USpace

4210 Multi Function Cabinet

Contents

USpace 4210 Data Rack Solution range of cabinets and accessories product overview and technical data.

USystems Limited, EMEA, Systems House, 235 Ampthill Road, BEDFORD MK42 9QG United Kingdom

Tel: +44 (0) 1234 761 720 sales@usystems.co.uk

USystems Inc. NORTH AMERICA , 10 Glenlake Parkway, Suite 130, ATLANTA Georgia 30328 USA

+001 214 307 6033 sales@usystems.com

Quality, recycling, compliance and manufacturing statement

USystems is registered as meeting the quality manufacturing requirements of EN ISO 9001:2015,   ISO 14001 Our products comply with CE, and RoHS standards and are UL listed. We recycle well over 90 per cent of our waste.

Overview

The USpace 4210 is one of the premium ranges of cabinets from USystems. Smart design and state of the art manufacturing facilities guarantees the unbeatable quality, style and innovation associated with USystems.

- Available in datacomms and server cabinet configurations

- 3307.0lbs/1500kg load bearing

- *1102lbs/500kg dynamic load

- 5 heights, 2 widths, 4 depths as standard

- Rigid bolted construction

- Superior venting standard AirTech door with 80% airflow

- Superior venting AirTech V door option with 86% airflow

- Multi depth mounting

- Multi cable access through top and base

- Quick release cladding

- Left or right hand hinged doors

- Lockable side panels

- Houses all major server brands

- ColdLogik compliant

The robust structure adapts itself to many applications and markets. The 4210 frame provides the perfect platform for installers and end users alike.

*Dynamic Load Rating is the total rolling mass of the rack and includes the rack frame, cladding and any fitted equipment and accessories and is subject to the load being evenly distributed at 20U height and below. Dynamic load relates to the movement of a rack within the same data centre on a smooth floor clear of any obstacles. Not suitable for transportation on a vehicle when loaded to this weight.

Multi function—comms and server cabinet build

Comprising of four corner posts, top and bottom end frame, depth support rails, front and rear 19" mounting angles, front infill panels (800w models), swing handle lockable front and rear door (available in a combination of options, lockable side panels, top cover with knock out blanks for cable entry and a set of four transport castors (not load bearing).
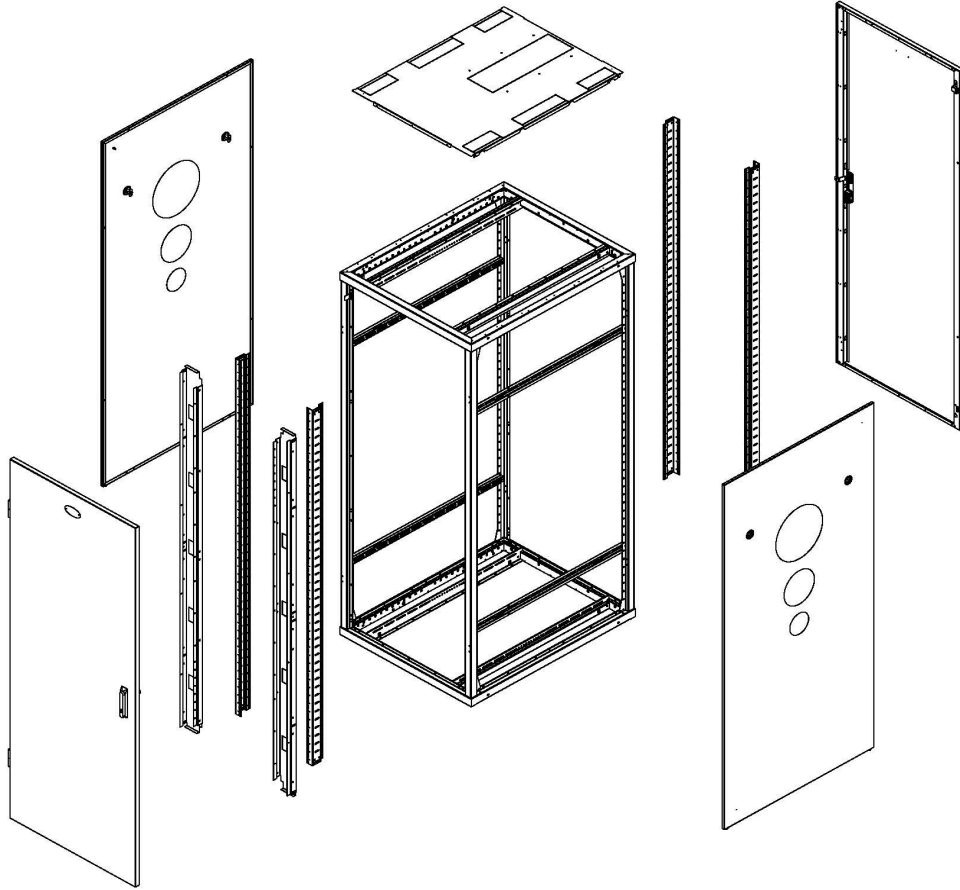
Materials and finish

