

# Enhanced Data Centre Infrastructure



*Powering Business Worldwide*

# Energizing a world that demands more.

Discover today's Eaton.

## Powering business worldwide

As a global power management company, we help customers worldwide manage the power needed for buildings, aircraft, trucks, cars, machinery and businesses.

Eaton's innovative technologies help customers manage electrical, hydraulic and mechanical power more reliably, efficiently, safely and sustainably.



*Powering Business Worldwide*



## We deliver:

- **Electrical solutions** that use less energy, improve power reliability and make the places we live and work safer and more comfortable
- **Hydraulic and electrical solutions** that enable machines to deliver more productivity without wasting power
- **Aerospace solutions** that make aircraft lighter, safer and less costly to operate, and help airports operate more efficiently
- **Vehicle drivetrain and powertrain solutions** that deliver more power to cars, trucks and buses, while reducing fuel consumption and emissions

We provide integrated solutions that help make energy, in all its forms, more practical and accessible.

With 2015 sales of \$20.9 billion, Eaton has approximately 100,000 employees around the world and sells products in more than 175 countries.



## Eaton's electrical business

### Eaton is a global leader with expertise in:

- Power distribution and circuit protection
- Backup power protection
- Solutions for harsh and hazardous environments
- Lighting and security
- Structural solutions and wiring devices
- Control and automation
- Engineering services

Eaton is positioned through its global solutions to answer today's most critical electrical power management challenges. With 100 years of electrical experience behind us, we're energized by the challenge of powering up a world that demands twice as much energy as today. We're anticipating needs, engineering products and creating solutions to energize our markets today and in the future.

We are dedicated to ensuring that reliable, efficient and safe power is available when it's needed most.

[Eaton.com](http://Eaton.com)



## Table of contents

### Data Centre solutions

Our capabilities	6
What's your challenge	7
DRS Series general rack applications	8
DRS Series specialised rack applications	10
DRS Series rack specification	12
DRS Series dimensions	14

### DRS Series rack platforms

Introduction	15
Overview	16
Basic & Network racks	17
Active & Active+ racks	18
Switch & Switch+ racks	19
Max & Closed loop racks	20
Cabling racks	21
DRS - family table	22
DRS - part number configuration	23

### Speciality racks

Introduction	24
Distribution racks	25
Colocation & Multi hosting racks	26
3 into 2 racks	27
High density cabling racks	29
Speciality part number configuration	30
RE Series 2 Post rack system	31

### Accessories

Introduction	35
General accessories	36
Earthing accessories	37
In-rack horizontal cable management	38
In-rack vertical cable management	41
Cable basket & trays	42
Cable hoops	43
Cable ring kits	44
Velcro® tie wraps & straps	44
In rack air management	45
Air management return ducts	49
Rack shelving	52

### Thermal management

Introduction	55
Passive air	56
Active air	59

### Intelligent infrastructure for data centers

Intelligent infrastructure for IT rooms and data centres	62
Power protection	63
Power distribution	64
Power management	66
Data center infrastructure monitoring	66

# Our capabilities

Eaton has over 50 years of experience in providing engineered solutions for Data Centres.



Throughout this time, we have witnessed the constant change in IT equipment that puts additional demands on the physical infrastructure of a Data Centre. Data Centres are designed to last 20 plus years, however IT upgrades will necessitate major changes are regularly made during this time.

The following guide brings together all of our standard Data Centre solutions in a way that matches the business needs of the diverse range of Data Centre customers. Eaton has a comprehensive range of products that address the needs of all types of Data Centres businesses from small data closets to large multi megawatt facilities.

As there is no such thing as a standard Data Centre, Eaton's standard is to meet the challenges of most Data Centre needs. However, should you require a product or solution not specifically shown in this guide, please contact us to arrange a call with one of our certified Data Centre experts.

# What's your challenge?

Although projects can differ significantly, the return on capital (ROC) is often a complex trade-off involving initial capital (CAPEX), the total cost of ownership (TCO) and operating expense (OPEX).

## Physical Infrastructure

**Adaptability** - Data Centres will evolve and change significantly throughout their typical 20 years of beneficial operation. Eaton has a range of cost-effective flexible solutions, from racks to cable management, specifically designed to be reconfigurable and upgradeable throughout the life of your Data Centre.

**Scalability** - What is your Data Centre business model? Technology will drive a repurposing of your Data Centre every 3 to 5 years. Whatever your need, our Data Centre application team is ready to assist in helping you find the ideal solution to cater for your initial and future state needs.

**Design Robustness** - Eaton's DRS Series is designed and built in the UK to all recognised international standards. With over 50 years of experience and multiple accreditations, our products are designed to meet the most exacting performance needs and ensure that IT infrastructure is secure and protected.

**Power** - Ensuring you can protect, deliver, manage and monitor power and energy throughout the entire Data Centre is critical to IT services availability and operational efficiency.

**Cooling** - Virtually every kW of electrical energy consumed by IT equipment is transformed to heat. Managing heat is critical in avoiding downtime, reducing energy consumption and ultimately improving PUE. Eaton offers a comprehensive range of air management, active and passive cooling products to suit any Data Centre application.

**Monitoring** - You can't manage what you can't measure. Eaton's range of monitoring solutions supports the management of Data Centre power and the cooling of critical equipment, automatically ensuring high availability, optimum environment and operating costs.

**Security** - Data is your most valuable asset and securing it is a priority. Whether you are an Enterprise, Managed Service, or Multi Hosting Data Centre, Eaton has a range of security products to secure everything from cables to your entire whitespace installation.

At Eaton we are committed to helping our customers solve the complex questions. On the following pages you will understand how our products and services come together to form our "Enhanced Data Centre infrastructure solution".

Our objective is to provide superior products and services to contribute to your business success.

## Our products

- **Access to a comprehensive range of rack and infrastructure solutions:**
  - Pre-configured designs to help with product selection
  - For major projects, a complete range of product configuration tools to tailor our products to your specific needs
- **Comprehensive accessory products to cater for:**
  - Cooling and Air Management
  - Critical Power
  - Monitoring and Access Control
  - Security

## Our services

- **Advice on EU code of conduct and how we can help improve operating efficiency.**
- **Project design reviews including financial modelling and benefit analysis.**
- **Project support services including:**
  - Site surveys and layout optimisation
  - Prince II project management
- **Comprehensive technical support documentation including data sheets and submittal drawings and individual project catalogues.**
- **Access to our DCDA trained applications and engineering teams to help you make the tough decisions.**

## DRS Series general rack applications



### Description

The configuration of the rack is often critical to the effective and efficient operation of the hosted equipment. With a wide range of feature options it can sometimes be a challenge to define what is actually needed or which configuration provides the optimal solution.

Using the expertise gained from over 50 years of experience supplying technical enclosures for the data market, Eaton has developed a range of application led rack platforms to help shorten and simplify the decision making process. Further, many of the application configurations follow industry "best practices" offering best in class operation and efficiency.

We know that application demands change over time so all of our rack platforms and application solutions are modular allowing reconfiguration at any time of the rack's life cycle.

### Basic rack

Available in 600mm and 800mm wide variants the "Basic rack" is usually configured with solid doors front and rear. With the solid doors limiting air flow through the rack a "Basic rack" has the capability to support active equipment densities of up to 1.5kW, subject to the room environment\*. A "Basic rack" has limited overhead service entry points, typically offering entry points capable of servicing cabling volumes of around 120 cables, with optional accessories available to support backbone or patch cabling as appropriate. The base of the rack is typically open and the rack is usually configured with fixed feet.

A "Basic rack" configuration typically provides the lowest cost configuration option but also has the lowest application flexibility.

### Network rack

Available in both 600mm and 800mm wide variants, a "Network rack" differs from a "Basic rack" in that it is typically configured with vented doors front and rear. Configuring the rack with vented doors allows greater air flow through the rack space, increasing the rack's ability to cope with active equipment densities to around 3kW per rack\*. With regards to cabling infrastructure the "Network rack" is configured to accept overhead cabling volumes of up to 120 cables and like the "Basic rack" has an open base with fixed feet.

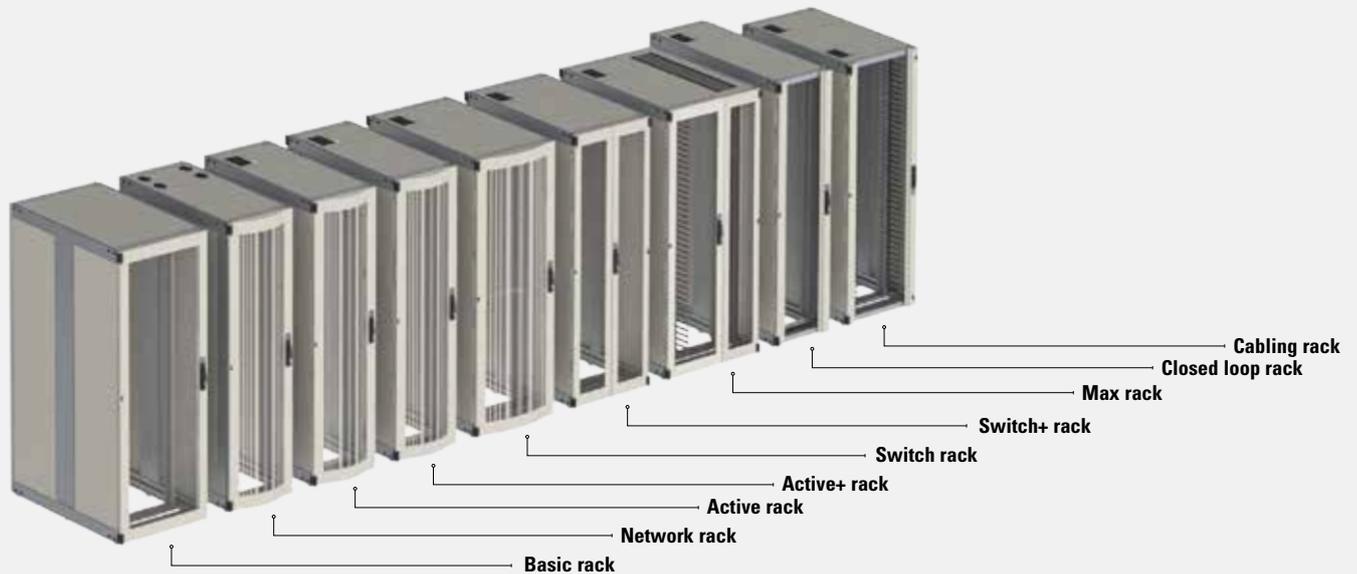
A "Network rack" configuration typically provides greater application flexibility at a moderately higher cost when compared to the "Basic rack". With equipment densities on the rise this configuration provides a more "future proof" option.

