Excel Environ Racks

www.excel-networking.com/environ-racks

Section 13



Environ® - A Solution for Every Requirement

The Excel range of racks is extensive and we believe that we've got a quality solution to meet every installation requirement. To help you pick the product that's right for your requirement we've highlighted the key features and benefits below:

		Key Features									
е	excel without compromise.	U Size	Available Widths	Available Depths	Number of Compartments	Load Capacity	Colour	19" Profiles	1U height markings	19" Profiles - adjustable position	
CR Comms Rack		15U 20U 24U 29U 33U 42U 47U	600 mm 800 mm	600 mm 800 mm 1000 mm	1	600 kg	GW BK	Front & Rear	✓	√	
Equipment Rack		29U 42U 47U	600 mm 800 mm	600 mm 800 mm 1000 mm	1	600 kg	GW BK	Front & Rear	√	✓	
CL Co-Lo Rack		42U 47U	600 mm 800 mm	1000 mm	2 or 4	600kg	GW BK	Front & Rear	✓	✓	
SR Server Rack		29U 42U 47U	600 mm 800 mm	1000 mm 1200 mm	1	1300 kg	GW BK	Front & Rear	✓	√	
OR Open Rack		42U 48U 52U	514 mm	75 mm	N/A	1500 kg	ВК	Front	√		
WR Wall Rack		6U 9U 12U 15U 18U 21U	600 mm	390 mm 500 mm 600 mm	1	63 kg - 390 60 kg - 500 60 kg - 600	GW BK	Front & Rear		√	

GW = Grey White BK = Black



Quick release doors	Swing lock handle on front door	Multi- point locks	Front door	Rear door	Removeable side panels	150 mm Cable Tray	High capacity vertical cable management	Jacking feet & load bearing castors as standard	Available flat pack	Available from stock
√	✓		Glass	Single steel	√		800 mm width only	✓	✓	✓
√	√	√	Wave Vented full width	Double Vented	√		800 mm width only	√	√	√
√	√		Vented	Vented	√		800 mm width only	√		√
Secure lift off doors	√	√	Wave Vented full width	Double Vented	√	800 mm width only	800 mm width only	√	✓	√
							Optional Accessories		√	√
√			Glass		√				✓	√

GW = Grey White BK = Black

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The Environ® Range



The Environ® range includes:



The Environ® CR standard Comms Rack range is supplied with a glass front and steel rear door. The CR range is designed with features, and functionality which make it ideal for LAN and security cabling installations and the housing of 19" mounted equipment such as switches, routers, storage and recording devices.



The Environ® ER Equipment Rack provides the same set of design features as the CR series with the added benefit of a single wave design mesh front door and mesh style wardrobe rear doors providing, ventilation, strength, security, and great aesthetics. The ER range is ideal for the installation of cabling, networking, server and AV equipment.



The Environ® CL Co-Location Rack takes the existing qualities of the Environ range but with the added benefit of having secure, lockable compartments. The CL series is designed specifically for applications where equipment security is a priority, or where space is being used by different enterprise departments or clients with a shared facility. The CL series is perfect for Cloud deployments and co-location data centre facilities.



The Environ® SR Server Rack range is designed to provide choice, functionality, and ease of use within high density server and equipment installations. With exceptional load bearing, split side panels, together with mesh design front and wardrobe rear door options, the SR range is ideal for data centre and enterprise equipment room installations.



The Environ® OR Open Rack solution has been refreshed to provide an even greater choice of vertical and horizontal cable management and is an ideal solution where there is a secure environment for the installation of high density copper and optical cabling.



The Environ® WR range of wall racks provide a wide choice of depths and heights. The WR series is designed for the installation of both cabling and equipment across a range of applications and are ideal for the housing of cabling, security and AV equipment.



A 25 year warranty is available when Environ Racks are purchased in conjunction with an Excel Networking Copper or Fibre Solution and installed by an Excel Cabling Partner. For more details, view **section 20** of this publication.

Visit www.excel-networking.com to view a series of videos that show the features and benefits of the Environ® range and also run through the build from flat pack to fully assembled.

Environ® CR Series



Our **Environ CR** Racks are a versatile range of racks, suitable for everyday applications across the full spectrum of vertical markets in the data, security, audio visual and telecommunications arenas.

Compatible with the suite of Environ accessories and components, these racks – which are each based on the same chassis – can be customised to suit individual applications to offer the most suitable solution for a given project.







Watch the video to find out more about the Environ CR Rack







The Environ CR range is available as a 600mm or 800mm wide with a choice of many heights and depths.