Frame
1.2mm &1.5mm CR4 steel

AirTech, glass and steel doors
1.0mm, 1.2 & 2.0mm CR4 steel
4.0mm toughened clear glass

Side panels
1.0mm & 1.2mm CR4 steel

Top cover
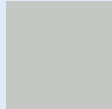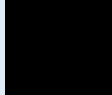1.2mm CR4 steel

Depth support rails
1.5mm CR4 steel

Mounting angles
2.0mm CR4 steel

Infills for 800w
1.5mm CR4 steel

Light grey
RAL 7035
Standard

Black RAL 9005
Option with
extended lead

Polyester semi gloss powder coat
*(Other colour options are available on request)*

NB: Internal specification —mounting angles and depth support rails come in Black RAL 9005 as standard regardless of cladding colour option unless specified otherwise at time of ordering.

# Multi function cabinet sizes with standard cladding

Heights	Available Widths		Available Depths footprint/with cladding			
24U 47.24"/1200mm						
30U 57.72"/1466mm						
36U 68.23"/1733mm	**23.62"** 600mm	**31.50"** 800mm	**23.62"/25.98"** 600mm/660mm	**31.50"/33.86"** 800mm/860mm	**39.97"/41.73"** 1000mm/1060mm	**47.24"/49.60"** 1200mm/1260mm
42U 78.70"/1999mm						
48U 89.21"/2266mm						

Cabinet manufactured to IEC 60297-3 and EIA STD 310 for panels and racks housing electronic equipment
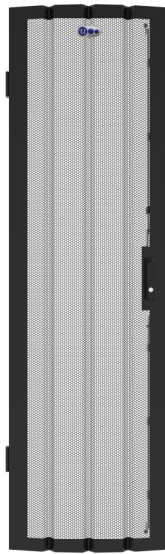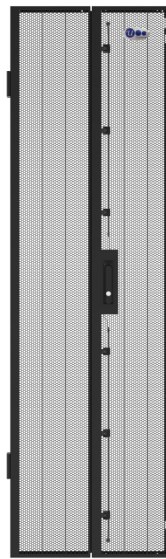
Door and locking options
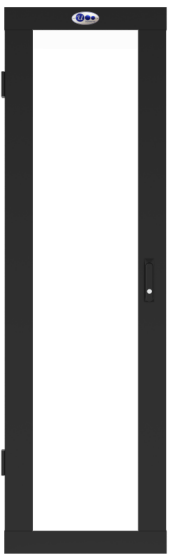
Glass door
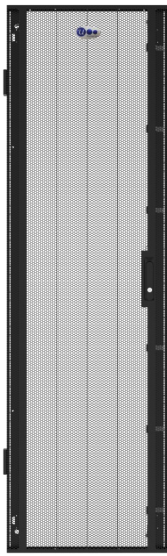
**AirTech vented door
(80% airflow)**

**AirTech 'V' vented door
(86% airflow)**

**AirTech wardrobe
door**

Solid door

Glass door

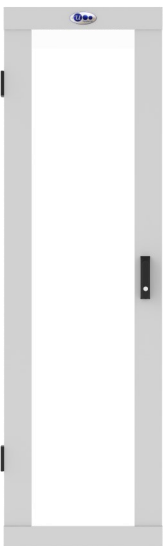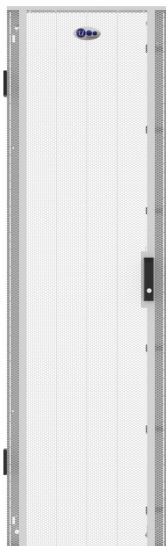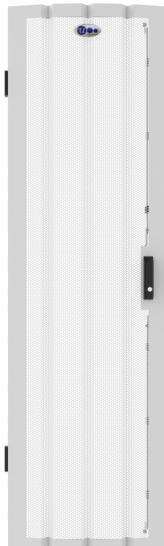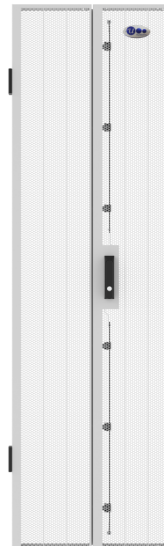

