UCoustic

MAINLINE COMPUTER PRODUCTS®
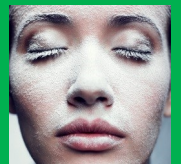
Edge 9210i soundproof server cabinets

31dbA IT noise reduction

12kW of heat load removal

M2M Connected and controlled

part of the rapid deployment micro data centre
(MDC) family of solutions from USystems

U•• Systems

UCoustic
Edge 9210i overview

Intelligence (M2M) as s

The UCoustic 9210i comes with built-in sensors
software allowing data to be accessed from m
servers remotely in turn this then provides rea
and alerts which can be sent to up to ten users

Visit www.usystems.co.uk/UTelligent/UMS fo

Rapid deployment micro Data Centre

A well-equipped server room should provide the IT equipment with a safe,
secure, well ventilated and resilient home - this comes at a high cost in terms
of equipping and fitting the room and also the expensive floor space
required.

The UCoustic 9210i on the other hand takes up less than a square metre in
footprint, can be located in any area including offices, receptions, hallways,
cupboards etc., without concern for noise or temperature
issues. Additionally, the UCoustic 9210i incorporates the latest M2M
technology for real time environmental and security monitoring.

A sound investment!

It is all well and good making these savings but deploying ac-
tive IT equipment into the middle of a working environment
can be off putting for visitors and detrimental to working con-
ditions in terms of the constant evasive noise and excessive
heat generated from the active equipment.

The UCoustic 9210i 42U cabinet effectively removes up to
31dBA (99.9%) of IT noise, which is tech speak for saying that
it will reduce server noise down to a whisper.

Unrivalled 12kW cooling capacity

Protecting expensive servers and switches or just general IT
equipment is of paramount importance and by clever design the
unique cooling system of the UCoustic 9210i enables the removal of
up to a staggering 12kW of heat load in a 42U height cabinet.

The UCoustic 9210i can also deal with removing the exhaust heat
rejected into the room from the cabinet via a ducting kit, again
making for a pleasant and controlled working environment.

Acoustics independently tested by PRITEX to ISO 3744

Compatible with all leading makes and types of server and SAN storage

Part of the MDC family of solutions from USystems

Environmental monitoring

A standard feature with the UCoustic 9210i is the built in environmental monitoring. Whether it be temperature, power, EC fan speeds or security, the UTelligent Management System 'UMS' will allow remote monitoring, device and sensor management – all displayed on the free integral graphical user interface.

standard

s and management
ultiple devices and
l time status, alarms
.

r more information

Safe and secure

The need to protect important hardware and sensitive information is paramount, the UCoustic 9210i will allow an immediate security upgrade via mounting security cameras internally to the front and rear of the cabinet. The UMS will record and store the information and if required will provide you with real time alerts of cabinet entry to view and download via remote access online.

For additional security the UCoustic 9210i can be upgraded with a complete access system including electronic doors etc.

Energy and space saving

Reducing energy bills is always desirable but expecting a standard server cabinet to assist in this aspect is impossible. UCoustic 9210i is uniquely different in design. Incorporating as standard EC fan technology, which means an immediate energy reduction. These fans will also speed up and slow down as and when the heat load dictates.

The new ducting kit will also allow heat normally expelled from the rear of the cabinet into the office to be either directed into another room/warehouse or outside, which is especially important in the summer; however equally important is to have the ability to recirculate the warm air back into the office environment during the winter months.

This cabinet has everything!

Being the best in class for soundproofing and cooling one thing, but if this is at the expense of being a poorly designed data rack, then this is surely an unacceptable compromise.

The UCoustic 9210i doesn't make any compromises, the advanced design extends to it being an excellent all round 19" data, comms and server cabinet, with fully adjustable front and rear mounting angles and 6 cable entry ports.

BEST
IN
CLASS

MAINLINE
COMPUTER PRODUCTS®

Standard specification

Edge 9210i Floor standing cabinets

The UCoustic Edge 9210i soundproof server cabinet is available in active or passive configuration and three heights – 12U, 24U and 42U; all are 780 mm wide and 1100 mm deep.

