Dipcoat-primed, powder-coated

Colour: RAL 7035 (light grey)

Approvals:
UL/cUL

Load capacity of rails:
3372 lbs (15000 N)

AC Supply includes:
– Nano-coated condenser
– Integral electric condensate evaporation
– Wired ready for connection (plug-in terminal strip)
– Drilling template
– Assembly components

Top Therm (Roof Mounted) Cooling Capacity up to 2kW

Part # XCA0000230

Rack Size H (U) x W (mm) x D (mm)	Rack Spec	Power	Cooling Spec
24U (1200 x 800 x 1000) mm Overall size: 1615 x 800 x 1000 mm	TS IT Rack Glass Front Door Rear Steel Door Air Baffle Kit Solid Side Panels Rear Vertical Cable Management 1U Blanking Panels Bottom Gland Plates Castors Solid Roof	PDU Basic 20A Single Phase 12 x C13 L6-20P	(415 x 597 x 475) mm (H x W x D) Up to 2kW 230V, 1~, 60 Hz Refrigerant:134a 42 kg

Service: Preassembled cabinet, accessories and PDU at the factory

Complete IT infrastructure within a stand-alone, sealed, and secure enclosure for protection of critical business applications.

Edge in a Box (EiB) enables a faster, easier and more cost-effective way to build and deploy small, medium, and large scale data centres at the network edge. Designed to facilitate the pre-installation of IT equipment by the customer, partner or integrator prior to shipment. Ideal for Edge and IoT applications where deployment speed, reliability and security is paramount. Suitable for quiet office environments due to its low dB operating noise and ability to contain IT equipment sound. Also rated to handle harsh industrial and non-traditional IT environments.

Edge in a Box - Roof Mount Cooling - 2kW - 42U Enclosure

Low Density Cooling



Material:
– Enclosure: Carbon steel
– Viewing window: Single-pane safetyglass, 0.12” (3.0 mm)

Surface Finish:
– Enclosure frame, interior installation: Dipcoat-primed

Doors and roof:
Dipcoat-primed, powder-coated

Colour: RAL 7035 (light grey)

Approvals:
UL/cUL

Load capacity of rails:
3372 lbs (15000 N)

AC Supply includes:
– Nano-coated condenser
– Integral electric condensate evaporation
– Wired ready for connection (plug-in terminal strip)
– Drilling template
– Assembly components

Top Therm (Roof Mounted) Cooling Capacity up to 2kW

Part # XCA0000231

Rack Size H (U) x W (mm) x D (mm)	Rack Spec	Power	Cooling Spec
42U (2000 x 600 x 1000) mm Overall size: 2415 x 600 x 1000 mm	TS IT Rack Glass Front Door Rear Steel Door Tooless 19” angles, front & rear Air Baffle kit Solid Side Panels Rear Vertical Cable Management 1U Blanking Panels Bottom Gland Plates Leveling Feet Solid Roof	PDU Basic 20A Single Phase 12 x C13 L6-20P	(415 x 597 x 475) mm (H x W x D) Up to 2kW 230V, 1~ , 60 Hz Refrigerant:134a 42 kg

Service: Preassembled cabinet, accessories and PDU at the factory

Complete IT infrastructure within a stand-alone, sealed, and secure enclosure for protection of critical business applications.

Edge in a Box (EiB) enables a faster, easier and more cost-effective way to build and deploy small, medium, and large scale data centres at the network edge. Designed to facilitate the pre-installation of IT equipment by the customer, partner or integrator prior to shipment. Ideal for Edge and IoT applications where deployment speed, reliability and security is paramount. Suitable for quiet office environments due to its low dB operating noise and ability to contain IT equipment sound. Also rated to handle harsh industrial and non-traditional IT environments.