**AirTech vented door
(80% airflow)**

**AirTech 'V' vented door
(86% airflow)**

**AirTech wardrobe
door**

Solid door

Single point swing handle
as standard

Combination key override swing handle
(four point locking and six point on
wardrobe doors)

Proximity smart card/fob reader   MIFARE   Keypad

Electronic intelligent locking with various readers and styles

Anti-air recirculation kit

It is universally understood that preventing hot air recirculating internally from the back of the rack has many upsides, including prevention of hot spots and a reduction in energy consumption. The 5210 anti-air recirculation kit comprises vertical brush strip to each side of the 19" mounting angles and 2 x horizontal blanking panels above and below the 19" mounting angles.

To help achieve best practice—fit EaziBlank blanking panels (opposite page) into unused U spaces within the rack to help minimise hot air recirculation.

Hot air plenum

Cold air plenum

Prevention of air recirculation

Brush strip air baffle kit on infills

Enhanced airflow management can be achieved with the addition of 4210 brush strip sealing kits which create a seal to prevent hot air re-circulating to the front 19" plenum.
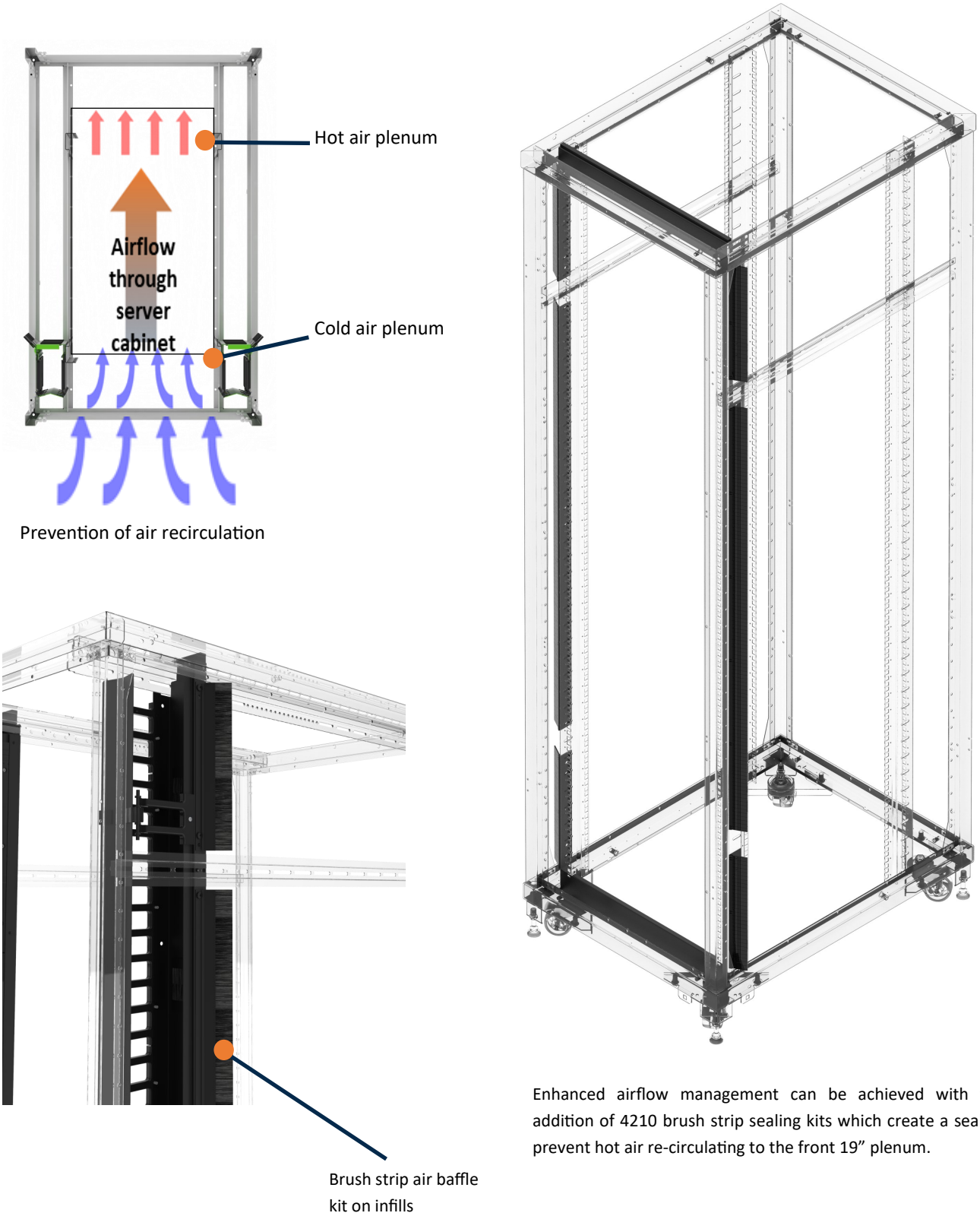
Thermal management