### Active or active+ rack

The "Active rack" and "Active+ rack" is a 600mm wide rack configured for conventional server hosting, where the cooling air flow operates in a front to rear direction. The "Active rack" is configured with single vented doors front and rear, whilst the "Active+ rack" has double vented doors fitted at the rear making it ideal for applications where space may be limited. The "Active rack" and "Active+ rack" configurations include internal air management baffles promoting the segregation of the cold air feed from the hot air return and the avoidance of hot spots. Air segregation offers improved system efficiency by ensuring the cold air reaches the equipment at the lowest temperature, which promotes improved cooling capabilities, facilitating the housing of equipment densities of up to 5kW per rack\*. Overhead service entry points are configured to allow data and power entries to be segregated in volumes of up to 120 cables.

An "Active rack" or "Active+ rack" configuration typically provides for systems with moderate equipment density capabilities for efficient system operation. These configurations also provide the ideal basis for upgrade to contained aisles, offering further improvements in operational efficiency.

\*Equipment heat load density indications assume the room environment is operating within the bounds of the recommendations as detailed by ASHRAE TC9.9



### Switch or switch+ rack

The "Switch rack" and "Switch+ rack" configurations are 800mm wide racks, arranged to deal with multi directional cooling demands, often encountered with network switches, where cooling equipment strategies run front to rear as well as left to right. "Switch racks" are configured with single vented doors at the front and double vented doors at the rear and the "Switch+ rack" is configured with double vented doors front and rear. Like the "Active rack" variants, the "Switch rack" and "Switch+ racks" incorporate internal air management baffles designed to be able to cope with a mixture of styles of active equipment, whilst still supporting equipment densities of up to 5kW per rack\*. Like the "Active rack" the "Switch rack" and "Switch+ rack" are configured to allow overhead data and power entries to be segregated. The default configuration allows the entry of around 120 cables but higher volumes can be accommodated if needed.

Like the "Active Rack" the "Switch Rack" and "Switch+ Racks" are able to manage moderate equipment densities and provide the ideal basis for upgrade to contained aisles.

### Max rack

The "Max rack" is a 1000mm wide rack, specifically designed to support high density switching, backbone cabling and patching applications in a single rack envelope. The "Max rack" is configured as standard with double vented doors front and rear, and with internal air management baffles that can support equipment loads of up to 5kW\*. The "Max rack" configuration offers extensive cable and thermal management features providing the ideal specification to handle multi directional aspirating switches as well as high density cabling support.

Designed for dedicated network switch hosting, the "Max rack" provides an optimised environment for high density switch applications.

### Cabling rack

The "Cabling rack" is a 800mm wide rack, typically configured with solid doors front and rear with the facility to accommodate active equipment densities of up to 1.5kW\*. As most cabling structures are passive there is little need to provide higher levels of cooling capability, afforded with vented doors, indeed vented doors in this application could lead to poor installation efficiency. "Cabling racks" are configured with overhead service entry points designed to accommodate cabling volumes of more than 120 cables, with optional accessories available to support backbone or patch cabling as appropriate.

The "Cabling rack" configuration provides the ideal specification for moderate density cabling application, promoting optimum system efficiency.

\*Equipment heat load density indications assume the room environment is operating within the bounds of the recommendations as detailed by ASHRAE TC9.9

## DRS Series specialised rack applications

### Description

In today's industry there are a number of benefits that can be achieved by deploying a single rack platform into a data room environment. These can include:

- A single look and feel undoubtedly improves the aesthetics of the installation. If you have customers visiting the facility what is the first thing they see in the data room?
- The ability to easily mix and match rack configuration in a common environment without compromising operational efficiency which in turn helps to lower operational costs. This includes the ability to make common air management schemes, such as aisle containment, across a range of different rack applications.
- The ability to easily adapt racks to other application formats, providing greater long term flexibility and avoiding the need to prematurely obsolete and replace racks.
- Commonality enables tighter control and helps simplify the documented change processes. Research shows that human error continues to be one of the top causes of network failures.
- Common product, simplifies maintenance and reduces spares inventories.

Eaton has over the years developed a range of dedicated speciality rack designs to meet the demands of many uncommon applications. Although these rack designs may be deployed in small numbers they can make the difference to the overall system capability. Importantly they enable installations to be designed and deployed using a single rack platform, leveraging the benefits highlighted below.

### Distribution rack

The "Distribution rack" is an 800mm wide rack with no external cladding, providing the ideal solution for applications where security is managed at room level rather than at rack level. It can provide a viable alternative to conventional 2-Post or 4-Post racks, whilst still offering the ability to re-configure to another application later. Being an open structure, the "Distribution Rack" can cope with moderate to high density cabling applications with optional accessories to support backbone and patching structures. Designed to support network switch environments where equipment loads are up to 1.5kW\*. Ideally suited to stand-alone applications or dedicated application zones, the "Distribution rack" configuration has limited air management capabilities and is not suitable in a hot and cold aisle configuration.

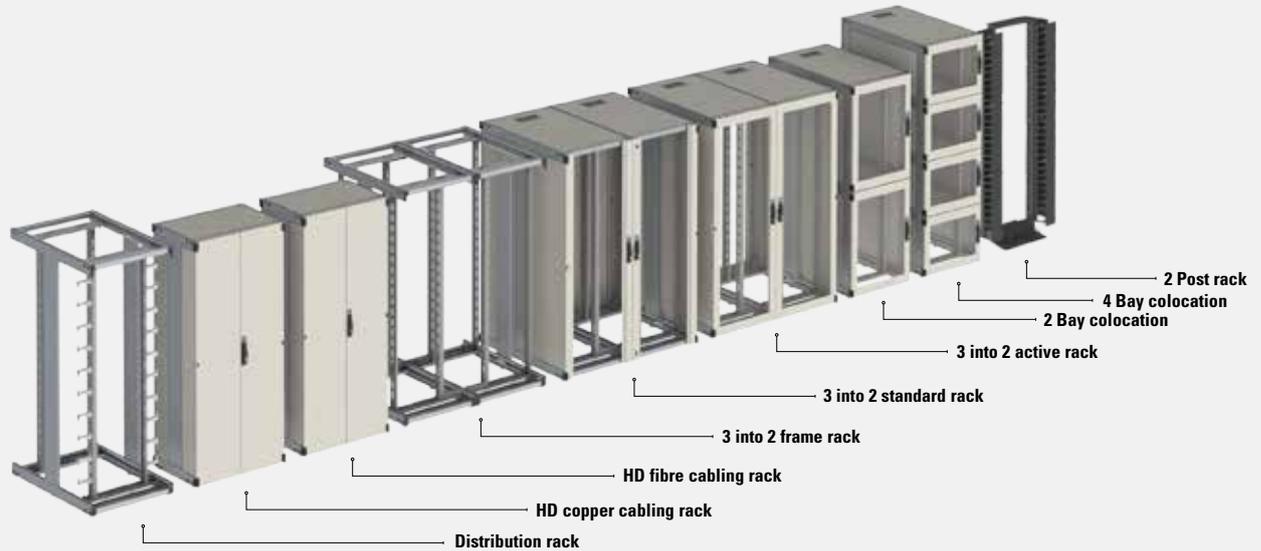
### HD copper cabling rack

A "HD copper cabling rack" is an 900mm wide by 500mm deep rack with a single sided 19" mounting configuration. The additional rack width provides increased space down each side of the rack allowing over 1,000 network port connections per rack envelope. They provide a unique working and access environment that saves installation time and on-going systems management, especially for newer, higher speed copper cabling technologies. The 500mm deep foot-print allows for two high density racks to be configured back to back in a 1,000mm deep footprint.

### HD fibre cabling rack

Based on the same footprint as the "HD copper cabling rack" the "HD fibre cabling rack" also has a single sided 19" mounting facility. In the "HD fibre cabling rack" configuration the 19" mounting facility is offset to the left of the rack, providing increased space on the right hand side of the rack to accommodate and manage larger cable volumes whilst ensuring cable integrity by managing increased cable bend radii requirements. Like the "HD copper cabling rack" two fibre cabling racks can positioned back to back in a 1000mm deep footprint.

*\*Equipment heat load density indications assume the room environment is operating within the bounds of the recommendations as detailed by ASHRAE TC9.9*



### 3 Into 2 rack

A totally unique space saving system the “3 into 2 rack” is designed to maximise the amount of available “U” space within a Data Centre or IT environment. The “3 into 2 Rack” is based on two 800mm wide racks adapted to allow three pairs of compact 19” rails to be fitted. Typically shipped as two separate 800mm wide racks, which are easily bayed together on site.

Ideal for applications where space is limited, including containerised configurations, the “3 into 2 rack” can offer up to 11% more U mounting space when compared to conventional bayed rack configurations.

### 2 & 4 Bay colocation rack

Designed specifically for co location / multi hosting Data Centres the “2-Bay colocation rack” and “4-Bay colocation Rack” provide segregated compartments or bays in a single rack foot-print. Typically configured with vented doors front and rear, the individual bays or compartments can support total rack active equipment loads of up to 5kW\* (2.5kW for each bay on a 2-Bay configuration and 1.25kW for each bay on a 4-Bay configuration). Each compartment or bay is configured to be individually managed with separate cable channels and combination locks providing individual bay security.

The Co Locate rack configuration allows for service providers to offer rack solutions to customers who do not need a full rack solution. This maximises available space, power and cooling while increasing Total Cost of Ownership (TCO) of the Data Centre whitespace.

### 2 Post rack

The “2 Post rack” is a basic rack structure, providing effectively one pair of fixed 19” rails secured to the floor with a simple floor mounting bracket. Typically used as an alternative to the “Distribution Rack”, the “2 Post rack” is primarily designed for moderate to high density cabling applications, including network switch mounting. These racks are typically available with a range of accessories to support vertical backbone and patch management, including options such as single sided or double-sided vertical cable channels. They are not ideally suited to server type applications as many server configurations typically require four point mounting. The open configuration means that the racks lend themselves to applications where security is managed at room level rather than at rack level. Unit level security options are readily available as common accessories and can be deployed to protect individual system installations including switches and patch panels. Typically suited to network switch type active environments where equipment loads are up to 1.5kW\*.

Ideally suited for stand-alone applications or dedicated application zones, the “2 Post rack” configuration has limited air management capabilities and can compromise installations if deployed in a hot and cold aisle configuration. They can be bayed together in multiples with cable management mounted between bayed racks.

