*U*Coustic
Soundproof Rack

USystems
A brand of legrand®

CABLENET

Contents

The UCoustic Rack

The UCoustic Soundproof Rack delivers the ultimate combination of noise reduction and air-cooled thermal performance. It removes the need for a costly comms room and can be used in any area including; offices, receptions, hallways, and cupboards, without concern for noise or temperature issues. The UCoustic Rack acts as a 1m² server room and allows for a safe and secure deployment of IT equipment whenever and wherever it is needed, saving space, cost, and deployment time.

The UCoustic Soundproof Rack is available in 3 different heights, 780mm wide and 1100mm deep with the ability to increase the depth by 300mm with the extension frame. The active rack has two EC fans in the rear doors to deal with higher heat loads and to ensure maximum energy efficiency, they are controlled with variable fan speed controllers with a dedicated fan curve.

Save Money, Time and Space

- Cost Effective and Green
  - No need for dedicated comms room
- Cool
  - Innovative air-flow design means you can dissipate up to 12kW of heat with no special cooling requirements
- Easy to deploy
  - With our exclusive ramp solution, delivery to site is as easy as plug and play
- Expandable
  - Deploy another UCoustic when required
- Portable
  - Easy to relocate to another room or building

Typical Applications

- Offices and Meeting Rooms
- Hallways and Cupboards
- Banks
- Hospitals and GPS
- Manufacturing Plants
- Laboratories
- Schools
- Hotels

A Sound Investment

Removes 99.9% of IT Noise

A driving force behind deploying active IT equipment into the middle of a working environment is saving money, however it can be off-putting and potentially detrimental to working conditions in terms of the constant evasive noise and excessive heat generated from the active equipment.

The UCoustic Soundproof Rack effectively removes up to 28.5dBA (99.9%) of IT noise, turning server noise into a whisper.

Unrivaled Air Cooling
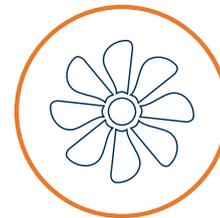
12kW Heat Dissipation

After choosing your IT equipment the second most important decision is how to protect it. By clever design the UCoustic unique cooling system enables the remove of up to 12kW of heat load in a 42U rack.

The UCoustic can also remove the exhaust heat rejected into the room from the rack via a ducting kit, again making for a pleasant and controlled working environment.

Energy and Space Saving

No costly comms room required

Reducing energy bills is always desirable but expecting a standard server rack to assist in this aspect seems impossible. USystems UCoustic Soundproof Rack is uniquely different in design. Incorporating EC fan technology as standard, which means an immediate energy reduction.

Rapid Deployment

Exclusive Ramp Solution

To avoid unnecessary delays on site, the UCoustic Rack is shipped on a heat treated pallet and ramp system to allow for the safe, quick and easy movement of the UCoustic rack to the floor. The ramp system also protects the top of the rack against minor transport damage.

Key Features

- In-Line Fan Speed Controller
  - Pre-set fan curve for efficient and controlled cooling
- Temperature controller
  - EC Fan Technology
- Energy saving and hot swappable
  - Fully adjustable 19" mounting angles fitted front and rear
- Single handle and two-point locking
  - Providing high security – electronic upgrade available
- Heavy duty castors, plinths, and levelling feet
  - For safe and rapid deployment
- IP44 Rated
  - IP54 Upgrade Option
- Foam Cable Entry System
  - Speedy installation without compromise to performance
- Anti air-recirculation kit
  - Saves energy and maintain hardware performance
- Cable Entry
  - Three entry points at the top and bottom of the rack.
- All doors and panels are easy to remove and refit
  - Supports maintenance of IT equipment
- Racks are finished in Black RAL9005 or Light Grey RAL7035