EaziBlank panels

Fitting 19" blanking or EaziBlank panels (and deploying rack air anti-recirculation kits) helps to avoid air mixing and recirculation within the rack space which in turn helps to maximise the cooling infrastructure effectiveness by delivering cool air to the equipment and not allowing it to bypass through empty U spaces.

Brush strip

19" blanking panel with brush strip enabling cable entry without compromise to air flow management.

Top cover fan tray
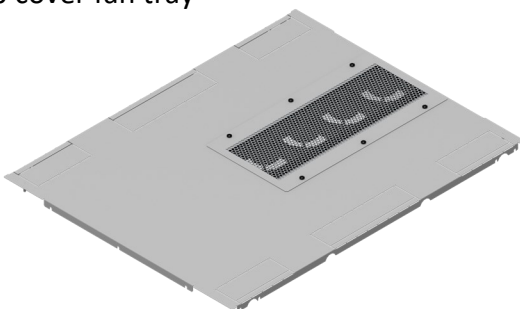
Retrofittable zero U top cover fan trays remove heat from cabinet and can be thermostatically controlled if required

Shelving

Adjustable shelf

Adjustable shelves with maximum load bearing of 100kg, these versatile shelves adjust to suit rail depths 450mm-750mm & 650mm-950mm.

Cantilever shelf

Easy to fit shelving solution suitable for mounting non 19" equipment. Mount directly to the 19" mounting angles with cage nut fixings (included).