Active cabinets have two EC fans in the rear doors to deal with higher heat loads – to ensure maximum energy efficiency, they are controlled with variable fan speed controls and temperature sensors.

Passive cabinets utilise the IT equipment fans to draw ambient air from the front and then rely upon the temperature differential between the cabinet IT equipment space and the room ambient temperature.

Key features

- Wardrobe style front and rear doors on active and passive cabinets

- Active rear doors contain one EC fan in each door; each fan has a speed controller and temperature sensor

- Built in environmental monitoring system, accessible via the free integral graphical user interface

- Fully adjustable 19" mounting angles fitted front and rear

- Soundproof cable entry system

- Six cable entry points via removable gland plates, three at the top and three at the bottom

- Load bearing castors

- For maintaining the IT equipment, all doors and panels are easy to remove and refit

- Cabinets are finished in USpace Black with Montana Blue highlights

UCoustic

Executive cabinet

Signature UCoustic cabinets for boardroom and office

The Executive cabinet comprises the same specification as the standard Edge 9210i UCoustic with the additional option of a real wood finish to blend elegantly with other office furniture – without compromising decibel attenuation, psychoacoustics, thermal performance or cabinet strength.

Standard finishes

- Oak

- Maple

Finishes available to special order

- Beech

- Cherry

- Sapele

- Walnut

24U with passive doors, side panels and top cover in light oak

Real wood finishes can be supplied in a combination of any of the following configurations:

- Passive doors, front and rear.

- Side panels

- Top cover

Please note - active rear doors cannot

Be finished in wood

24U with passive doors in maple

UTelligent Management System included as standard

The UTelligent Management System 'UMS' is an M2M device that allows you to connect multiple sensors and devices.
Giving you the ultimate control and monitoring of your IT cabinet.

Simple To Use - Packed full of features

The UMS has a Web User Interface 'WEBUI' accessible via a browser on any device. This gives you control and monitoring for your cabinet based on your access levels.

Safe and secure

The need to protect important hardware and sensitive information is paramount. Our range of cabinets will allow an immediate security upgrade by mounting security cameras internally to the front and rear of the cabinet. The 'UMS' will store images and if required will provide you with real time alerts of cabinet entry to view download via remote access.

Get additional security options. Our range can be upgraded with a complete access system including electronic locking system. Please contact for further information or visit www.usystems.co.uk/UMS.

Part of the MDC family of solutions from USystems

UCoustic

Power and monitoring

As part of the ability to connect to other devices the 'UMS' can obtain data for the UTelligent Power devices and display in a clear and easy to follow view. The benefit will allow you IT to monitor the cabinet and connected devices on one screen without opening multiple windows.

UTelligent Power Distribution Unit Status

PDU Name	Alarm Status	L1 VAC	L1 Amps	L1 kW's	L1 Hz	L1 PF	L1 kWh's
PDU-1 (http://192.168.0.101)	NONE	244.8 VAC	0.00 Amps	0.000 kW's	49.8Hz	0.004 PF	22.3 kWh's
PDU-2 (http://192.168.0.102)	NONE	244.8 VAC	0.00 Amps	0.000 kW's	49.8Hz	0.004 PF	22.3 kWh's

Because you need to know

Alarms and alerts in real time will notify you of any issues with your cabinet and up to 10 emails can be receive the notification. The LED logo on the cabinet doors will change colour if the cabinet status changes, alerts (amber) or alarm (red). It will remain green when working correctly.

The key to cooling

One of the key features of our technology is the ability to monitor/alert and control EC fans housed in USystems enclosures to give you the best in cooling control and energy savings. To control these fans one temperature sensor is included as standard.