\*Equipment heat load density indications assume the room environment is operating within the bounds of the recommendations as detailed by ASHRAE TC9.9

## DRS Series rack specification selection

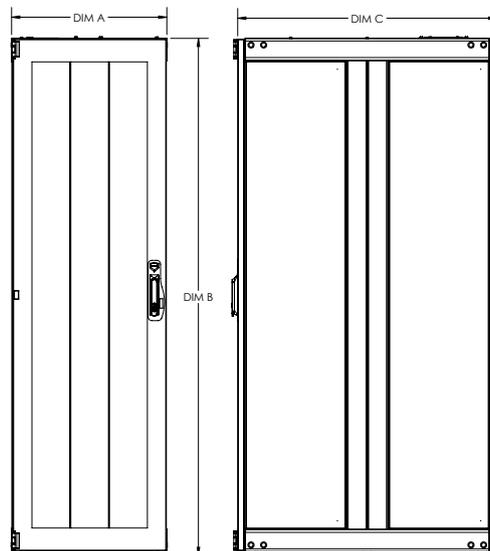
Rack application platform		Basic rack		Network rack		Active rack	Active+ rack	
		600	800	600	800	600	600	
Equipment compatibility	Backbone cabling	<120 cables	■	■	■	■	■	■
		>120 cables	-	□	-	□	-	-
	Patch cabling	<120 cables	■	■	■	■	■	■
		>120 cables	-	□	-	□	■	■
	Front to rear aspiring active equipment (SERVERS)	0 - 1.5 kW	□	□	■	■	□	□
		1.5 - 3.0 kW	-	-	■	■	■	■
		3.0 - 5.0 kW	-	-	□	□	■	■
	Multi directional aspiring active equipment (SWITCHES)	0 - 1.5 kW	-	□	-	■	-	-
		1.5 - 3.0 kW	-	-	-	-	-	-
		3.0 - 5.0 kW	-	-	-	-	-	-
Incoming services and space	Base data cable entry	■	■	■	■	■	■	
	Overhead data cable entry	□	□	■	■	■	■	
	Volume overhead cable entry	-	-	-	-	-	-	
	Base power entry	■	■	■	■	■	■	
	Overhead power entry	■	■	■	■	■	■	
	Upgradable top panels	■	■	■	■	■	■	
	Suit narrow aisle widths < 1000mm	■	□	■	□	■	■	
Thermal management	Glazed and steel door	■	■	-	-	-	-	
	80% vented doors fitted	□	□	■	■	■	■	
	Double doors fitted front	-	-	-	-	-	-	
	Double doors fitted rear	-	-	-	-	-	■	
	Roof fan tray compatible	■	■	■	■	■	■	
	Air baffles fitted as standard	-	-	-	-	■	■	
	Front to rear rack air cooling	□	□	■	■	■	■	
	Multi directional rack air cooling	-	□	□	■	□	■	
	Ducted cooling upgrade option	□	□	■	■	■	■	
	Aisle containment compatible	■	■	■	■	■	■	
	High density open loop cooling compatible	-	-	■	■	■	■	
	High density closed loop cooling compatible	■	■	-	-	□	□	
Contained aisle high density cooling compatible	-	-	□	□	■	■		
Security	Latching side panels	■	■	■	■	■	■	
	Doors fitted	■	■	■	■	■	■	
	Standard key locking	■	■	■	■	■	■	
	Mechanical combination locks	-	-	-	-	-	-	
	Upgradable locking	■	■	■	■	■	■	

■ = Recommended & fully compatible    □ = Available & compatible

Switch rack	Switch+ rack	Max rack	Cabling rack	Distribution rack	HD copper Cabling rack	HdD fibre cabling rack	2-Bay colocation rack		4-Bay co-locate rack		
							3 Into 2 rack	600	800	600	800
800	800	1000	800	800	900	900	1600	600	800	600	800
■	■	■	■	■	■	■	□	■	■	■	■
□	□	■	■	■	■	■	-	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■
□	□	■	■	■	■	■	□	■	■	■	■
■	■	■	□	■	-	-	■	■	■	■	■
■	■	■	-	□	-	-	□	■	■	■	■
■	■	■	-	□	-	-	□	□	□	□	□
■	■	■	□	■	-	-	-	-	■	-	■
■	■	■	-	□	-	-	-	-	■	-	■
■	■	■	-	□	-	-	-	-	□	-	□
■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■
-	-	■	■	■	■	■	■	-	-	-	-
■	■	■	■	■	□	□	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	-	-	■	■	■	■	■
□	■	■	□	■	-	-	□	■	□	■	□
-	-	-	■	-	-	-	□	-	-	-	-
■	■	■	-	-	-	-	-	■	■	■	■
-	■	■	-	-	-	-	-	-	-	-	-
■	■	■	-	-	■	■	-	-	-	-	-
■	■	■	■	■	-	-	□	□	□	□	□
■	■	■	-	-	-	-	-	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	-	■	-	■
■	■	■	■	■	■	■	■	■	□	■	□
■	■	■	■	■	-	-	■	■	■	■	■
■	■	■	■	■	-	-	□	■	■	■	■
■	■	■	■	■	■	-	■	■	■	■	■
■	■	■	■	-	-	-	■	-	■	■	■
■	■	■	■	-	■	■	■	■	■	■	■
■	■	■	■	-	■	■	■	■	■	■	■
■	■	■	■	-	■	■	■	-	-	-	-
-	-	-	-	-	-	-	-	■	■	■	■
■	■	■	■	-	■	■	■	■	■	■	■

## Dimensions

Cabinet size			Dim B mm				Dim C mm	Weight kg
Height U	Width mm	Depth mm	Dim A mm	+ Skids	+ Castors	+ Plinth		
42U	600	875	600	2013	2082	2099	875	103
42U	600	1000	600	2013	2082	2099	1000	109
42U	600	1200	600	2013	2082	2099	1200	121
42U	600	1400	600	2013	2082	2099	1400	132
42U	800	875	800	2013	2082	2099	875	121
42U	800	1000	800	2013	2082	2099	1000	127
42U	800	1200	800	2013	2082	2099	1200	139
42U	800	1400	800	2013	2082	2099	1400	150
47U	600	875	600	2236	2306	2099	875	111
47U	600	1000	600	2236	2306	2099	1000	119
47U	600	1200	600	2236	2306	2099	1200	130
47U	600	1400	600	2236	2306	2099	1400	142
47U	800	875	800	2236	2306	2099	875	130
47U	800	1000	800	2236	2306	2099	1000	137
47U	800	1200	800	2236	2306	2099	1200	150
47U	800	1400	800	2236	2306	2099	1400	162
52U	600	875	600	2459	2528	2545	875	120
52U	600	1000	600	2459	2528	2545	1000	127
52U	600	1200	600	2459	2528	2545	1200	140
52U	600	1400	600	2459	2528	2545	1400	153
52U	800	875	800	2459	2528	2545	875	139
52U	800	1000	800	2459	2528	2545	1000	147
52U	800	1200	800	2459	2528	2545	1200	160
52U	800	1400	800	2459	2528	2545	1400	173



\* 600W cabinet configured - vented front & vented rear

\* 800W cabinet configured - vented front & double vented rear

# DRS Series

Eaton's DRS Series offers the optimum infrastructure solution for Data Centre whitespace.



Typical arrangement for a multi-tenant or Cloud / Virtual Computing Data Centre

## Description

Designed to meet the demands of ever increasing equipment density while maintaining the benefits in cabling access and ease of installation. DRS Series is designed for reconfigurability and remediation, to grow and to change as the IT environment and your Data Centre needs evolve.



**Offset post configuration**  
Offers design flexibility to achieve current best practise as well as catering for the continued evolution of IT equipment such as high density servers and switches.



**Centre post configuration**  
Optimised data centre solution that provides unrestricted space to install equipment, large cable looms and significantly reduces deployment and remediation costs.



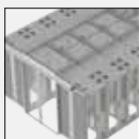
**Corner post configuration**  
Traditional set up for basic installations.

## Overview

- Patented configurable frame with Centre, Offset and 4 Post frame options
- Bolt together construction with flat packed options
- Static load rating 1500kg
- Supplied with two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Fitted with Nylon skids as standard
- Earth bonding kit included as standard
- Earth bonding compliant EN60950-1
- Various door options to suit application
- Various roof options to suit application
- Available in black or standard light grey



Ducted cooling



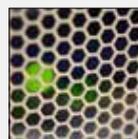
Aisle containment



Upgradeable security



Closed loop heat exchanger



Optimised cooling



Cable management

### 1. Open frame structure

- Bolt together construction
- 1500kg static load rating
- NEMA / IP20 environmental rating
- Quick to assemble and easy to adjust
- Standard heights 42U, 47U and 52U
- Width 600mm, 800mm, 1000mm
- Depths 875mm, 1000mm, 1200 & 1400mm
- Available assembled and flat packed

### 2. Door features

- Quick release hinges
- Configurable left or right hinged
- Multi point locking with upgrade locking options
- Single and double door variants
- Vented doors incorporate 80% perforated open area section

### 3. Locking options

- Upgrade options include:
  - Individually keyed locks
  - Mechanical combination locks
  - Electronic locking
  - Network configurable intelligent locking

### 4. Side panel features

- Standard split half depth construction
- Easier handling
- Quick release hinges
- Secure
- Earth bonding facility

### 5. Mounting technologies

- 19" square pierced rails
- Rails infinitely adjustable front to rear
- Full width mounting option in 800W racks
- Fully EIA-310-E compliant

### 6. Top panel options

- Range of top infill panel options including vented, cable entry and fan tray options
- Modular top panel configuration



# Basic & Network racks

## Basic - specification

**Included as standard:**

- Centre post configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors configured left hand (LH) hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Glazed front door
- Plain steel rear door
- Top panel configuration: grommet entry panel rear all other panels are plain
- Quick release side panels both sides
- Earth bonding kit
- Available in standard light grey or black



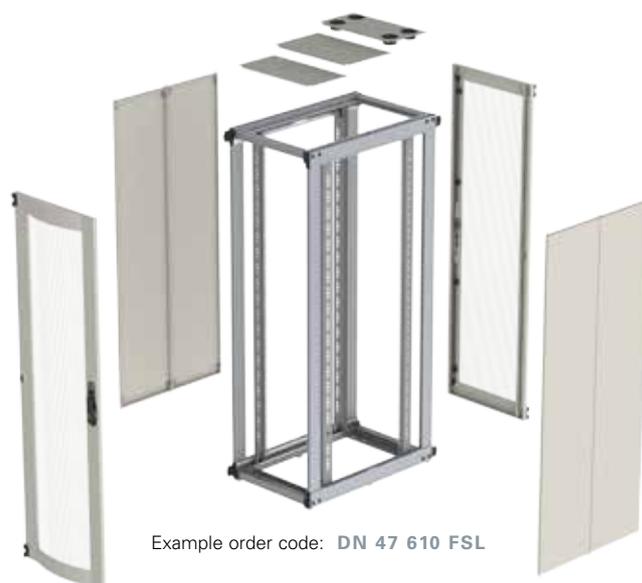
Configuration	Application	Depth mm	Width mm								Configuration see page 23			
			600	600	600	600	800	800	800	800	Build	Sides	Colour	Base
Basic Rack	DB	42U	608	610	612	614	808	810	812	814	C	S	L	
		47U	608	610	612	614	808	810	812	814	C	S	L	