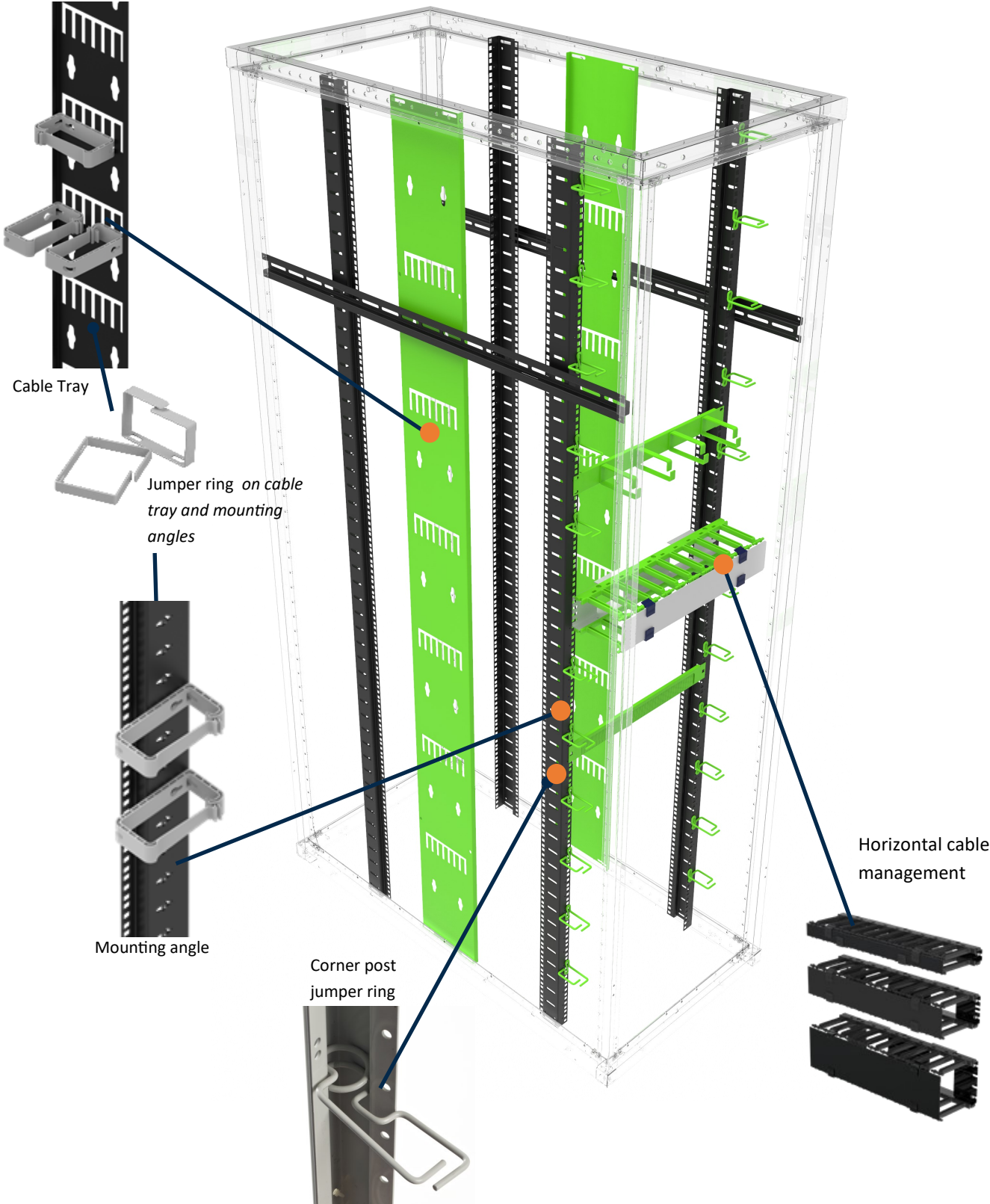
Chassis runners

Simple and cost effective alternative to cantilever and fixed shelving. Easy to fit and allows you to support and withdraw full width products with safety.

Cable management

600mm wide data comms cabinet

Vertical cable management options

Cable Tray

Jumper ring *on cable tray and mounting angles*

Mounting angle

Corner post jumper ring

Horizontal cable management

Front to rear cable troughs
for 800w cabinets only
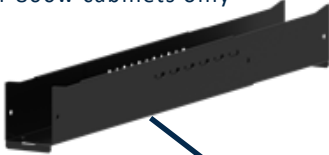
4 loop jumper ring panel

Vertical cable fingers
with open hinged cover

Versatile jumper ring which can be mounted in a multitude of useful positions within the rack, for example on the front or sides of the 19" rails and on the vertical cable trays.

19" brush strip panel

19" blanking panel with brush strip enabling cable entry without compromise to air flow management.