Edge in a Box - Closed Loop Standalone - 5kW - 42U Enclosure

Medium Density Cooling



Benefits:
– Up to 75% energy saved due to speed-regulated components and heat pipe technology
– Suitable for international use due to a unique multi-voltage capability
– Longer service life of the components inside the enclosure and the cooling unit due to component- friendly cooling
– Intuitive operation due to touch display and intelligent interfaces

Material:
– Enclosure: Carbon steel
– Viewing window: Single-pane safety glass, 0.12" (3.0 mm)

Doors and roof:
Dipcoat-primed, powder-coated

Colour: RAL 7035 (light grey)

Approvals:
UL/cUL

Load capacity of rails:
– 3372 lbs (15000 N)

Surface Finish:
– Enclosure frame, interior installation: Dipcoat-primed

Supply includes:
– Nano-coated condenser
– Integral electric condensate evaporation
– Wired ready for connection (plug-in terminal strip)
– Drilling template
– Assembly components

Top Therm (Side Mounted) Cooling Capacity up to 5kW - Left Hand Side Mounted AC

Part # XCA0000232

Rack Size H (U) x W (mm) x D (mm)	Rack Spec	Power	Cooling Spec
42U (2000 x 800 x 1000) mm Overall size: 2000 x 1193 x 1000	TS IT Rack Glass Front Door Rear Steel Door Tooless 19" Angles, Front & Rear Air Baffle (Right hand side) Solid Side Panels Rear Vertical Cable Management 1U Blanking Panels Bottom Gland Panels Leveling Feet Solid Roof	PDU Basic 20A Single Phase 12 x C13 L6-20P	(1600 x 450 x 393) mm (H x W x D) Up to 5kW 380-480V, 3~ , 60 Hz Refrigerant: 134a 72.4kg

Top Therm (Side Mounted) Cooling Capacity up to 5kW - Right Hand Side Mounted AC

Part # XCA0000238

Rack Size H (U) x W (mm) x D (mm)	Rack Spec	Power	Cooling Spec
42U (2000 x 800 x 1000) mm Overall size: 2000 x 1193 x 1000	TS IT Rack Glass Front Door Rear Steel Door Tooless 19" Angles, Front & Rear Air Baffle (Left hand side) Solid Side Panels Rear Vertical Cable Management 1U Blanking Panels Bottom Gland Panels Leveling Feet Solid Roof	PDU Basic 20A Single Phase 12 x C13 L6-20P	(1600 x 450 x 393) mm (H x W x D) Up to 5kW 380-480V, 3~ , 60 Hz Refrigerant: 134a 72.4kg

Edge in a Box - Closed Loop DX Cooling - 12kW - 42U Enclosure

Medium Density Cooling



Benefits

– Maximum energy efficiency due to EC fan technology and IT-based control
– Minimal pressure loss at the air end, which in turn minimizes the power consumption of the fans
– Control of the server inlet temperature
– Due to the speed-regulated compressor, the cooling output adapts to the actual requirements
– Redundant temperature sensor integrated at the air end
– Absorbed thermal energy is emitted to the ambient air at the external condenser location, without heating up the installation room
– Ideal for IT cooling of small and medium-sized locations
– One or two racks can be cooled separately

Application and mode of operation:

The LCP draws in the hot air at the sides at the rear of the server enclosures, cools it using high performance compact impellers, and blows the cooled air back into the front part of the server enclosure at the sides.

Approvals: UL/cUL

Color: RAL 9005 (black)

Liquid Cooling Package - LCP Cooling Capacity up to 12kW

Part # XCA0000233

Rack Size H (U) x W (mm) x D (mm)	Rack Spec	Power	Cooling Spec
42U (2000 x 600 x 1200) mm Quantity: 2 Overall size: 2000 x 1500 x 1200	TS IT Rack Glass Front Door Rear Steel Door Tooless 19” Angles, Front & Rear Air Baffles Solid Side Panels Rear Vertical Cable Management 1U Blanking Panels Bottom Gland Plates Leveling Feet Baying Brackets TS IT Roof	PDU Basic 20A Single Phase 24 x C13 L6 -20P	(2000 x 300x 1200) mm Quantity: 1 12kW (40,945 BTU) Number of Fans: 4 (EC) 208V 1~, 60Hz 410a Refrigerant Infinitely Variable Fan Control Inverter-controlled Compressor 201 kg Outdoor Condenser Unit