See pages 12-14 for rack specification

## Network - specification

**Included as standard:**

- 4 post frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Hi-Flo curved vented front door
- Flat vented rear door
- Top panel configuration: grommet entry panel rear all other panels are plain
- Quick release side panels both sides
- Earth bonding kit
- Available in standard light grey or black



Configuration	Application	Depth mm	Width mm								Configuration see page 23			
			600	600	600	600	800	800	800	800	Build	Sides	Colour	Base
Network Rack	DN	42U	608	610	612	614	808	810	812	814	F	S	L	
		47U	608	610	612	614	808	810	812	814	F	S	L	
		52U	608	610	612	614	808	810	812	814	F	S	L	

See pages 12-14 for rack specification

## Active & Active+ racks

### Active - specification

**Included as standard:**

- Centre post frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Hi-Flo curved vented front door, flat vented rear door
- Quick release side panels both sides
- Top panel configuration: enhanced brush entry panel rear all other panels are plain
- Air management baffle kits
- Earth bonding kit
- Available in standard light grey or black



Example order code: **DA 47 610 CSL**

Configuration	Application	Width mm	600	600	600	Configuration see page 23			
		Depth mm	1000	1200	1400	Build	Sides	Colour	Base
Active Rack	DA	42U	610	612	614	C	S	L	
		47U	610	612	614	C	S	L	
		52U	610	612	614	C	S	L	

See pages 12-14 for rack specification

### Active+ - specification

**Included as standard:**

- Centre post frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Single doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Hi-Flo curved vented front door, double vented rear door
- Top panel configuration: enhanced brush entry panel rear all other panels are plain
- Quick release side panels both sides
- Air management baffle kit
- Earth bonding kit
- Available in standard light grey or black



Example order code: **DE 47 610 CSL**

Configuration	Application	Width mm	600	600	600	Configuration see page 23			
		Depth mm	1000	1200	1400	Build	Sides	Colour	Base
Active+ Rack	DE	42U	610	612	614	C	S	L	
		47U	610	612	614	C	S	L	
		52U	610	612	614	C	S	L	

See pages 12-14 for rack specification

# Switch & Switch+ racks

## Switch - specification

**Included as standard:**

- Offset rear frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Single doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Hi-Flo curved vented front door, flat double vented rear door
- Quick release side panels both sides
- Top panel configuration: enhanced brush strip rear all other panels plain
- Air management baffle kit
- Earth bonding kit
- Available in standard light grey or black



Example order code: **DS 47 808 RSL**

Configuration	Application	Width mm	800	800	800	800	Configuration see page 23			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
Switch Rack	DS	42U	808	810	812	814	R	S	L	
		47U	808	810	812	814	R	S	L	
		52U	808	810	812	814	R	S	L	

See pages 12-14 for rack specification

## Switch+ - specification

**Included as standard:**

- Offset rear frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors fitted with standard key locking swing handle with 2-point locking
- Double vented doors front and rear
- Quick release side panels both sides
- Top panel configuration: enhanced brush strip rear all other panels plain
- Air management baffle kit
- Earth bonding kit
- Available in standard light grey or black



Example order code: **DP 47 808 RSL**

Configuration	Application	Width mm	800	800	800	800	Configuration see page 23			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
Switch+ Rack	DP	42U	808	810	812	814	R	S	L	
		47U	808	810	812	814	R	S	L	
		52U	808	810	812	814	R	S	L	

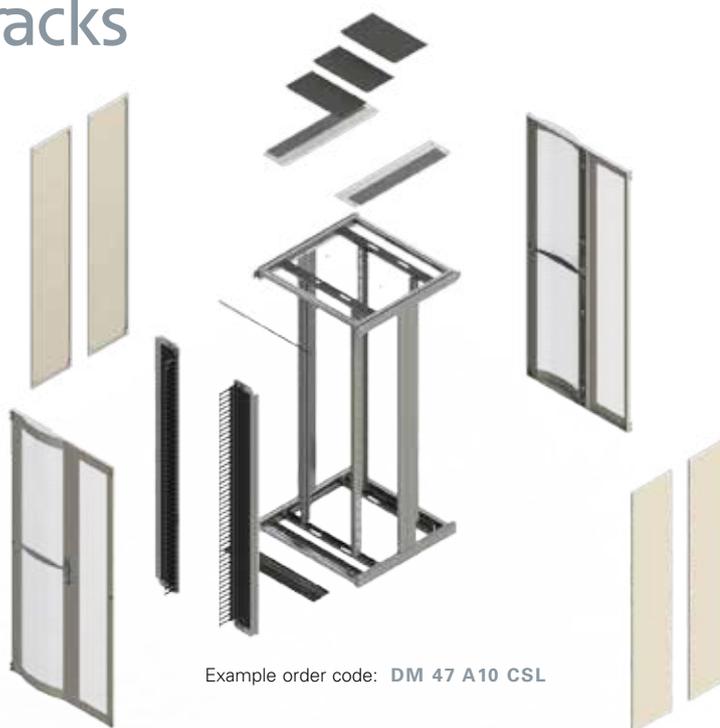
See pages 12-14 for rack specification

## Max & Closed loop racks

### DRS Max - specification

**Included as standard:**

- Centre post frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors fitted with standard key locking swing handle with 2-point locking
- Double vented doors front and rear
- Front vertical cable management fingers
- Top panel configuration: enhanced brush strip rear all other panels plain
- Quick release side panels both sides
- Air management baffle kit
- Earth bonding kit
- Available in standard light grey or black



Example order code: **DM 47 A10 CSL**

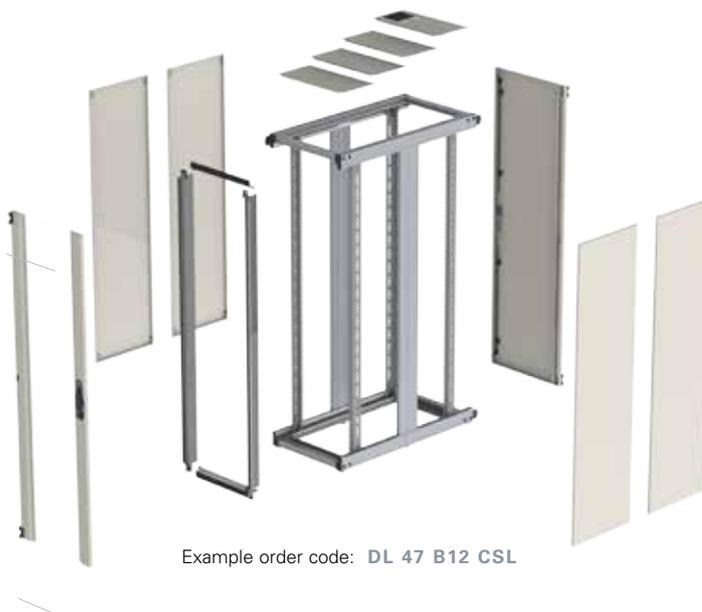
Configuration	Application	Width mm	1000	1000	1000	1000	Configuration see page 23			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
<b>Max Rack</b>	<b>DM</b>	42U	A08	A10	A12	A14	C	S	L	
		47U	A08	A10	A12	A14	C	S	L	
		52U	A08	A10	A12	A14	C	S	L	

See pages 12-14 for rack specification

### DRS Closed loop - specification

**Included as standard:**

- Centre post frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Glazed front and plain steel rear door
- Top panel configuration: enhanced brush strip rear all other panels plain
- Quick release side panels both sides
- Air management baffle kit
- Earth bonding kit
- Available in standard light grey or black



Example order code: **DL 47 B12 CSL**

Configuration	Application	Width mm	600	600	800	800	Configuration see page 23			
		Depth mm	1200	1400	1200	1400	Build	Sides	Colour	Base
<b>Closed Loop Rack</b>	<b>DL</b>	42U	612	614	812	814	C	S	L	
		47U	612	614	812	814	C	S	L	

See pages 12-14 for rack specification

# Cabling racks

## DRS Cabling - specification

### Included as standard:

- Centre post frame configuration
- Two pairs of 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Glazed doors front and plain steel rear
- Front vertical cable management fingers
- Quick release side panels both sides
- Top panel configuration, 2 plain and 2 enhanced brush strip
- 1x pair of vertical cable management fingers fitted
- Earth bonding kit
- Available in standard light grey or black



Configuration	Application	Width mm	800	800	800	800	Configuration see page 23			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
Cable Rack	DC	42U	808	810	812	814	C	S	L	
		47U	808	810	812	814	C	S	L	