Optional Upgrades

- Door Dust Filters
  - Providing a dust free operational environment
- Cable Tray
  - Ensures best cabling practice
- Cable Management Fingers
  - Ideal for tidy cabling and patching
- Plinth Panels
  - Provides a sleek finish that compliments the surroundings
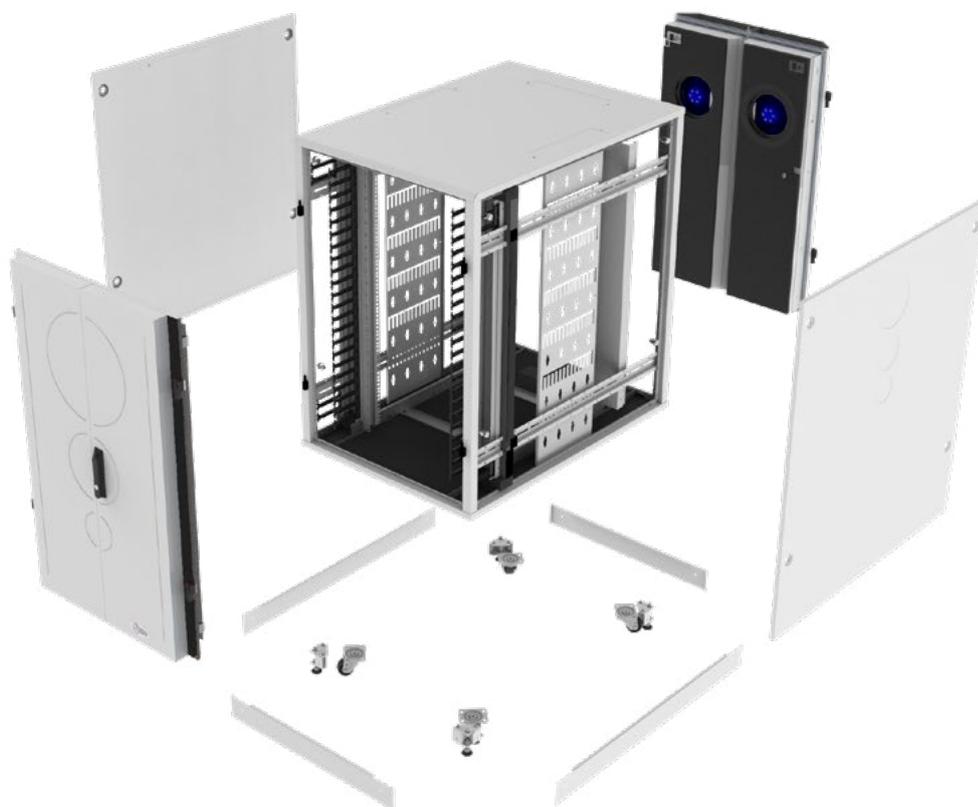
EC fan technology
Energy saving and hot swappable

### InLine Fan Speed Controller
Pre-set fan curve for cooling

Foam cable entry system
Speedy installation without compromise to performance

Swing handle and two point locking
Electronic upgrade available

Heavy duty castors, Plinth corners, levelling feet (standard)
For safe rapid deployment
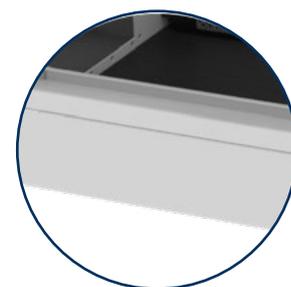
Plinth panels (optional upgrade)
For that finishing touch

UCoustic Technical Information

General		UCoustic 12U	UCoustic 24U	UCoustic 42U
Order Code — 100 to 115v	Light Grey	UCG-1211-15	UCG-2411-15	UCG-4211-15
	Black	UCB-1211-15	UCB-2411-15	UCB-4211-15
Order Code — 200 to 240v	Light Grey	UCG-1211-24	UCG-2411-24	UCG-4211-24
	Black	UCB-1211-24	UCB-2411-24	UCB-4211-24
H x W x D (max.)	mm	714 x 780 x 1250	1247 x 780 x 1250	2047 x 780 x 1250
Weight (Rack)	kg (lbs)	140 (308)	204 (449)	328 (723)
Weight (300mm Extension Frame)	kg (lbs)	23 (51)	33 (73)	47 (104)
Dynamic Load (on castors) *	kg (lbs)	750 (1653)		
Static Load *	kg (lbs)	750 (1653) On Castors		
		1500 (3307) On Levelling Feet		
Index of Protection **		IP44 - Upgrade to IP54 available		
Noise reduction of IT noise	dBA	28.5dBA (99%)		
Paint Finish	Light Grey	Semi Gloss powder coat - RAL 7035		
	Black	Semi Gloss powder coat - RAL 9005		
Frame Material	mm	1.5mm CR4 steel		
Passive and Active door Material	mm	1.0mm, 1.2 & 2.0 mm CR4 steel		
Top Cover Material	mm	1.2mm CR4 steel		
Mounting Angles Material	mm	2.0mm CR4 steel		
Foam		Fire Retardant		
EC Fan Control		Up to 2 - 2 pre-set fan curves		
Cooling Capacity		UCoustic 12U	UCoustic 24U	UCoustic 42U
Max. Thermal Load	kW	12		
Fan Type		Backward curve EC Fan		
Cooling Type		Air Cooled		
Air Cooling Capacity (230V)	kW	6.2	10.5	11.5
Air Cooling Capacity (115V)	kW	6	9	10

*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.