For more information about the Environ CR Rack, visit our website, browse our online catalogue for specific part numbers or view the Environ Catalogue.

Environ® CR Series

The Key features of the Environ CR range include:



Swing handle cam lock fitted to glass front door



19" profiles marked with U height position



Full height front and rear adjustable 19" profiles



• Side panels are lockable and racks can be bayed with or without side panels



Jacking feet and castors can be fitted simultaneously
 Vented Roof



• Large cut out in base for cable entry



• Barrel lock fitted to steel rear door



• Multiple brush strip cable entry in roof sized to accept a 32amp Commando plug



• High density vertical cable management - 800 series only





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Environ® ER Series



Our **Environ ER** Racks are a versatile range of racks, suitable for everyday applications across the full spectrum of vertical markets in the data, security, audio visual and telecommunications arenas.

Compatible with the suite of Environ accessories and components, these racks – which are each based on the same chassis – can be customised to suit individual applications to offer the most suitable solution for a given project.





Watch the video to find out more about the ER Rack.





The Environ ER range is available as a 600mm or 800mm wide with a choice of three heights and three depths.

For more information about the Environ ER Rack, visit our **website**, browse our **online catalogue** for specific part numbers or view the **Environ Catalogue**.

Environ® ER Series

The Key features of the Environ ER range include:



• Wave design mesh front door



• Swing handle single point fitted to front door



• Side panels are lockable and can be bayed with or without side panels



• Jacking feet and castors can be fitted simultaneously



• Full height front and rear adjustable 19" profiles



• Wardrobe style double mesh rear doors



 Multiple brush strip cable entry in roof sized to accept a 32amp Commando plug



High density vertical cable management
 800 series only



• 19" profiles marked with U height position



Side panel latch plate



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Environ® CL Series



The Environ CL Co-Location Rack takes the existing qualities of the Environ range but with the added benefit of having secure, lockable compartments. The CL series is designed specifically for applications where equipment security is a priority, or where space is being used by different enterprise departments or clients with a shared facility. The CL series is perfect for Cloud deployments and co-location data centre facilities.







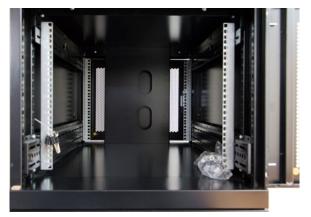


Then Environ CL range is available as a 600mm or 800mm wide with a choice of two heights and two or four compartments.

For more information about the Environ CL Rack, visit our website, browse our online catalogue for specific part numbers or view the Environ Catalogue.



• Vertical Management (CL800)



• Vertical Management (CL600)



Mesh Compartment Doors



• Inside Compartment (CL600)



• Removable Side Panel



• CL800 Inner Rack



 Jacking feet and castors can be fitted simultaneously



Optional Cable Management Rings (CL800 only)



• Inner door lock



• Key and 3 digit combination locks

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Environ® SR Series



The **Environ SR** Server Rack range is designed to provide choice, functionality, and ease of use within high density server and equipment installations. With improved load bearing, split side panels, together with mesh design front and rear door options, the SR range is ideal for data centre and enterprise equipment room installations.







Watch the video to find out more about the Environ SK Kack







The Environ SR range is available as a 600mm or 800mm wide with a choice of three heights and two depths.

For more information about the Environ SR Rack, visit our **website**, browse our **online catalogue** for specific part numbers or view the **Environ Catalogue**.

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Environ® SR Series

The Key features of the Environ SR range include:



• Wave design mesh front door



Swing handle two point lock fitted to front door



Quick release hinged side panels
 42U and 47U only



Jacking feet and castors can be fitted simultaneously



• Full height front and rear adjustable 19" profiles



Swing handle front door



Swing handle three point lock fitted to rear doors



High density vertical cable management
 800 series only



• Brush style cable entry in roof



Removable base panels for cable entry

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Environ® WR Series



environ-racks/wall-racks

The Environ WR range of wall mount racks have been designed with strength, ease of use and aesthetics in mind. They are designed for the installation of both cabling and equipment and are ideal for use across a range of applications including local area networking (LAN) cabling and hardware, and the housing of security and AV equipment.

We hold large stocks for next day free delivery to the UK mainland and they are widely available through local distributors across Europe and the Middle East.