Power & energy	Camera system	Cooling & temperature	Dash-board	Network settings	Alarm sensor	Security & access	Fire protection	Motion sensor	Door sensor

Multiple sensors

Temperature sensors give you the ability to monitor in real time anywhere from inside or out of the cabinet and feature to report the data log daily, weekly or monthly. Also if required a report can be downloaded manually for the 'UMS' software. Other types of sensors are also available please view here, the 'UMS' allows 2 one wire sensors and either 2 or 6 digital sensors dependent on the UMS version.

UTelligent Hub

The UMS Hub allows multiple cabinets with 'UMS's housed inside them to be displayed on the Hub software. Giving you the ability to monitor and access all of the cabinet that are linked within the same network depending on the level of your access giving.

IP54 floor standing cabinets

Retains the sound attenuation and heat dissipation of the standard Edge 9210i UCoustic but with an IP 54 rating.
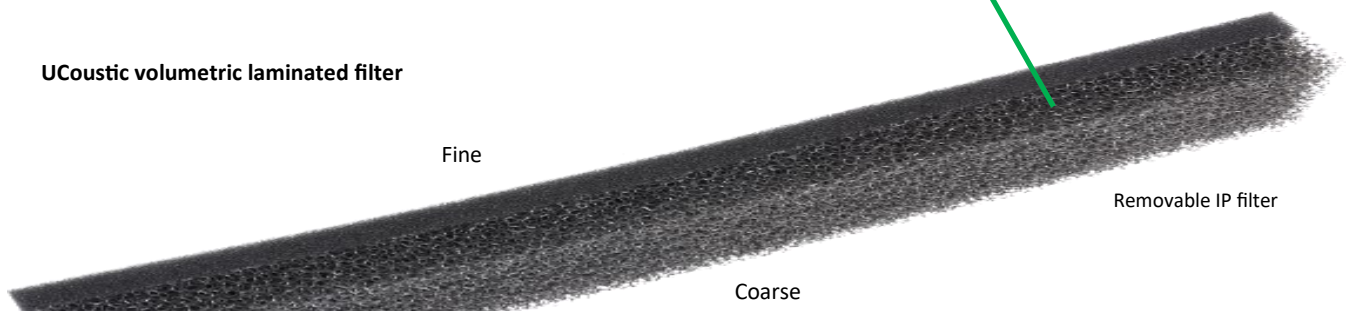
The cabinet is ideal for:

- Dusty environments
- Offices in industrial areas
- Sensitive active equipment
- Laboratories
- Schools

Cable entry system with IP gasket seal

UCoustic volumetric laminated filter

Fine

Removable IP filter

Coarse

Two separate reticulated open cell foams laminated to form one volumetric UCoustic filter, each manufactured to specific and stringent tolerances.

One being coarser than the other gradually filtering out harmful particles flowing through into the cabinet.

Part of the MDC family of solutions from USystems

Cable management

Cable entry systems

The UCoustic is unique in that it has six point of cable entry—three to the top and three to the bottom

Top cable entry glands

Bottom cable entry glands
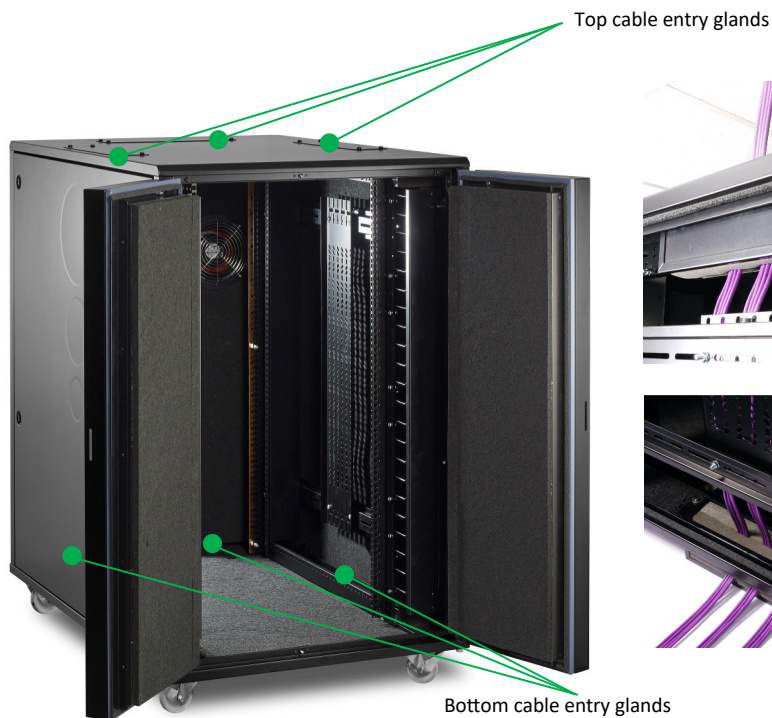
Specially designed to retain soundproof integrity and IP rating.