**This figure will be affected if the filter is not fitted/regularly maintained

Drawing

Standard footprint internal dimensions
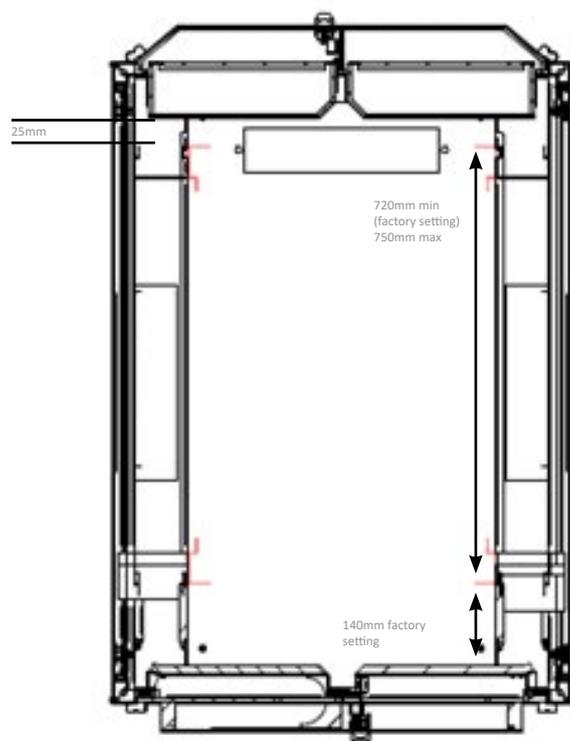
Internal dimensions with 300mm extension

Rear Doors

25mm

720mm min
(factory setting)
750mm max

140mm factory
setting

375mm

720mm min
(factory setting)
750mm max

1217mm with
extension

140mm factory
setting
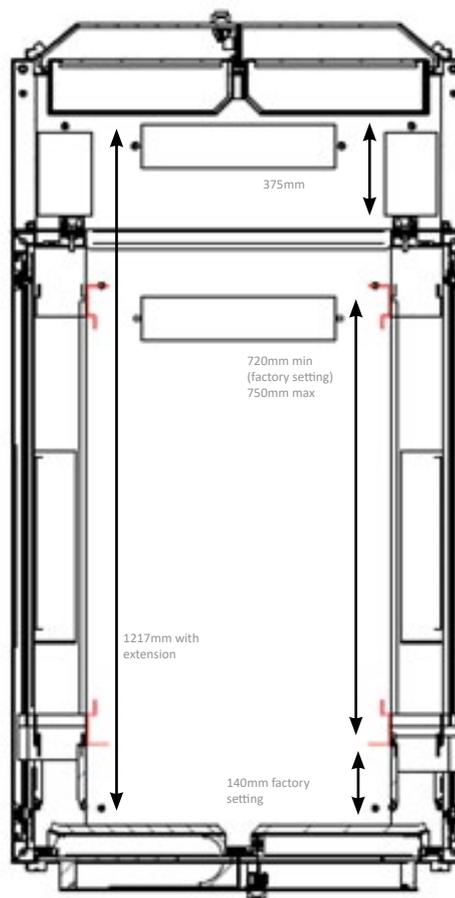
Front Doors

Please refer to official technical drawings

Materials and Finish

|		
Frame , cladding and accessories 1.2, 1.5mm, 2.0mm & 3mm CR4 steel	**Gasket** Fire retardant	**Semi gloss powder coat**
Earth bonding kit 4mm diameter earth cable	**Dust filter** Reticulated foam	Light grey RAL 7035
Polyolefin film NG25-0.1mm	**Cable entry system** Fire retardant foam	Black RAL 9005 Option with extended lead
Soundproof foam DST0880 – density 26 to 32 kgm-3	**Fixed plinth, HD castors and levelling feet** 750kg dynamic load, 1500kg static load	