See pages 12-14 for rack specification

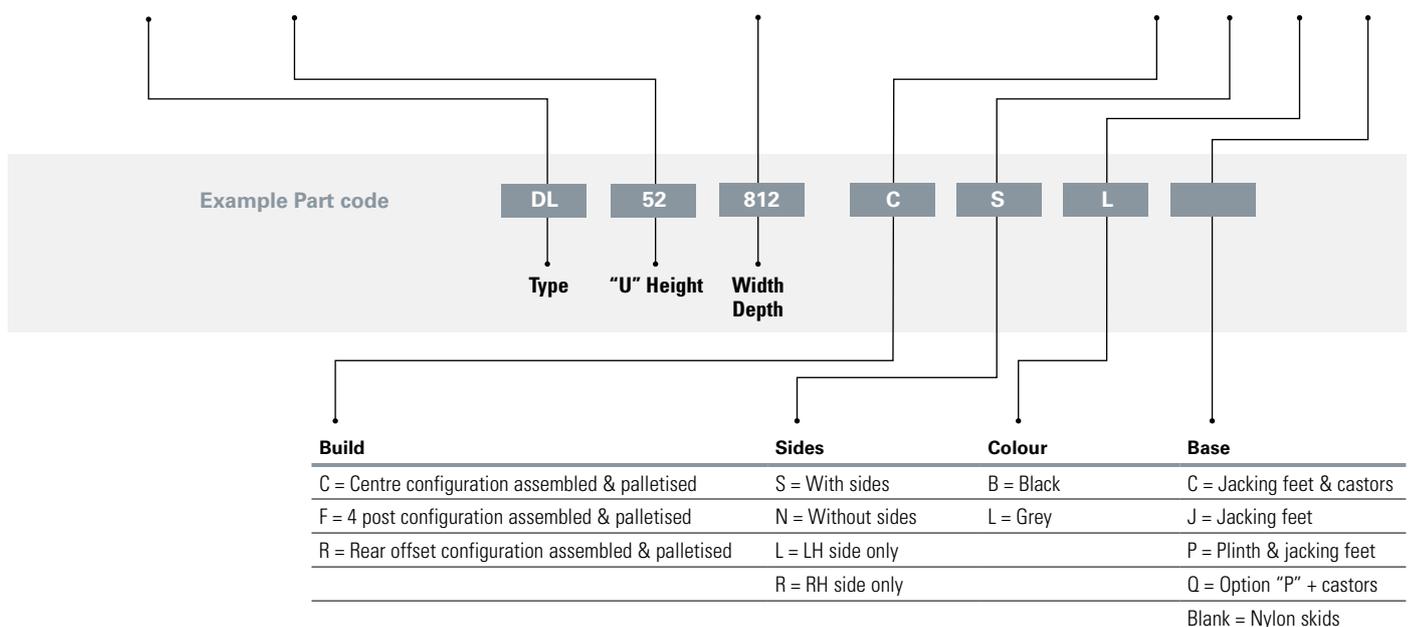
## DRS Series part number family table

DRS Series		Basic DB	Network DN	Active DA	Active+ DE	Switch DS
						
<b>Frame</b>	Frame configuration	Centre post	4-post	Centre post	Centre post	Rear offset
<b>Doors</b>	Front door	Flat vented	Hi-Flo curved	Hi-Flo curved	Hi-Flo curved	Hi-Flo curved
	Rear door	Flat vented	Flat vented	Flat vented	Flat double vented	Flat double vented
<b>Roof</b>	Top cover - rear	Cable grommet	Cable grommet	Enhanced brush entry	Enhanced brush entry	Enhanced brush entry
	Top cover - middle	Plain	Plain	Plain	Plain	Plain
	Top cover - front	Plain	Plain	Plain	Plain	Plain
	Top cover - 1200D infill	Plain	Plain	Plain	Plain	Plain
<b>Air flow</b>	Top & bottom baffles	None	None	Fitted	Fitted	Fitted
	Vertical baffles	None	None	Fitted	Fitted	Fitted
<b>Cable support</b>	Twist & lock cable management arms	None	None	None	None	None
	Vert cable mgmt fingers single (RCM)	None	None	None	None	None
	Cable spool arms	None	None	None	None	None
	Vert cable mgmt fingers pair (RCM)	None	None	None	None	None

DRS Series		Switch+ DP	Max DM	Closed loop DL	Cabling DC
					
<b>Frame</b>	Frame configuration	Rear Offset	Centre Post	Centre Post	Centre Post
<b>Doors</b>	Front door	Flat Double Vented	Flat Double Vented	Glazed	Glazed
	Rear door	Flat Double Vented	Flat Double Vented	Plain Steel	Plain Steel
<b>Roof</b>	Top cover - rear	Enhanced Brush Entry	Enhanced Brush Entry	Enhanced Brush Entry	Enhanced Brush Entry
	Top cover - middle	Plain	Plain	Plain	Plain
	Top cover - front	Plain	Plain	Plain	Enhanced Brush Entry
	Top cover - 1200D infill	Plain	Plain	Plain	Plain
<b>Air flow</b>	Top & bottom baffles	Fitted	Fitted	Fitted	None
	Vertical baffles	Fitted	Fitted	Fitted	None
<b>Cable support</b>	Twist & lock cable mgmt arms	None	None	None	None
	Vert cable mgmt fingers single (RCM)	None	None	None	None
	Cable spool arms	None	None	None	None
	Vert cable mgmt fingers pair (RCM)	None	Fitted Front	None	Fitted Front

# DRS Series part number configuration

Standard Racks	Application	Width Depth	600				800				1000				Build	Sides	Colour	Base
			600	600	600	600	800	800	800	800	1000	1000	1000	1000				
<b>42 U racks</b>																		
Basic	DB	42U	608	610	612	614	808	810	812	814	-	-	-	-	C	S	L	
Network	DN	42U	608	610	612	614	808	810	812	814	-	-	-	-	F	S	L	
Active	DA	42U	-	610	612	614	-	-	-	-	-	-	-	-	C	S	L	
Active+	DE	42U	-	610	612	614	-	-	1U	-	-	-	-	-	C	S	L	
Switch	DS	42U	-	-	-	-	808	810	812	814	-	-	-	-	R	S	L	
Switch+	DP	42U	-	-	-	-	808	810	812	814	-	-	-	-	R	S	L	
Max	DM	42U	-	-	-	-	-	-	-	-	A08	A10	A12	A14	C	S	L	
Closed loop	DL	42U	-	-	612	614	-	-	812	814	-	-	-	-	C	S	L	
Cabling	DC	42U	-	-	-	-	808	810	812	814	-	-	-	-	C	S	L	
<b>47U racks</b>																		
Basic	DB	47U	608	610	612	614	808	810	812	814	-	-	-	-	C	S	L	
Network	DN	47U	608	610	612	614	808	810	812	814	-	-	-	-	F	S	L	
Active	DA	47U	-	610	612	614	-	-	-	-	-	-	-	-	C	S	L	
Active+	DE	47U	-	610	612	614	-	-	-	-	-	-	-	-	C	S	L	
Switch	DS	47U	-	-	-	-	808	810	812	814	-	-	-	-	R	S	L	
Switch+	DP	47U	-	-	-	-	808	810	812	814	-	-	-	-	R	S	L	
Max	DM	47U	-	-	-	-	-	-	-	-	A08	A10	A12	A14	C	S	L	
Closed loop	DL	47U	-	-	612	614	-	-	812	814	-	-	-	-	C	S	L	
Cabling	DC	47U	-	-	-	-	808	810	812	814	-	-	-	-	C	S	L	
<b>52U racks</b>																		
Network	DN	52U	608	610	612	614	808	810	812	814	-	-	-	-	F	S	L	
Active	DA	52U	-	610	612	614	-	-	-	-	-	-	-	-	C	S	L	
Active+	DE	52U	-	610	612	614	-	-	-	-	-	-	-	-	C	S	L	
Switch	DS	52U	-	-	-	-	808	810	812	814	-	-	-	-	R	S	L	
Switch+	DP	52U	-	-	-	-	808	810	812	814	-	-	-	-	R	S	L	
Max	DM	52U	-	-	-	-	-	-	-	-	A08	A10	A12	A14	C	S	L	



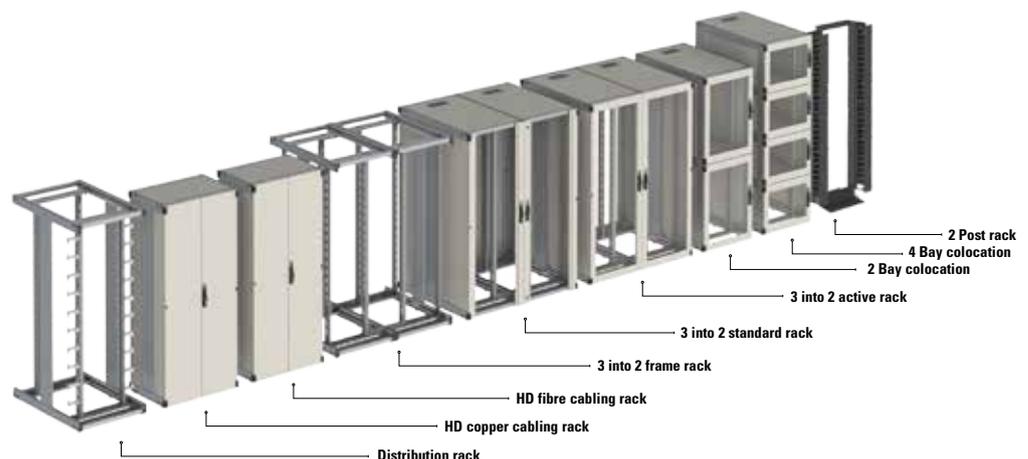
# Speciality racks ... comprehensive solutions

Eaton has over the years developed a range of dedicated speciality rack designs to meet the demands of many uncommon applications.



### Description

Although these rack designs may be deployed in small numbers they can make the difference to the overall system capability. Importantly they enable installations to be designed and deployed using a single rack platform.



# Distribution rack

## Description

The “Distribution rack” is an 800mm wide rack with no external cladding, providing the ideal solution for applications where security is managed at room level rather than at rack level. It can provide a viable alternative to conventional 2-Post or 4-Post racks, whilst still offering the ability to re-configure to another application later. Being an open structure, the “Distribution rack” can cope with moderate to high density cabling applications with optional accessories to support backbone and patching structures. Designed to support network switch environments where equipment loads are up to 1.5kW\*. Ideally suited to stand-alone applications or dedicated application zones, the “Distribution rack” configuration has limited air management capabilities and is not suitable in a hot and cold aisle configuration.

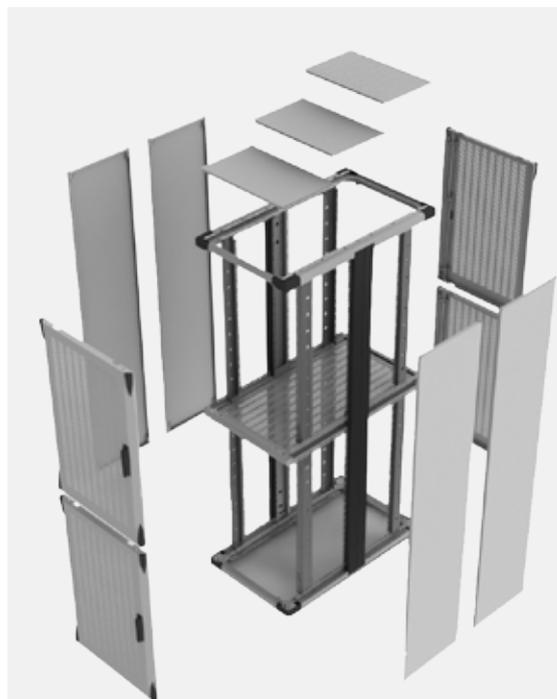


## Included as standard:

- Centre post frame configuration
- Two pairs of 19” mounting rails
- Unit height labels fitted to front and rear 19” mounting rails (numbered bottom to top)
- Nylon skids
- Earth bonding kit
- Open frame front and rear
- Open frame top and bottom
- Fitted with 20 twist and lock cable management arms
- Available in standard light grey or black

Configuration	Application	Width mm	800	800	800	800	Configuration see page 31			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
DRS distribution rack	DDF	42U	808	810	812	814	C	S	L	
		47U	808	810	812	814	C	S	L	
		52U	808	810	812	814	C	S	L	

## Colocation & multi hosting racks



### Description

The Colocation / Multi Hosting racks provide the perfect space saving solution, allowing either two or four conventional rack spaces to be housed within a single rack foot-print.