The universal cable entry system can be mounted to the top and the base with the box being mounted internally or externally to the cabinet.

Cable tray

Ensure best cabling practice with 9210 cable tray, designed to fit in line with the top and bottom side cable entry posts.

Cable trunking
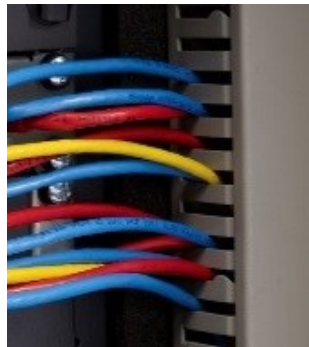
Ensure best cabling practice by utilising finger cable trunking; sold in pairs and available in all UCoustic heights.

Cable finger management

Ideal for laying up and dressing cables ensuring an adequate bend radius for all category cables—great time saver.

UCoustic ducting kit

Best practice energy saving option

Enables hot exhaust air to be directed outside the room or building, **saves on energy** and keeps the room cool and protect the ambient temperature.

- Save money, energy and power consumption on existing room air conditioning

- Divert and recycle waste hot air providing free heating to other rooms

- Helps prevent hardware and software failures

- Helps prevent any unnecessary downtime

- Access to rear of cabinet and door opening is not affected when the ducting kit is utilised

- Retrofittable to the 24U and 42U UCoustic Edge 9210i active cabinet

- Can be directed to exhaust through wall, window or ceiling plenum

Venting to wall
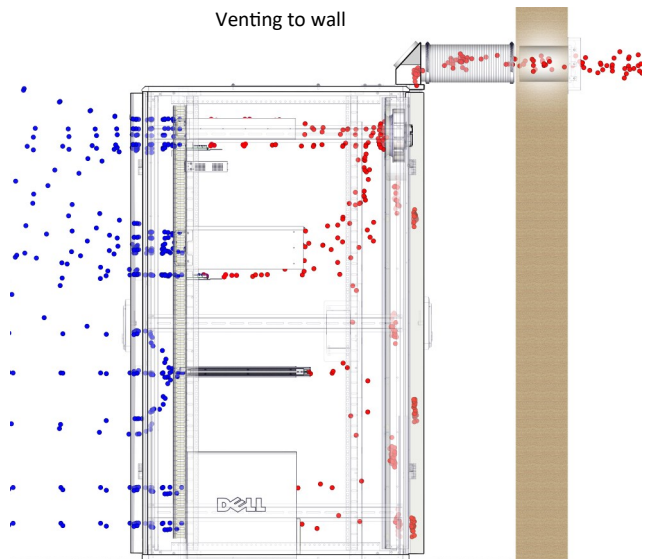
Venting to ceiling
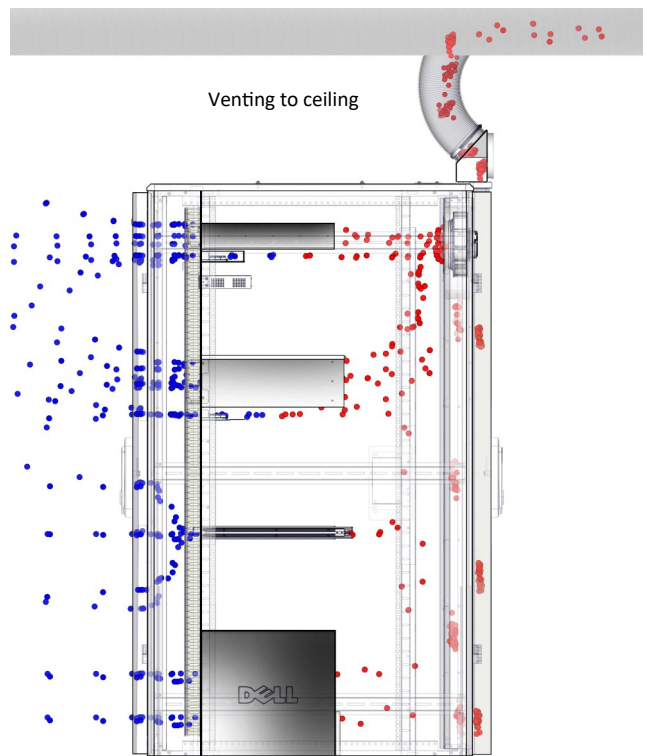
UCoustic