UCoustic Accessories

Ducting Kit

The UCoustic air ducting kit offers massive cost savings by reducing the need for ambient air conditioning and heating. It enables hot exhaust air to be directed outside the room or building, saves on energy, and keeps the room cool and protects 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 rack and door opening is not affected when the ducting kit is utilised
- Retrofittable
- Can be directed to exhaust through the ceiling or a wall
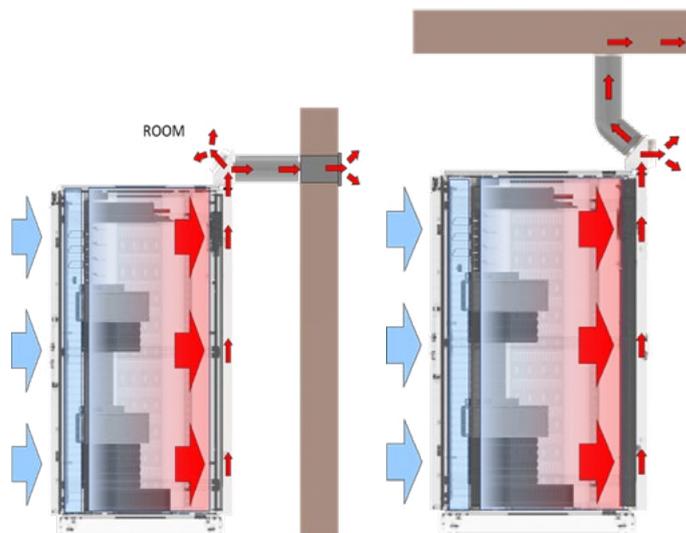
Cisco Side Venting Kit

We supply a side venting kit for active IT equipment which cools from side to side, such as Cisco Switch Gear.

Hot air out at rear of cabinet

Cool air in from front of cabinet
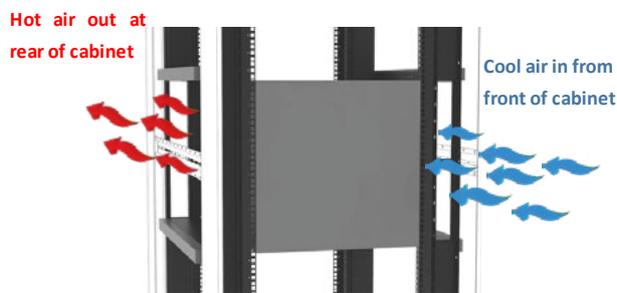
Extra Depth Server Extension Kit