60 SECOND INSIGHTS

EXCEL ENVIRON RACKS

excel

The Key features of the Environ WR range include:



• Aesthetically pleasing framed safety glass front door











Lockable, quick release side panes for maximum access into rack





Cable entry cut out in top and base



Angled vented roof



 Adjustable 19" mounting profiles

For more information about the Environ WR Rack, visit our website, browse our online catalogue for specific part numbers or view the Environ Catalogue.

Environ® OR Series - 2 Post Open Rack

Discover more about Excel's

Environ Open Racks on the

https://excel-networking.com/ environ-racks/open-racks

Excel Website:

The **Environ OR** series of open racks are designed for the mounting of patch panels and networking equipment in secure environments or in locations where space does not allow for the use of a standard rack. Each frame is constructed from rigid aluminium and supported by heavy

duty top and base cross members which enable static load bearing of up to 1500kg. A choice of heights, up to 52U are available in a standard 2 post 75mm deep rack. Each profile has U height numbering and pre threaded conductive M6 tapped holes for quick and easy equipment installation. Each rack is supplied flat pack with all required fixings and installation instructions. A wide range of high density vertical and horizontal cable management solutions are available to suit each rack.







 Lockable aluminium double hinge doors



 Pass though cut outs in vertical design from 8" wide and above





 Cable spools in vertical design from 8" wide and above

Click here to watch our How To video of constructing a 4-post OR Rack.



 Rounded cable management fingers to avoid cable damage



• M6 threaded 19" profiles • Simple bolt



Simple bolt together assembly



The Environ OR conversion kit allows two standard OR open frames to be converted into one four post open frame. This is particularly useful when limited space is available and the customer wants to have back to back patching fields. It is also useful when a client would like to use the 4-post frame to accommodate active equipment.

For more information about the Environ OR Rack, visit our website, browse our online catalogue for specific part numbers or view the Environ Catalogue.

Environ® OR Series - High Density Cable Management



The Environ OR series of cable management solutions are designed for standard through to high density cable management within enterprise and data centre environments. The vertical designs are specifically relevant where the use of angled patch panels, or ports is preferred due to the required port density.

Options are available in a range of widths with front only, or front and rear management, each based on the same core design.

Each manager has a rear frame manufactured from powder coated welded sheet steel and is fitted with full height, ABS plastic cable management finger assemblies which have a rounded finish to prevent cable damage or stress.

Each frame has a full height hinged door manufactured from formed and powder coated aluminium to provide a strong but lightweight finish to any installations. The doors can be locked to secure cable access, and via simple fitted twist handles can hinge from left to right, or right to left. The door is fixed to the cable management frame at the top and base, enabling maximum access to installed cables, and is easily removed when required.

Within each vertical management unit 8" wide and above are cable spools and letterbox cutouts to assist management of excess cable, or patching to rear or adjacent frames.

The horizontal range can be supplied in either 2U or 3U designs. Each are assembled from a powder coated steel back or mid plate, with front only, or front and rear cable management fingers and a hinged 'lid/face' which snaps lock at the top and bottom to protect cables and provide an aesthetically pleasing finish.

Features

- Vertical design available in 42U, 48U and 52U heights
- Horizontal design available in 2U & 3U
- Vertical design available in range of width options
- Manage in excess of 1500 Category 6 cables
- ABS cable management fingers
- Rounded cable management fingers to avoid cable damage
- Lockable aluminium double hinge doors
- Doors open left to right, or right to left
- Cable spools in vertical design from 8" wide and above

- Pass though cut outs in vertical design from 8" wide and above
- Quick and easy to fit to Environ OR racks, fixings supplied
- Ideal for use with angled patch panel or ports
- Free standing or fix to Environ OR racks
- Aesthetically pleasing design



to V5

Environ® Locking Solutions



Environ Locking Solutions from Excel, in conjunction with Southco, provide an ergonomic and stylish solution to environments where security is paramount. The solution can be standalone, networkable, integrate into Access Control systems, BMS and includes Biometrics.

The Solution brings intelligence and monitoring right down to the lock level of a data rack, giving you ultimate control of access to the services and equipment within a comms room or data centre, making it perfect for colocation deployments and remote sites where access is restricted for authorised personnel only.



Compatible with Excel Environ Range



Wide Choice



Futureproo



Enhanced Security



25-Year Warranty

Why Choose the Excel Environ Locking Solution?



Integrate with Excel Intelligent PDUs

The locks can be powered and integrate with the Excel Intelligent PDU solution. By using a junction box, the tin open ended wire harness loom can be split into two RJ22 cables, allowing for the 12VDC to power the unit and the other receiving the Wiegand outputs from the integrated reader. The PDU can activate 2 locks, with simultaneous operation.