Side venting kit (Cisco server spec)

Side venting kit for active IT equipment which cools from side to side such as switch gear, Cisco servers etc.
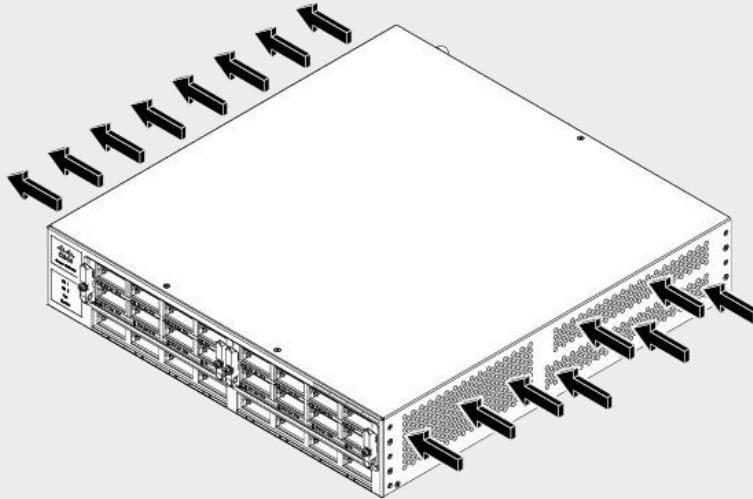
Anti-vibration soundproof cabinets

The Anti-vibration cabinet is a recent addition to the UCoustic family—utilising special anti vibration mounts and dampening castors it is designed to isolate the 19" mounting angles from the fabric of the cabinet—this in turn protects the IT equipment from Vibration and mild shocks.
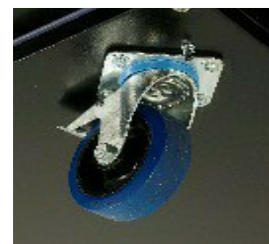
The option is especially important if installing sensitive active equipment or if used in a controlled environment. Also useful if transporting the cabinet in vehicles for relocation etc.