To accommodate greater depth IT equipment such as some of the latest high-power servers, we designed an extension kit that increases the depth of the UCoustic by 300mm, accommodating this type of specialist, deeper equipment. The extension kit is fully retrofittable and will not adversely affect the performance of the rack.
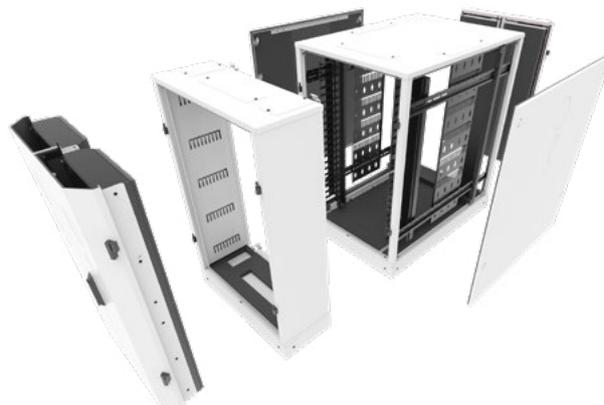
Option		12U Compliant	24U Compliant	42U Compliant
Packaged EDGE-3 Upgrade Kit	Light Grey	E3G-12-EDGE-AA	E3G-24-EDGE-AA	E3G-42-EDGE-AA
	Black	E3B-12-EDGE-AA	E3B-24-EDGE-AA	E3B-42-EDGE-AA
300mm Deep Server Extension Kit (Factory Fitted)	Light Grey	E3G-1230-EX-AF	E3G-2430-EX-AF	E3G-4230-EX-AF
	Black	E3B-1230-EX-AF	E3B-2430-EX-AF	E3B-4230-EX-AF
300mm Deep Server Extension Kit (Packaged Accessory)	Light Grey	E3G-1230-EX-AA	E3G-2430-EX-AA	E3G-4230-EX-AA
	Black	E3B-1230-EX-AA	E3B-2430-EX-AA	E3B-4230-EX-AA
IP54 Upgrade Kit (Factory Fitted)		E3X-12-IP-AF	E3X-24-IP-AF	E3X-42-IP-AF
IP54 Upgrade Kit (Packaged Accessory)		E3X-12-IP-AA	E3X-24-IP-AA	E3X-42-IP-AA
Fixed Kick Plinth Kit (Packaged Accessory)	Light Grey	E3G-PK-AA		
	Black	E3B-PK-AA		
Top Ducting Exhaust System (Factory Fitted)	Light Grey	N/A	E3G-DS-AF	
	Black		E3B-DS-AF	
Top Ducting Exhaust System (Packaged Accessory)	Light Grey		E3G-DS-AA	
	Black		E3B-DS-AA	
Cisco Side Venting Kit (Factory Fitted) *	Black	E3B-12-CK-AF	E3B-24-CK-AF	E3B-42-CK-AF
Cisco Side Venting Kit (Packaged Accessory) *	Black	E3B-12-CK-AA	E3B-24-CK-AA	E3B-42-CK-AA
75w Cable Tray (Factory Fitted)	Black	E3B-1275-CT-AF	E3B-2475-CT-AF	E3B-4275-CT-AF
75w Cable Tray (Packaged Accessory)	Black	E3B-1275-CT-AA	E3B-2475-CT-AA	E3B-4275-CT-AA
300w Cable Tray (Factory Fitted)	Black	E3B-1230-CT-AF	E3B-2430-CT-AF	E3B-4230-CT-AF
300w Cable Tray (Packaged Accessory)	Black	E3B-1230-CT-AA	E3B-2430-CT-AA	E3B-4230-CT-AA
Cable Management Fingers (Pair) (Factory Fitted) *	Black	E3B-12-CM-AF	E3B-24-CM-AF	E3B-42-CM-AF
Cable Management Fingers (Pair) (Packaged Accessory) *	Black	E3B-12-CM-AA	E3B-24-CM-AA	E3B-42-CM-AA
Passive Filter Replacement Kit (Pair) (Packaged Accessory)		E3X-12-PF-AA	E3X-24-PF-AA	E3X-42-PF-AA
Active Filter Replacement Kit (Pair) (Packaged Accessory)		E3X-AF-AA		
Foam Cable Entry Block (Packaged Accessory)		EXX-CE-AA		

*Note—Cisco Side Venting Kit and Cable Management Kit will not both fit, please only select one per EDGE-3
Factory Fitted items must be ordered with EDGE-3 cabinet

Edge-Ucoustic Accessories Part 1

Packaged Ucoustic to EDGE-3 12u Upgrade Kit (Black)	E3B-12-EDGE-AA
Packaged Ucoustic to EDGE-3 24u Upgrade Kit (Black)	E3B-24-EDGE-AA
Packaged Ucoustic to EDGE-3 42u Upgrade Kit (Black)	E3B-42-EDGE-AA
Packaged Ucoustic to EDGE-3 12u Upgrade Kit (Light Grey)	E3G-12-EDGE-AA
Packaged Ucoustic to EDGE-3 24u Upgrade Kit (Light Grey)	E3G-24-EDGE-AA
Packaged Ucoustic to EDGE-3 42u Upgrade Kit (Light Grey)	E3G-42-EDGE-AA
Packaged EDGE-3 12u Cisco Side Venting Kit	E3B-12-CK-AA
Packaged EDGE-3 24u Cisco Side Venting Kit	E3B-24-CK-AA
Packaged EDGE-3 42u Cisco Side Venting Kit	E3B-42-CK-AA
Packaged EDGE-3 12u 300mm Deep Server Extension Kit (Grey)	E3G-1230-EX-AA
Packaged EDGE-3 24u 300mm Deep Server Extension Kit (Grey)	E3G-2430-EX-AA
Packaged EDGE-3 42u 300mm Deep Server Extension Kit (Grey)	E3G-4230-EX-AA
Packaged EDGE-3 12u 300mm Deep Server Extension Kit (Black)	E3B-1230-EX-AA
Packaged EDGE-3 24u 300mm Deep Server Extension Kit (Black)	E3B-2430-EX-AA
Packaged EDGE-3 42u 300mm Deep Server Extension Kit (Black)	E3B-4230-EX-AA
Packaged EDGE-3 12u IP54 Seal Upgrade Kit	E3X-12-IP-AA
Packaged EDGE-3 24u IP54 Seal Upgrade Kit	E3X-24-IP-AA
Packaged EDGE-3 42u IP54 Seal Upgrade Kit	E3X-42-IP-AA
Packaged EDGE-3 Top Ducting System 24u or 42u (Grey)	E3G-DS-AA
Packaged EDGE-3 Top Ducting System 24u or 42u (Black)	E3B-DS-AA
Packaged Inline Fan Speed Controller	XA0-0002-XX-AA
Fitted Schuko Angled Plug – IEC C13 (Right Angled) – 2m	UM4-0050-AA
Packaged EMS (Edge Management System) Assembly	UM4-0001-AA
Packaged EDGE Camera Security Kit	EXX-CS-AA
Packaged EDGE-3 780w1100d 90h Plinth Kit Panels Only (Black)	E3B-PK-AA
Packaged EDGE-3 780w 1100d 90h Plinth Kit With Corners (Black)	E3B-PKC-AA
Packaged EDGE-3 780w1100d 90h Plinth Kit Panels Only (Light Grey)	E3G-PK-AA
Packaged EDGE-3 780w 1100d 90h Plinth Kit With Corners (Light Grey)	E3G-PKC-AA