Castors, feet and plinths

Fixed plinth
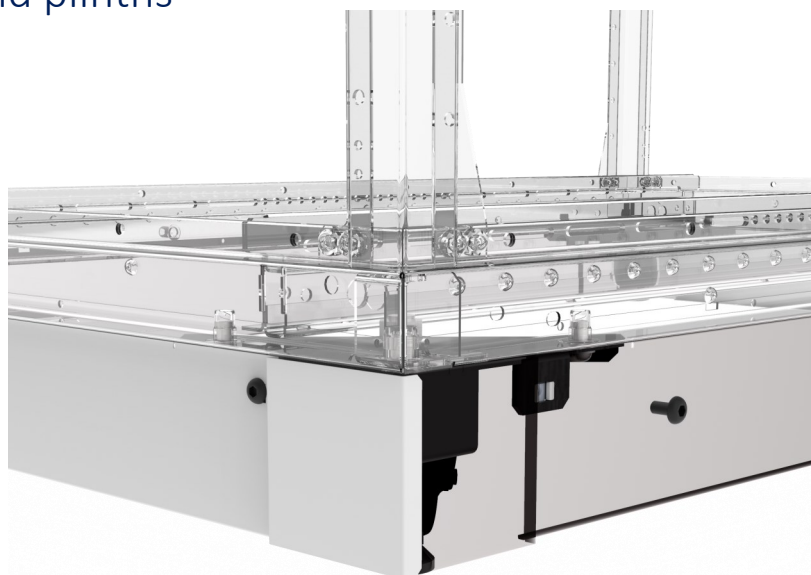
Plinth kits are designed to help close-off the gap between the rack and the floor for racks with castors/levelling feet fitted. These kits comprise a pair of front and rear kick plates 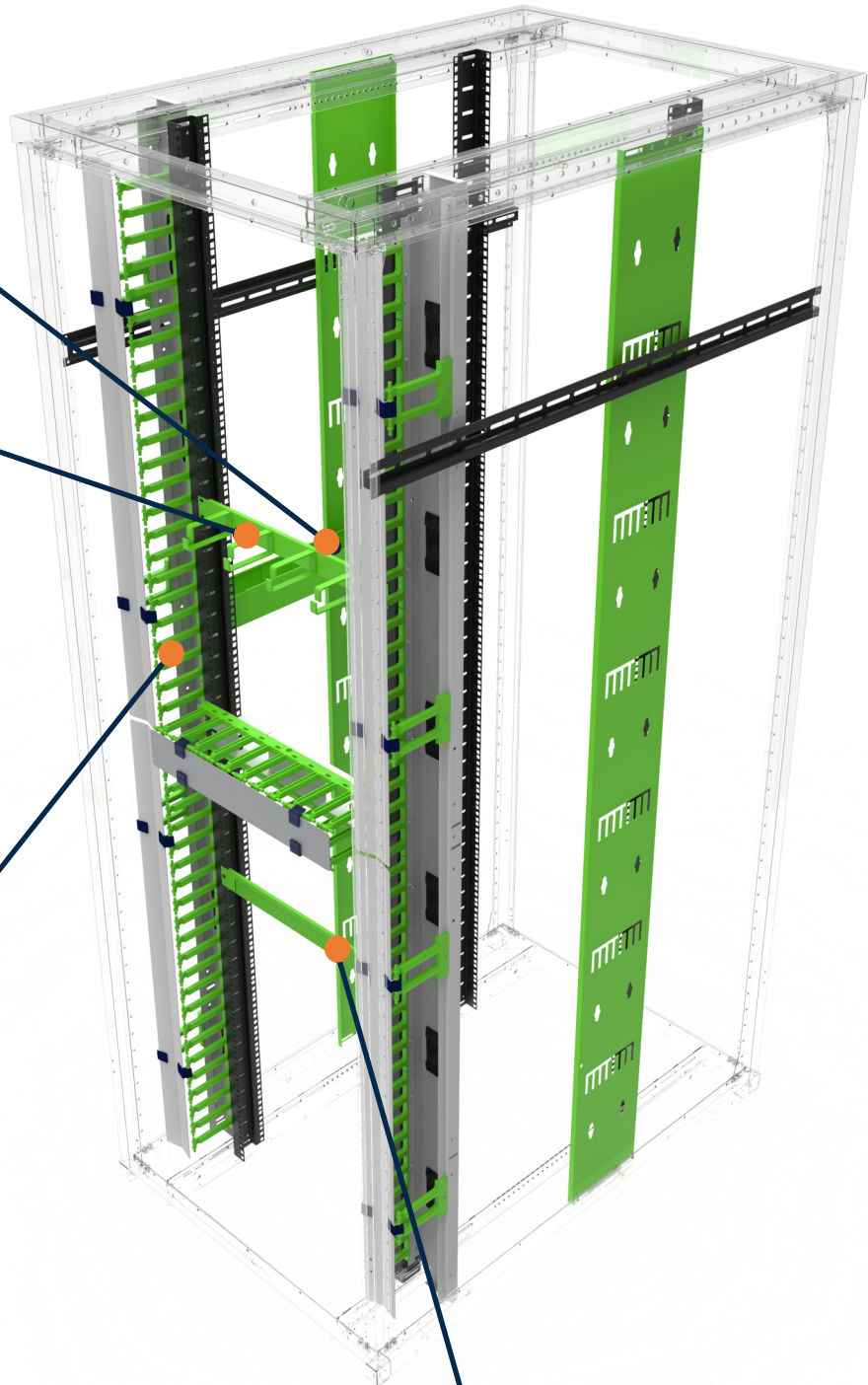and side kick plates and fitting these adds to the efficient use of air and to the aesthetics of the 4210 rack when on castors/levelling feet by hiding the incoming services into the rack base. These are not load bearing plinths.