Close up of anti vibration mount
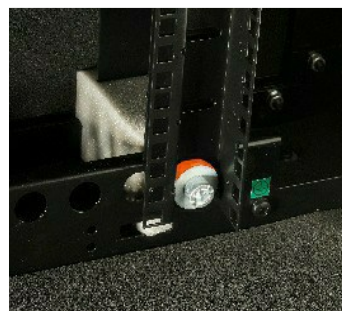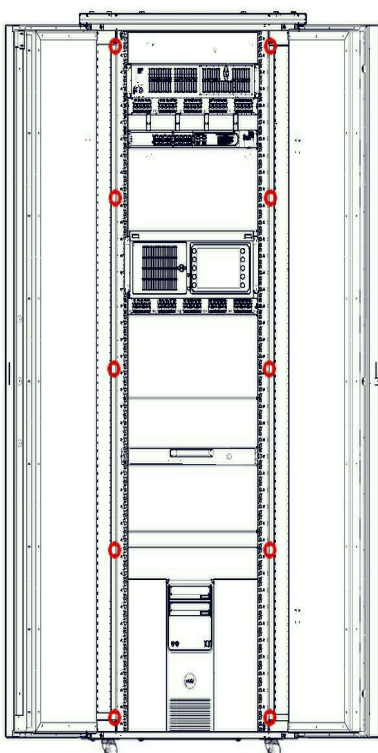
Anti vibration fixing positions

Specialist vibration dampening castors

Extra depth server extension kit

When utilising enterprise, render node or higher speed servers the extension kit enables these to be housed in the UCoustic Edge 9210i by giving an additional 200mm depth to accommodate this type of specialist, deeper equipment.

The extension kit is fully retrofittable and will not adversely affect the performance of the cabinet.

Additional 200mm depth
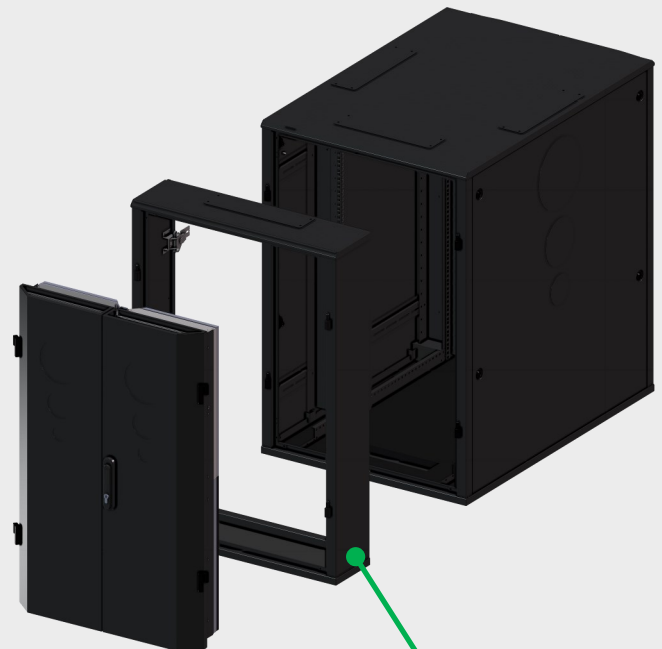
Extra 200mm usable depth
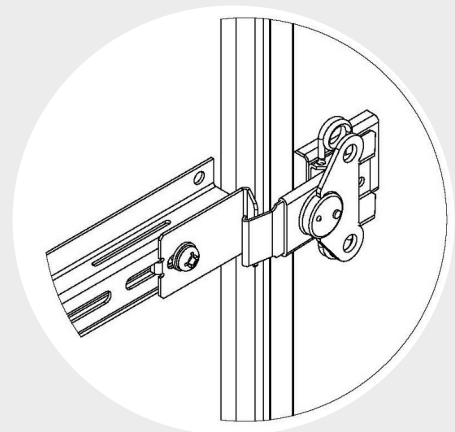
The extension kit is fixed in place with butterfly catches and adjustable clamp plates to ensure an even and effective seal.

Part of the MDC family of solutions from USystems

*U*Coustic

9210i intelligent power

With today's ever increasing cost of power and the drive to reduce consumption, **UTelligent Power** gives the user control and information to reduce costs by using the tools that identify, log and manage events.

UTelligent Power's flexibility allows information to be managed using SNMP/HTTP and RS485 Mod-Bus protocols and is available in a full range of socket configurations and current ratings.

As **SNMP/HTTP** via individual IP addresses or up to 32 units on a single IP address. Management information from each **UTelligent Power** unit is shown via WEB browser or through a dedicated software management package.