Edge-Ucoustic Accessories Part 2

Packaged EDGE-3 12u 75w Cable Tray (Single)	E3B-1275-CT-AA
Packaged EDGE-3 24u 75w Cable Tray (Single)	E3B-2475-CT-AA
Packaged EDGE-3 42u 75w Cable Tray (Single)	E3B-4275-CT-AA
Packaged EDGE-3 12u 300w Cable Tray (Single)	E3B-1230-CT-AA
Packaged EDGE-3 24u 300w Cable Tray (Single)	E3B-2430-CT-AA
Packaged EDGE-3 42u 300w Cable Tray (Single)	E3B-4230-CT-AA
Packaged EDGE-3 12u Cable Management Fingers (Pair)	E3B-12-CM-AA
Packaged EDGE-3 24u Cable Management Fingers (Pair)	E3B-24-CM-AA
Packaged EDGE-3 42u Cable Management Fingers (Pair)	E3B-42-CM-AA
Packaged EDGE Temperature and Humidity Sensor	EXX-TH-AA
Packaged EDGE Contact Sensor & Mounting Bracket	EXX-CO-AA
Packaged EDGE-3 12u Passive Filter Replacement Kit FrontPair	E3X-12-PF-AA
Packaged EDGE-3 24u Passive Filter Replacement Kit FrontPair	E3X-24-PF-AA
Packaged EDGE-3 42u Passive Filter Replacement Kit FrontPair	E3X-42-PF-AA
Packaged EDGE-3 Active Filter Replacement Kit (Rear Pair)	E3X-AF-AA
Packed EDGE-3 1U New Style Quick Release Blanking Panel	RA0-0201-AA
Packed EDGE-3 2U New Style Quick Release Blanking Panel	RA0-0202-AA
Packed EDGE-3 3U New Style Quick Release Blanking Panel	RA0-0203-AA
Packed EDGE-3 4U New Style Quick Release Blanking Panel	RA0-0204-AA
Packed EDGE-3 5U New Style Quick Release Blanking Panel	RA0-0205-AA
Packaged EDGE 55 SV Foam Cable Entry Block (Single)	EXX-CE-AA
Edge-3 12u Open Heat Treated Crate	YA0-0476-XX
Edge-3 24u Open Heat Treated Crate	YA0-0508-XX
Edge-3 42u Open Heat Treated Crate	YA0-0507-XX
Edge-3 12u Closed Standard Plywood Crate	YA0-0479-XX
Edge-3 24u Closed Standard Plywood Crate	YA0-0508-PLY
Edge-3 42u Closed Standard Plywood Crate	YA0-0507-PLY
Packaged Edge 3 Baying Kit (Black)	UE6-4585-AA-B
Packaged Edge 3 Baying Kit (Light Grey)	UE6-4585-AA-G
Packaged EDGE C13 To C14 Power Cable	EXX-C13C14-AA
Packaged Schuko Angled Plug – IEC C13 (Right Angled) – 2m	EXX-SCHUKO-AA
Packaged UCoustic/Edge 3 Earth Kit	UE4-0101-AA
Packaged Hose Clips - Size/Diameter: 60-170mm - Pair	CM-DUC-0005-AA-AA
Packaged 8mmx10mm X 10M (EF02+DST0880) IP/SEALING GASKET	FOA-3504-XX-AA

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