IP Access Control

The networkable, intelligent locks can be powered and integrate within Third Party IP Access Control solutions. Typically the handles can be connected to a system through screw terminal connections, the tin open ended wire harness loom can be fitted, allowing for the 12VDC to power the unit and receive the Wiegand outputs from the integrated reader.



BSM

The EA-A01 Southco Security System Integration Kit simplifies the cabling and connections necessary between the Electronic Swing handle with integrated card reader, and any Wiegand based access control system.

Click here to view our **Environ Locking Solutions brochure:**



How to obtain a quotation for an Intelligent Lock Solution

Before we can quote for an intelligent lock solution we require a few basic facts from you:

- 1. What rack do you require the lock to be fitted on
- 2. Which door do you wish to have the locks fitted on Front/rear (please note all locks are not compatible with all door styles -See table below
- 3. Do you wish the system to be standalone Select the SC style handle
- 4. Do you wish the system to have networkable functionality select the H3 style handle
- 5. Do you require keypad, RFID or biometric authentication if RFID what reader technology

Once we have this information we will be able to provide you with a full quotation.

SC: This solution is provided with a battery pack that actives the lock circa 50,000 times.

H3: This solution is operated by 12 VDC and is not provided within the lock kit.

See integration options for more information.

Biometric authentication: only available on H3 series.

To help understand what locks can be fitted to what doors please see below compatibility chart.

These locks are only sold as part of Environ rack and will come fitted complete with the open ended Y cables fitted to the doors (on H3 range) to allow for final fitting into power source and Wiegand output receiver.

Intelligent handle / door compatibility chart

Door	Lock style				
	SC	H3			
SR - Front door	×	✓			
SR - Rear door	×	✓			
CL - Front door	✓	×			
CL - Rear door	✓	×			
ER - Front door	✓	✓			
ER - Rear door	×	✓			
CR - Front door	✓	×			
CR - Rear door	×	×			
WR - Front door	×	×			

for V5

USystems

We partner with USystems an organisation that have sustainability and energy consumption at the heart of what they do. Their mission is to provide data centres of various sizes, including standard, hyperscale and edge with High Performance Compute capabilities with cooling solutions that improve operational and energy efficiency and therefore benefit the environment.



As more industries move towards cloud storage and increase their reliance on IoT infrastructures, the need to locally process data and applications without the concern of bandwidth constraints is essential. Known as Edge computing this is the solution for a local self-sufficient micro data centres designed replace large local infrastructures.

It allows data produced by IoT devices to be processed closer to where it is created instead of sending it across long routes to data centres or clouds. Enabling specific requirements to be handled at distributed locations which act as powerful gateways to this data storage without affecting speed and performance.

Watch the video to find out more.

USystems offer several solutions – click on the links below to find out further details on each range.

Air Cooled Micro Data Centres

Air cooled solutions are best suited for spaces which are typically air-conditioned or have an air supply temperature in which IT equipment is designed to operate in.

EDGE-3 Soundproof MDC

Click here for more information



LX and DX cooled Micro Data Centres

Active cooled solutions can look after their own ambient environment and or room ambient environment. These cooling solutions incorporate the award winning ColdLogik cooling technology.

EDGE-5 Air Conditioned MDC

Click here for more information

EDGE-7 Side Cooler MDC

Click here for more information

EDGE-8 Rear Door Cooler MDC

Click here for more information





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Aisle Containment Modular Data Centres

USystems MDC POD's come in a variety of sizes and duty performances.

EDGE-9 Aisle Containment MDC

Click here for more information



ColdLogik® Rear Door Coolers (RDC)

ColdLogik rear door coolers (RDC) are the first fully intelligent rear door cooler and can save up to 93% energy savings compared to CRACs and up to 45% energy savings over In-Row cooling. These innovative doors can be retrofitted onto existing OEM cabinets and the remove the need for aisle containment or raised floors.

ColdLogik RDC's are the ideal cooling technology for both legacy and new build data centres. Whether the rack density is below 10kW, for typical applications, through to 200kW for high performance compute, ColdLogik RDC's offer the most cost effective and energy efficient cooling solution on the market.

Click here for more information

Watch the video to see how the ColdLogik technology can be deployed into a data centre.



ColdLogik InRow Cooler

The Coldlogik CL80 incorporates the award winning ColdLogik Management System to ensure maximum capacity, efficiency and control. It provides precision cooling for new or retrofit environments where aisle containment is utilised.