As a **ModBus** protocol **UTelligent Power** units can communicate with most modern management platforms or with **UTelligent Power** own data logging and management software.

It will link with the **UMS** and display all of the **UTelligent Power** information onto the **UMS** WEBUI with a direct link to the **UTelligent Power's** software.

Secure Space range
Intelligent locking and monitoring solutions

Key features

Proximity sensors front and rear

Electronic handles with key override and status indicator /feedback

Handle status feedback via TCIP/IP

Web interface, TCIP/IP protocol, SNMP protocol

User and Admin access levels

One RJ45 10/100 base-TX Ethernet TCP/IP network port

Up to 500 users, Up to 20 user groups

Displays on the UMS's WEBUI

Options

Standard or 19" rack mounted unit

Optional keypad and bio finger print

Any industry standard entry system option

Door status sensors front, rear and top

General accessories
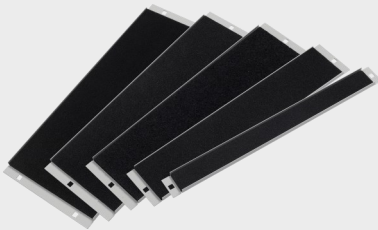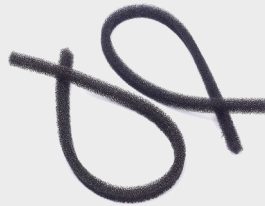
Load spreader

UCoustic Fixed plinth

Levelling feet

UCoustic Baying kit
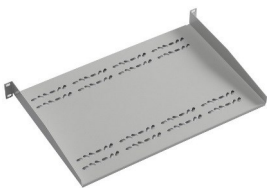
UCoustic blanking

UCoustic dust filter

Tower infill kit

Document wallet

U Measure strips

Cantilever shelf

Fixed shelf
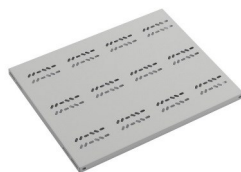
Chassis runners

Telescopc shelf
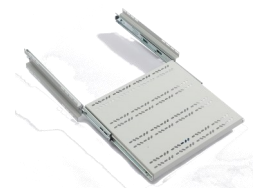
Cage nut fixings

Earth bonding kit

Copper bus bar

Clean earth

ESD kits

Part of the MDC family of solutions from USystems

Rapid deployment micro data centre

UCoustic

Active cabinet

Rear doors

23mm recommended minimum distance between door face and 19" mounting angles

700mm factory settings

917mm

129mm

100mm factory settings

Front doors

Passive cabinet

Rear doors

44mm recommended minimum distance between door face and 19" mounting

700mm factory settings

938mm

129mm

100mm factory settings

Front doors

External dimensions and weights

	Active units			Passive units		
Cabinet usable space	12U	24U	42U	12U	24U	42U
External height without castors	620 mm	1152 mm	1954 mm	620 mm	1152 mm	1954 mm
External height with castors	720 mm	1252 mm	2054 mm	720 mm	1252 mm	2054 mm
Cabinet weight	133kg	194kg	313kg	124.5kg	181.5kg	290kg
Floor footprint (w x d)	780 x 1100 mm					
Floor footprint with doors (w x d)	780 x 1210 mm					
Usable internal depth	825 mm					
Maximum load capacity	1000kg without castors			500kg on castors		

Energy and attenuation performance

	Active units			Passive units		
Maximum heat load	12kW	12kW	12kW	1.75kW	2.25kW	2.75kW
Maximum power consumption	Up to 1 Amp - all active models			Not applicable		
Maximum attenuation performance	31dbA - all models					

U Systems

UCoustic Edge 9210i data cabinets

Space utilisation with unrivalled sound attenuation and heat dissipation

A server room in a cabinet!

Connected

Edge

Cloud

1 Local device

2 Localised data centre

3 Regional data centre