With individually keyed bays the Colocation rack offers the additional benefit of allowing tiered access control. By controlling the issue of keys administrators can limit users to either individual or groups of bays. This functionality can be further enhanced with Eaton programmable electronic locking solution.

### Accessory options:

- In-rack cable management
- In-rack system security and monitoring
- In-rack power management

Eaton provides a comprehensive range of solutions to cater for the future needs of builders and operators of multi-hosting Data Centres. Our range of products provides scalable and secure customer segregation

**- literally down to 1U!**

## Colocation rack

### Included as standard:

- Divider panels between each bay
- Two pairs of 19" mounting rails in each
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Vented doors fitted front and rear
- Doors fitted with mechanical combination locks
- Top panels configured: brush entry panel at the rear, all other panels are plain
- Quick release sides panels both sides
- Available in standard light grey or black

### Accessory options:

- Vertical cable management
- Power distribution management
- Upgradeable locking including electronic systems
- Environmental monitoring



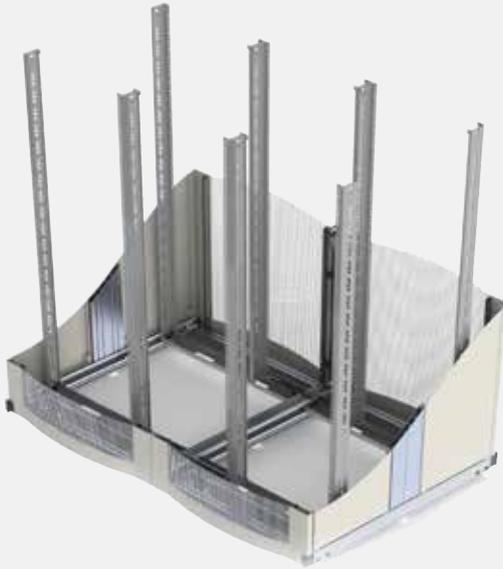
DRS 2-Bay



DRS 4-Bay

Configuration	Application	Width mm	600				800				Configuration see page 31		
			Depth mm	875	1000	1200	1400	875	1000	1200	1400	Build	Sides
2-Bay colocation	DX	42U	608	610	612	614	808	810	812	814	F	S	L
		47U	608	610	612	614	808	810	812	814	F	S	L
		52U	608	610	612	614	808	810	812	814	F	S	L
4-Bay colocation	DY	47U	608	610	612	614	808	810	812	814	F	S	L
		52U	608	610	612	614	808	810	812	814	F	S	L

# 3 into 2 racks

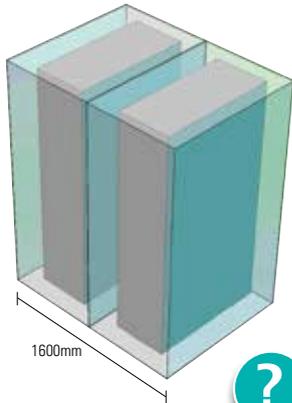


### Description

Where space is a premium, Eaton offers a special solution to assist in optimising floor-space utilisation. The unique cornerless construction of the DRS Series ranges allow 3 sets of 19" rails to be mounted inside the foot print of two 800mm bayed enclosures. While not suitable for all installations, the layout offers an 11% reduction in floor space coverage for a given amount of 'U' space.

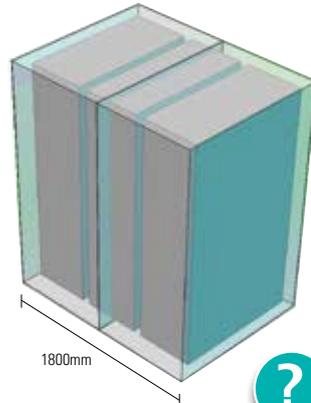
Contact our applications team to discuss 3 into 2 racks for space optimisation.

**Conventional arrangement**  
2 x 800mm racks



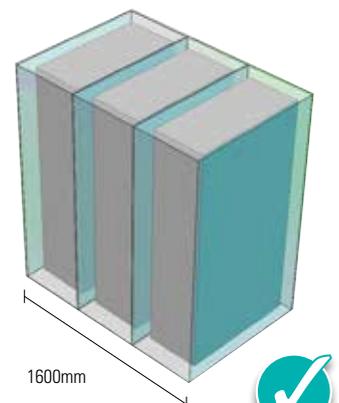
**Conventional** 800mm wide racks  
Rack volume = 3.2m<sup>3</sup>  
Equipment mounting U = 84U  
Equipment density = **26.25U / m<sup>3</sup>**

**Conventional arrangement**  
3 x 600mm racks

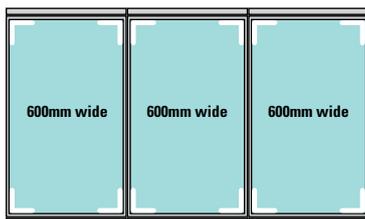


**Conventional** 600mm wide racks  
Rack volume = 3.6m<sup>3</sup>  
Equipment mounting U = 126U  
Equipment density = **35.0U / m<sup>3</sup>**

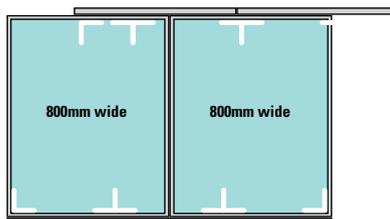
**3 into 2 arrangement**  
2 x 800mm racks



**Eaton 3 into 2** 800mm wide racks  
Rack volume = 3.2m<sup>3</sup>  
Equipment mounting U = 126U  
Equipment density = **39.37U / m<sup>3</sup>**



**Conventional** 3 x 600mm wide racks = 1800mm



**Eaton 3 into 2** 2 x 800mm wide racks = 1600mm



## 3 into 2 racks

### 3 into 2 open rack

**Included as standard:**

- Centre post frame configuration
- No doors
- 3 x pairs of compact 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- No sides panels
- No top panels
- Bolt together kit
- Available in standard light grey or black

Configuration	Application	Width mm	1600	1600	1600	1600	Configuration see page 31			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
3 into 2 open frame	DQO	42U	F08	F10	F12	F14	C	N	L	
		47U	F08	F10	F12	F14	C	N	L	
		52U	F08	F10	F12	F14	C	N	L	



### 3 into 2 basic rack

**Included as standard:**

- Centre post frame configuration
- 3 x pairs of compact 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Glazed front doors
- Plain steel rear doors
- Quick release side panels both sides
- Top panels configured: brush entry rear, all other panels are plain
- Bolt together kit
- Available in standard light grey or black

Configuration	Application	Width mm	1600	1600	1600	1600	Configuration see page 31			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
3 into 2 basic	DQS	42U	S08	S10	S12	S14	C	S	L	
		47U	S08	S10	S12	S14	C	S	L	



### 3 into 2 active rack

**Included as standard:**

- Centre post frame configuration
- 3 x pairs of compact 19" mounting rails
- Unit height labels fitted to front and rear 19" mounting rails (numbered bottom to top)
- Nylon skids
- Vented front and rear doors
- Quick release side panels both sides
- Top panels configured: brush entry rear, all other panels are plain
- Bolt together kit
- Available in standard light grey or black

Configuration	Application	Width mm	1600				Configuration see page 31			
		Depth mm	875	1000	1200	1400	Build	Sides	Colour	Base
3 into 2 active	DQA	42U	A08	A10	A12	A14	C	S	L	
		47U	A08	A10	A12	A14	C	S	L	
		52U	A08	A10	A12	A14	C	S	L	



# High density cabling racks

## Description

Eaton's range of high density copper and fibre cabling racks are designed to solve the problem of today's networking environment. They provide unique working and cabling accessibility to totally transform rack installation layouts, on-site installation time and on-going systems management.

The high density rack is an 900mm wide by 500mm deep rack with a single sided 19" mounting configuration. The additional rack width provides increased space down each side of the rack allowing over 1,000 network port connections per rack envelope. They provide a unique working and access environment that saves installation time and on-going systems management, especially for newer, higher speed copper and fibre cabling technologies. The 500mm deep foot-print allows for two high density racks to be configured back to back in a 1,000mm deep footprint.

## HD copper cabling rack

### Included as standard:

- One pair of 19" mounting rails with cable management fingers
- Unit height labels fitted to 19" mounting rails (numbered bottom to top)
- Nylon skids
- Single doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Doors fitted with quick release hinges
- Double plain steel front and single plain steel rear doors
- Quick release side panels both sides
- Top panels configuration: single plain panel
- Fitted with 20 twist and lock cable management arms
- Earth bonding kit
- Available in standard light grey or black

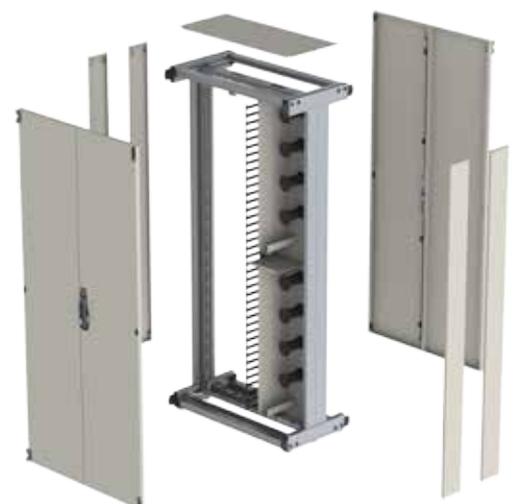


Configuration	Application	Width mm	900	Configuration see page 31			
		Depth mm	500	Build	Sides	Colour	Base
HD copper	DH	42U	905	C	S	L	
		47U	905	C	S	L	
		52U	905	C	S	L	