Castors with levelling feet

With castors and levelling feet

Levelling feet

Cabinet levelling feet have a weight loading of 300kg

These castor kits allow for the movement of the USpace 4210 rack with a total mass of 500kg*. The base adjustable foot kits allow the 4210 racks to be levelled on an uneven floor surface.

Earthing

Earth bonding kit

Standard cladding or wardrobe door earth bonding kit

Clean earth
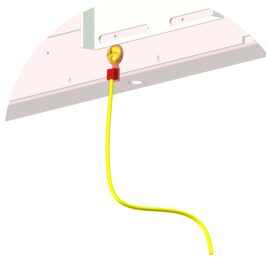
Copper bus bar

Horizontal and vertical 3mm and 5mm thick solid copper options. Clearance holes for M6 fasteners

ESD kit

Comprising M6 stud, wrist bank and grounding cable

Power

Power distribution units

Broad range of standard models ranging from 4 to 16 way configurations 13amp, IEC, 16amp, 32amp and specials

Intelligent power

Full range of build configurations from overall power monitoring to link legacy interface units, remote monitoring and control

Uninterruptable power supplies

Monitors power conditions constantly maintaining and maintaining and regulating voltage and frequency

Up to 95% efficiency in online double conversion mode and 98% in high-efficiency mode

Related products - Aisle containment

USystems Aisle Containment options comprise horizontal and vertical solutions (hot or cold) most of which can be retrofitted to existing data centre scenarios even when cabinets are differing in height and or widths.

- Thermodynamically advantageous

- Enhanced efficiency

- Cost effective

- Low-maintenance

- Hot or cold aisle versions

- Quick and easy installation

- Modular

- Re-locatable

- Expandable

- Retrofittable

Related products - ColdLogik Smart Passive

The ColdLogik CL20 Smart Passive uniquely has a modular up-grade path for a 'pay as you grow' ethos to counter costly and wasteful 'rip out and replace' upgrades.

As a worldwide community we all have a finite resource with which to work. At USystems we hold sustainability at the heart of our design philosophy.

The CL20 Smart Passive is designed with sustainability in mind, allowing you to plan for the future without discarding a proven energy efficient solution of today. This has been achieved by providing a unique upgrade path from a self cooling passive RDC to a proactively cooled RDC able to fully control both the environment within the cabinet and the room temperature itself.

Anticipating the next generation computer chip sets, heat load densities are set to rise in the next few years—will have major ramifications on the decisions you make today in designing your data centre with an upgrade path allowing for such higher density equipment.

The Smart Passive enables the installation of a passive solution now, without it becoming redundant once there is such a change in new active equipment.