Service: Preassembled cabinet, accessories and PDU at the factory

Optional Variants:

1000mm depth
800mm width
Open loop cooling with perforated doors on all cabinets and Inrow air conditioners (row flush)

Edge in a Box - Closed Loop CW Cooling - 120kW - 42U Enclosure

High Density Cooling



Benefits

– Maximum energy efficiency thanks to EC fan technology and IT-based control
– Minimal pressure loss at the air end, minimizes the power consumption of the fans
– Optimum adaptability due to continuous control of the cold water volume flow
– By using high water inlet temperatures, the proportion of indirect free cooling is increased, which in turn reduces operating costs
– Thanks to six modular, box-type plug-in fan units, the cooling output can be adapted to actual requirements
– The box-type plug-in fan units are configurable as n+1 redundancy
– With redundant temperature sensor integrated at the air end as standard
– The separation of cooling & rack prevents water penetrating the server enclosure
– Up to 60kW cooling output on a footprint of just 4 ft2 (0.36 m2)
– The low weight means a minimal load area
– Optional touchscreen display

Approvals: UL/cUL

Color: RAL 9005 (black)

Monitoring of all system-relevant parameters such as:

– Server air intake temperature
– Server waste air temperature
– Water inlet/return temperature
– Water flow
– Cooling output
– Fan speed
– Leakage
– Optional sensors
– Direct connection of the unit via SNMP/Ethernet
– Integration into RiZone

Application and mode of operation: The LCP draws in the hot air at the sides at the rear of the server enclosures, cools it using high performance compact impellers, and blows the cooled air back into the front part of the server enclosure at the sides.

Liquid Cooling Package - LCP Cooling Capacity up to 120kW

Part # XCA0000234

Rack Size H (U) x W (mm) x D (mm)	Rack Spec	Power	Cooling Spec
42U (2000 x 600 x 1200) mm Quantity: 5 Overall size: 2000 x 3600 x 1200	TS IT Rack Glass Front Door Rear Steel Door Tooless 19” Angles, Front & Rear Air Baffles Solid Side Panels Rear Vertical Cable Management 1U Blanking Panels Bottom Gland Plates Leveling Feet Baying Brackets TS IT Roof	PDU Basic 20A Single Phase 24 x C13 L6 -20P	(2000 x 300x 1200) mm Quantity: 2 60kW / LCP Number of Fans: 6 (EC) 208V 2~, 230V 1~ , 60Hz Cooling Medium: Water Infinitely Variable Fan Control 2-way Control Ball Valve 210 kg

Service: Preassembled cabinet, accessories and PDU at the factory

Optional Variants:
1000mm depth
800mm width
Open loop cooling with perforated doors on all cabinets and Inrow air conditioners (protruding)

Optional Extras



CMC III Monitoring System

IT security if now inextricably linked with the Computer Multi Control (CMC) monitoring system. It has become firmly established as a permanent feature of physical IT security, allowing modern IT infrastructures to be operated securely, while at the same time, ensuring optimum performance.



DET-AC Fire-alarm and Extinguisher Systems

With the VdS-tested early fire detection and extinguishing system for network and server enclosures, up to five bayed racks can be monitored and extinguished in the event of a fire. The environmentally friendly extinguishing NOVECTM 1230 is not critical for the IT components.

OPTION	ADDITIONAL SERVICE	REQUIRED	OPTIONAL
FIRE SUPPRESSION (Optional)	Installation	x	
	Commissioning, Testing & Startup	x	
	Warranty (extension) Upgrade Comfort		x
	Warranty (extension) Upgrade Advance		x
	Yearly Inspection	x	
	Door ADS Contact Switches		x
MONITORING & SECURITY (Optional)	Installation		x
	Commissioning, Testing & Startup	x	x
	Software/ Netwrok Programming		x
	Warranty (extension) Upgrade Comfort		x
	Warranty (extension) Upgrade Advance		x
	Yearly Inspection		x

REQUIRED – Would need to be quoted with Option selection.

OPTIONAL – Can be selected by client as an Add-on service.

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