## HD fibre cabling rack

### Included as standard:

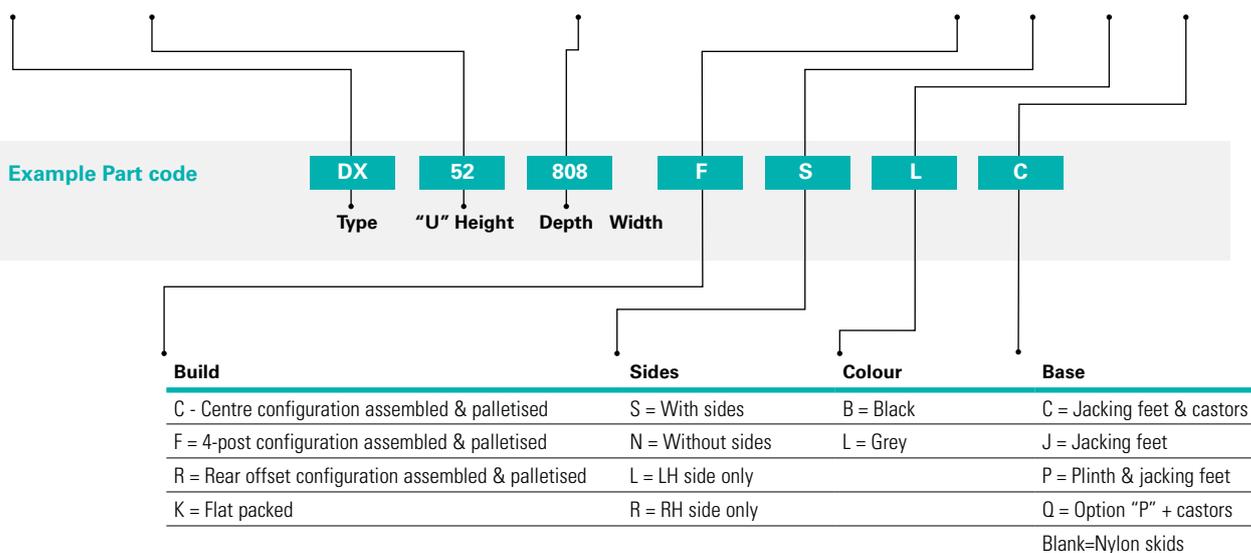
- One pair of 19" mounting rails with cable management fingers fitted to RH rail
- Unit height labels fitted to 19" mounting rails (numbered bottom to top)
- Nylon skids
- Single doors configured LH hinged as standard
- Doors fitted with standard key locking swing handle with 2-point locking
- Doors fitted with quick release hinges
- Double plain steel front and single plain steel rear doors
- Quick release side panels both sides
- Top panels configuration: single plain panel
- Fitted with fibre cable management system on RH side
- Earth bonding kit
- Available in standard light grey or black



Configuration	Application	Width mm	900	Configuration see page 31			
		Depth mm	500	Build	Sides	Colour	Base
HD fibre	DF	42U	905	C	S	L	
		47U	905	C	S	L	
		52U	905	C	S	L	

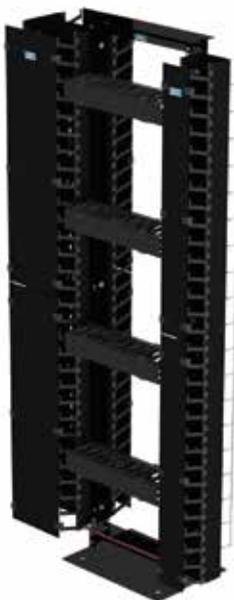
# Speciality rack part number configuration

Speciality Racks	Application	Width mm	600	600	600	600	800	800	800	800	900	Build	Sides	Colour	Base
		Depth mm	875	1000	1200	1400	875	1000	1200	1400	500				
<b>42U Racks</b>															
Distribution	DDF	42U	-	-	-	-	808	810	812	814	-	C	N	L	
HD Copper	DH	42U	-	-	-	-	-	-	-	-	905	C	S	L	
HD Fibre	DF	42U	-	-	-	-	-	-	-	-	905	C	S	L	
3 into 2 Frame	DQO	42U	-	-	-	-	F08	F10	F12	F14	-	C	N	L	
3 into 2 Basic	DQS	42U	-	-	-	-	S08	S10	S12	S14	-	C	S	L	
3 into 2 Active	DQA	42U	-	-	-	-	A08	A10	A12	A14	-	C	S	L	
2-Bay Colo	DX	42U	608	610	612	614	808	810	812	814	-	F	S	L	
4-Bay Colo	DY	42U	-	-	-	-	-	-	-	-	-	-	-	-	
<b>47U Racks</b>															
Distribution	DDF	47U	-	-	-	-	808	810	812	814	-	C	N	L	
HD Copper	DH	47U	-	-	-	-	-	-	-	-	905	C	S	L	
HD Fibre	DF	47U	-	-	-	-	-	-	-	-	905	C	S	L	
3 into 2 Frame	DQO	47U	-	-	-	-	F08	F10	F12	F14	-	C	N	L	
3 into 2 Basic	DQS	47U	-	-	-	-	S08	S10	S12	S14	-	C	S	L	
3 into 2 Active	DQA	47U	-	-	-	-	A08	A10	A12	A14	-	C	S	L	
2-Bay Colo	DX	47U	608	610	612	614	808	810	812	814	-	F	S	L	
4-Bay Colo	DY	47U	608	610	612	614	808	810	812	814	-	F	S	L	
<b>52U Racks</b>															
Distribution	DDF	52U	-	-	-	-	808	810	812	814	-	C	N	L	
HD Copper	DH	52U	-	-	-	-	-	-	-	-	905	C	S	L	
HD Fibre	DF	52U	-	-	-	-	-	-	-	-	905	C	S	L	
3 into 2 Frame	DQO	52U	-	-	-	-	F08	F10	F12	F14	-	C	N	L	
3 into 2 Active	DQA	52U	-	-	-	-	A08	A10	A12	A14	-	C	S	L	
2-Bay Colo	DX	52U	608	610	612	614	808	810	812	814	-	F	S	L	
4-Bay Colo	DY	52U	608	610	612	614	808	810	812	814	-	F	S	L	



## RE Series 2-post rack

A simple mounting frame solution to house IT equipment whilst providing maximum cabling access and capacity.



Eaton's RE Series 2-Post Rack platform is ideally suited to telecommunication rooms where volume copper or fibre cabling systems are usually deployed. The open access design enables easy installation of equipment and provides a secure connectivity solution for all internationally recognized cabling standards, including CAT 8.

Designed to be easily assembled on site, each frame is shipped flat-packed for simple on-site installation.

Also available is a range of complementary horizontal and vertical cable management accessories. These provide users with the tools to configure the system to match individual applications.

### Features / Benefits:

- Easy bolt together construction
- 45U Standard height
- Range of vertical, horizontal and cable spool management options and configurations
- Robust pre-drilled floor mounting base (bolts not supplied)
- Black powder coat finish
- Supplied in simple kit form for easy on-site assembly.

# RE Series 2-post rack

Eaton's RE Series 2-Post Rack is an open rack frame available in 45U height which suits most applications. Designed to be easily assembled on site, each frame is shipped flat-packed for simple and quick assembly and installation

### All RE 2-Post Racks Include:

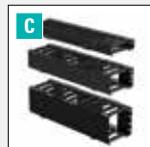
- 2 x vertical 19" members
- 2 x pre drilled base mounting angles (no bolts supplied)
- 2 x top support angles
- 1 x PDU Mounting Brackets (Pair)
- Black finish
- Supplied in simple kit form for easy on-site assembly.



Adjustable depth cable spools



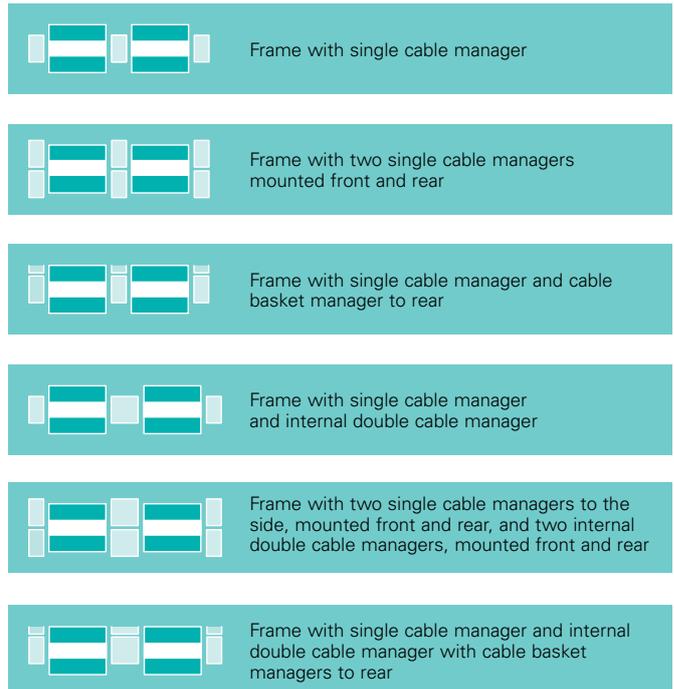
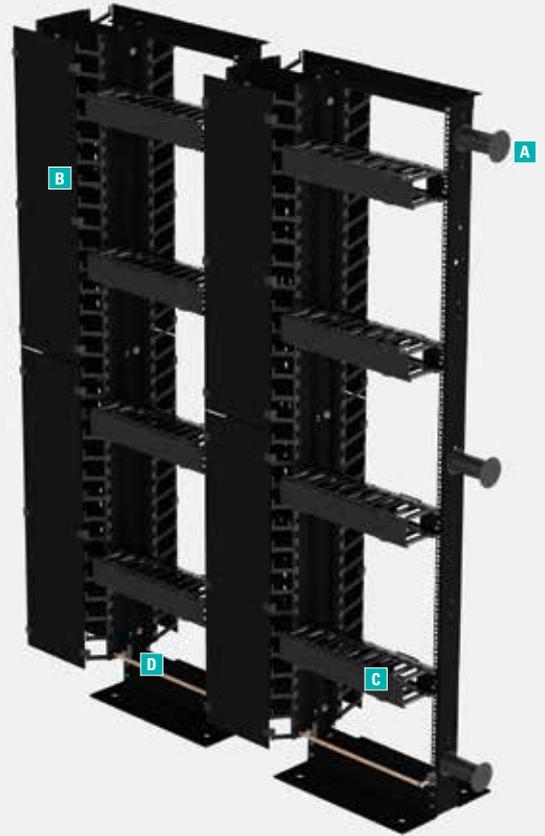
High Density vertical cable managers with clip on split covers Available in 140mm & 280mm widths



High density horizontal cable managers. 1U, 2U and 3U options



19-inch mounted earth bar kit



# RE Series 2-post rack

## Technical Specifications

Part code	RE2PRFK45UB
<b>Physical</b>	
Equipment Mounting Height	45U
Height (mm)	2134
Width (mm)	516
Depth of Mounting Base (mm)	381
Weight (kg)	20.4
Weight Capacity (Static) (kg)	750
Rail Mounting Width (mm)	482.6 (19") fully compliant to EIA-310-E
Colour	Black RAL 9005 powder coat
<b>Active Equipment Management</b>	
Heat Load Suitability	By nature an open structure rack limits the opportunity to optimise the management of air to active equipment. Therefore equipment heat load densities will be governed by the provision of cooling in the room.
<b>Conformance</b>	
Regulatory Approvals	IEC/EN 60950, IEC/EN 60297, IEC 529
Standards	EIA-310-E compliant
<b>Shipping; Supplied flat packed.</b>	
<b>Customer Service &amp; Support</b>	
Warranty	2 Years

**Note:** Due to continuous product improvement programs specifications are subject to change without notice.

## Cable management

### High density vertical cable managers

Eaton's open rack vertical cable managers are available in two standard widths. The managers are designed to bolt to the sides of the RE 2-Post Rack frame and can be configured either in single or double configurations. Units are supplied complete with dual hinged split covers for ease of operation and improved cable management.