The CL20 Smart Passive is available as a complete cabinet solution and is also compatible with the ColdLogik Adaptor frame enabling existing OEM or populated cabinets to be retrofitted on site without disruption.
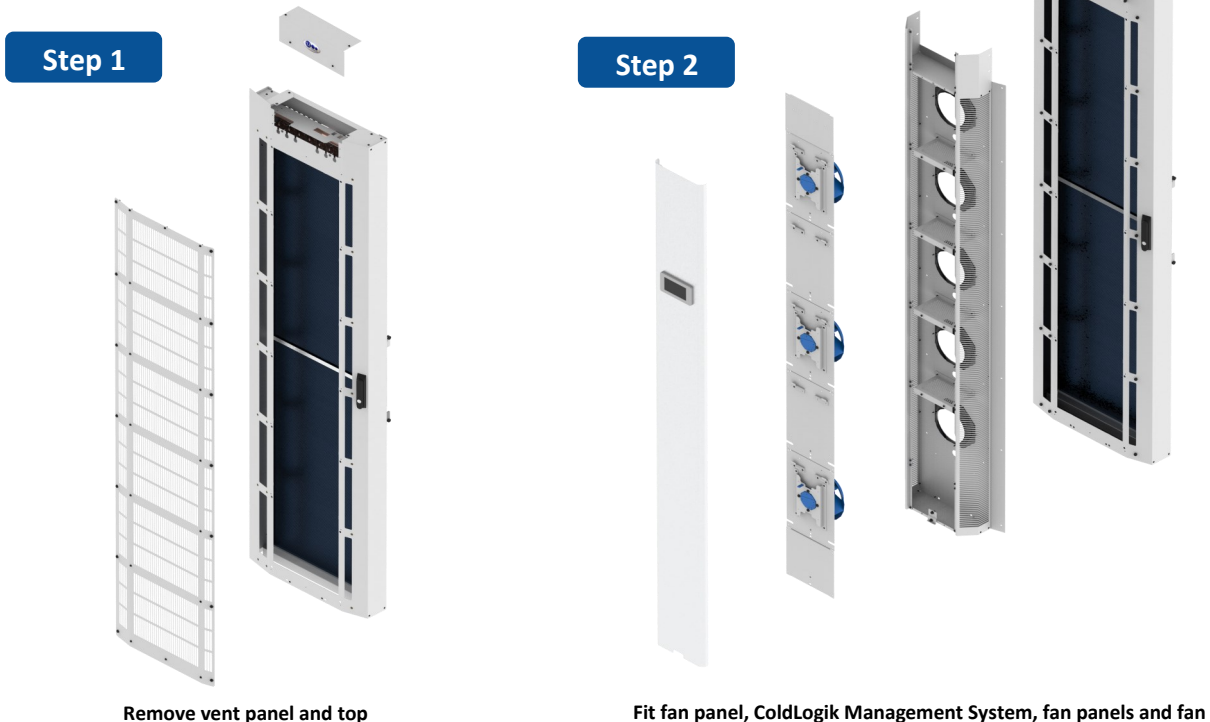
Zero running costs – no electrical components
Lower capital cost – No fans, controller or monitoring
Easy Installation – requires only water connection and hanging
Silent running – no external fans

Step 1

Step 2

Remove vent panel and top

Fit fan panel, ColdLogik Management System, fan panels and fan

Related products - CL20 Rear Door Cooler 'RDC'

The **ColdLogik** CL20 range of RDC's is the most comprehensive in the market. All models can be retro-fitted to OEM cabinets, alternatively they can be fitted directly to our space saving ColdLogik compliant USpace 4210 cabinet or alternatively on to the USpace 5210 cabinet via a dedicated interface frame.. This unrivalled range offers more sizes and more cooling capacity than any other makes of RDC's.

ColdLogik CL20 Proactive Rear Door Coolers replace the traditional approach to data centre cooling, allowing loads of up to **92kW per cabinet** with the added benefit of removing real estate inherent with hot aisle/cold aisle, in row cooling, CRAC cooling and aisle containment designs, whilst enabling remote monitoring and full control of the data centre environment .

CL20 C8 Rear Door Cooler

45kW of 'sensible' cooling

CL20 C12 Rear Door Cooler

55kW of 'sensible' cooling

CL20 C14 Rear Door Cooler

85kW of 'sensible' cooling

CL20 C18 Rear Door Cooler

92kW of 'sensible' cooling

Related products - CL80 InRow Cooler

ColdLogik CL80 InRow Coolers are fitted alongside cabinets in containment, typically being IEC 297 3 and EIA STD 310 compliant. The coolers ensure efficient thermal and energy performance by removing the heat generated by the active equipment , preventing hot exhaust air entering space where it is not permitted.

The InRow coolers can be sited within an existing data centre to work with existing computer room air-conditioning to provide additional cooling. They also reduce energy consumption and remove hot spots.

68kW of 'sensible' cooling

75kW of 'sensible' cooling

InRow cooling is up to 75% more efficient than traditional cooling methods.

ColdLogik InRow Coolers offer precision InRow cooling controlled and integrated via ColdLogik's award winning **ColdLogik** intelligent Management and Room Management Systems

ColdLogik InRow Coolers utilise space efficiently whilst offering closed coupled cooling within aisle containment

*U*Space

The backbone of data centres since 2004

Multi function cabinets and white space solutions

created by

*U*Systems

Putting our planet first

USystems Limited,

EMEA, Systems House, 235 Ampthill Road, BEDFORD MK42 9QG United Kingdom

Tel: +44 (0) 1234 761 720 sales@usystems.co.uk

USystems Inc.

NORTH AMERICA , 10 Glenlake Parkway, Suite 130, ATLANTA Georgia 30328 USA

+001 214 307 6033 sales@usystems.com