Click here for more information



Cold Aisle Containment

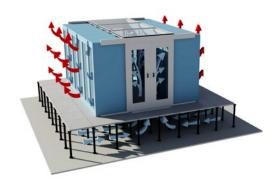
Excel Networking works very closely with Nubis Aisle Containment Solutions to provide flexible vendor independent airflow containment systems that are easily configurable for multiple data centre cooling designs and room characteristics.

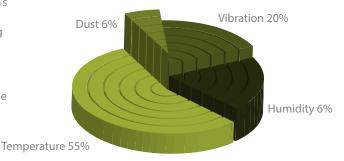
The system can be fitted retrospectively to any existing data centre configuration where racks and cabinets are either homogeneous (uniform height) or heterogeneous (multiple heights) making Nubis the ideal solution for legacy data centres.

What is Cold Aisle Containment?

Cold aisle containment is a non-intrusive bespoke retrofit to data centres, whereby the cold aisle is contained to maximise cooling efficiency. This enables five main key capabilities:

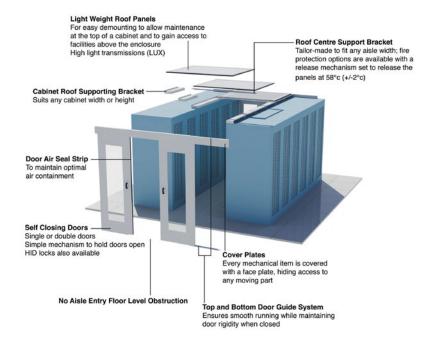
- Preventing recirculation of air back to the computer toom airconditioning (CRAC) units significantly improves the efficiency of the building's cooling system and reduces the company' carbon footprint
- 2. By creating a positive pressure in the cold aisle, air is directed straight to the servers. This makes them run more efficiently, reducing the risk of failure and extending their lifespan.
- 3. In the event of a total cooling shutdown, Cold Aisle containment stops a heating outage for as much as 35mins providing an extra 20 mins to react.
- 4. Being able to regulate the air enables better control of the room's temperature. By increasing the temperature of the CRAC by just 1%C provides a typical saving in the region of 4% of cooling power bills. In addition, the chiller units will make greater use of the natural air temperature (free cooling), further enhancing energy savings.
- 74% of server failures occur in the top third of the rack where the temperature is traditionally hotter. Cold Aisle Containment provides temperature equilibrium across all servers, no matter where they are positioned within the rack.





Electronic Failure Sources

The following illustration demonstrates a typical example of a Cold Aisle Containment system. The corridor is fully enclosed to maximise the efficient use of cold air.



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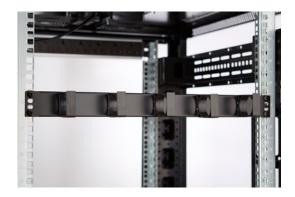
Pre-Configured Racks

At Excel our reputation is founded on our dedication to providing a quality service in every aspect of our business. Our range of Environ Racks provide a solution to meet every installation requirement, which is further enhanced with our configuration services which save installation time on site.

Our Specialist Support Services include Configured Racks for the Environ Floor and Wall Racks, where we install the majority of kit that you need and we deliver it ready configured to site.

What are the benefits of Pre-Configured Racks?

- Reduces installation costs
- Reduces installation times
- Reduces equipment and specialist labour costs
- Fast turnaround typically 2 days
- Covered by the 25-year Excel system warranty when installed by an accredited partner
- Environmentally friendly reduces waste onsite



Features

We pre-install items, exactly where required – including:-

- PDUs horizontal & vertical
- Fan trays
- Patchcord/cable management
- Shelves all types
- Cable tray/basket
- Pre-loomed cabling patchcords, power etc.
- Pre-approved layout drawing/specification
- Pre-labelled



View the Brochure



Watch the video to find out more about Excels Pre-Configured Racks and Cabinets Services





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Onsite Rack Assembly Service

Our Onsite Rack Assembly service is perfect for where access to the installation site is restricted or you have limited time on site.

How it Works

The Environ racks (flat packed), together with any additional accessories that you've ordered, including shelves, cable management, PDUs etc would be delivered to site by our normal delivery service the day before. Our experienced team of rack builders will visit the location the day after and will position the rack(s) and build them to the agreed specification.

Features

- Save time on site for your installation team
- We can fit shelves, cable management and PDUs if required
- We will provide a full Q.C. inspection of the built rack(s) and provide a handover to the customer
- We can provide method statements and risk assessments, including an advance assessment provision, should they be required
- Our team will include a first aider and ECS certification















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