#### Features / Benefits:

- 2 width options; 140mm or 280mm
- 1 x vertical manager
- 2 x dual hinged covers
- Mounting instructions & fixings
- Black finish RAL9005
- Supplied in simple kit form for easy on-site assembly.

Part Code	Description
RE2PRMK45U140B	45U x 140mm Wide HD Cable Manager (1pcs)
RE2PRMK45U280B	45U x 280mm Wide HD Cable Manager (1pcs)

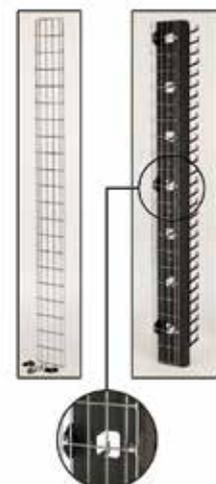
### Vertical cable basket kits

Designed to mount on the rear of the RE 2-Post Rack vertical cable managers, these basic sections can be configured to offer rear, side or forward facing management options.

#### Features / Benefits:

- 1 x vertical basket manager
- 3 width options; 100mm, 200mm or 300mm
- Mounting hardware
- 2 x dual hinged covers
- Mounting instructions & fixings
- Black finish
- Supplied in simple kit form for easy on-site assembly.

Part Code	Description
RE2PRBK45U100B	45U x 100mm Wide Vertical Cable Basket (1pcs)
RE2PRBK45U200B	45U x 200mm Wide Vertical Cable Basket (1pcs)
RE2PRBK45U300B	45U x 300mm Wide Vertical Cable Basket (1pcs)



# RE Series 2-post rack

## High density 19-inch horizontal managers

Horizontal cable managers are available in heights of 1U, 2U & 3U. The depth of the unit allows for higher density cabling. The design allows cables to be transitioned across the rack space, front to rear through the 19-inch aperture and above and below the managers to adjacent devices or patch panels.

### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Promotes cable bend radius control
- Clip-on hinged covers hide cable tails
- Unit depth 150mm
- Finished black.



Part Code	Description
ETN-HDHCM1UB	1U High Density Horizontal 19" Cable Manager (1pcs)
ETN-HDHCM2UB	2U High Density Horizontal 19" Cable Manager (1pcs)
ETN-HDHCM3UB	3U High Density Horizontal 19" Cable Manager (1pcs)

## Universal rack 19" earth bar kit

Eaton's 19-inch mounted earth bar kits can be fitted at any EIA 310 compliant rack. It takes up 1U of equipment mounting space and can easily be positioned in any available slot. Importantly our design ensures that the earth bar is isolated from the rack allowing the building clean earth to be directly connected. Connecting the equipment mounted in the rack to the earth bar ensure earth continuity and optimal operation of the infrastructure, particularly important with higher performance cabling systems.

### Features / Benefits:

- Universal mount to all EIA 310 compliant rails
- 25 individual earth points
- Supplied complete with all applicable fixings for square pierced 19-inch rails
- Optional earth bar clamps are available (packs of 20).



Part Code	Description
ETN-U19EBK	Universal Rack 19" Earth Bar Kit (1pcs)
ETN-EBL20	Earth Bar Clamps (20pcs)

## Adjustable cable spool

The adjustable cable spools provides support and anchor points for managing changes in multiple cable directions. The spools are designed to mount onto the sides of the RE 2-Post Rack frames.

### Features / Benefits:

- Tool-less adjustment from 127mm—203mm
- Promotes cable bend radius control
- Finished black.



Part Code	Description
ETN-SB860ACSF	Adjustable Cable Spool (5pcs)

# Accessories

A comprehensive range of in-rack accessories which include:-  
General accessories, earthing, cable management and shelving accessories



# In rack accessories

## General accessories

### Unit height labels

These self adhesive labels can be easily fitted to most 19-inch mounting rails and are especially suitable for all Eaton rack models. The labels help identify each equipment mounting "U," numbering equipment slots from bottom to top.

#### Features / Benefits:

- Self adhesive labels for easy mounting
- Numbered 1 - 47 bottom to top
- White background with black lettering for easy U identification
- Supplied with fixings and mounting instructions.

Part code	Universal U height number strip
ETN-AUHL	Numbered 1 at the top and 47 at the bottom (pair)
ETN-AUHRL	Numbered 47 at the top and 1 at the bottom (pair)
AUHLFR	Pair 1 - Numbered 1 at the top and 47 at the bottom Pair 2 - Numbered 48 at the top and 94 at the bottom



### Fixing kits

Part Code	Fixing kits
ETN-FPFP	Fixings – Screw, Washer & Cage (50pcs)
ETN-FPFC	Fixings – Screw, Cup Washer & Cage (50pcs)



### Castor kits

Part code	Castor kits
D3CAST600W	Castor kit 750kg dynamic load rating (4 pcs)
D3CAST600W	DRS Base castor & JF kit 600W
D3CAST800W	DRS Base castor & JF kit 800W
D3JACK600W	DRS Base jacking foot kit 600W
D3JACK800W	DRS Base jacking foot kit 800W

For 2017 production builds onwards



### Bolt together / baying kit

Each rack is configured with holes in the rack frame verticals allowing rows of same height racks to be bolted together for optimized stability and thermal efficiency. Racks of differing depths can be bolted together with racks levelled along the row.

#### Features / Benefits:

- Simple kit for easy site installation
- Helps optimize rack stability and thermal efficiency
- Can be used with side panels in place or removed
- Supplied with fixings and mounting instructions.

Part Code	Description
D3BTK	DRS Series bolt together kit (1pcs)



## Earthing accessories

### Rack earth kits

Part code	Rack earthing kits
D3EARTH	DRS Series earth kit
AEP	Universal electro static rack earthing point

Earth bar kits comprise of earth bars, mounting brackets, isolation mounts, fixings and mounting instructions

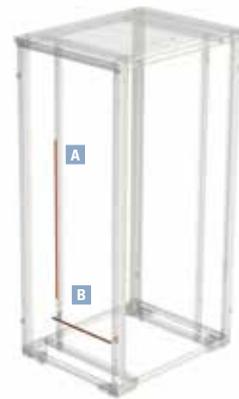


### Universal rack earth bar kits

Eaton's 19-inch mounted earth bar kits can be fitted at any EIA 310 compliant rack. It takes up 1U of equipment mounting space and can easily be positioned in any available slot. Importantly our design ensures that the earth bar is isolated from the rack allowing the building clean earth to be directly connected. Connecting the equipment mounted in the rack to the earth bar ensure earth continuity and optimal operation of the infrastructure, particularly important with higher performance cabling systems.

#### Features / Benefits:

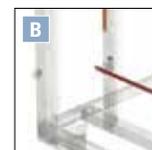
- Universal mount to all EIA 310 compliant rails
- 25 individual earth points
- Supplied complete with all applicable fixings for square pierced 19-inch rails
- Optional earth bar clamps are available (packs of 20).



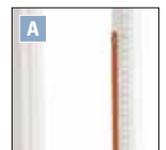
Part Code	Description
ETN-U19EBK	Universal rack 19" earth bar kit (1pcs)
ETN-EBK1	Earth bar kit 1000mm (1pcs)
ETN-EBK2	Earth bar kit 2000mm (1pcs)
ETN-EBIM	Earth bar isolation mounts (2pcs)
ETN-EBL20	Earth bar clamps (20pcs)



Optional Earth Bar Clamps



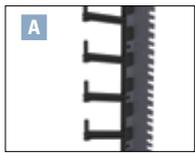
19-Inch Earth Bar Assembly



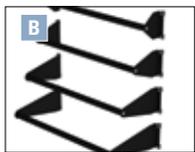
Vertical Earth Bar Assembly

# In-rack horizontal cable management

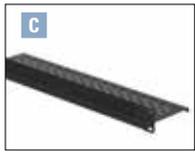
Eaton offers a range of accessories and retrofit-able upgrades which provide users with the opportunity to optimize the rack and room environment according to installation demands and budget constraints. Many of these accessories can be used on rack platforms from multiple vendors (denoted "Universal").



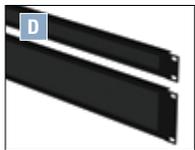
Active equipment cable manager



19-Inch cable strain relief bars



1U cable through support panel



Cable through 19-inch panels



Standard 19-inch cable managers



High density 19-inch cable managers



Adjustable front to rear cable trough (800mm wide only)



Rack image generic only

## Horizontal cable management accessories

### 9U active equipment cable manager

These 9U cable managers secure to the 19-inch mounting rails. The fingers on the managers are designed to segregate and support the incoming cables, allowing data and power cables to be segregated whilst at the same time promoting bend radius control.

#### Features / Benefits:

- Best suited to 800mm wide rack platforms
- Universal mount to EIA 310 compliant rails
- Finger spacing aligns to rack Us
- Promotes cable bend radius control
- 115mm Deep.

Part Code	Description
ETN-9UECM	9U active equipment cable manager (1pcs)



### 19-Inch cable strain relief bars

These bars mount across the aperture of any EIA 310 compliant 19-inch rails. They allow cables to be adequately supported, avoiding placing strain on the cable terminations and connections.

#### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Promotes cable bend radius control
- Multiple depths allow for transitioning of cable to different areas
- Finished black.

Part Code	Description
ETN-CMRB19022U	2U cable strain relief bar 50mm deep (1pcs)
ETN-CMRB19042U	2U cable strain relief bar 100mm deep (1pcs)
ETN-CMRB19062U	2U cable strain relief bar 150mm deep (1pcs)
ETN-CMRB19082U	2U cable strain relief bar 200mm deep (1pcs)



### 19-Inch cable entry & support panel

These 1U panels combine cable through and cable support features. The open edge brush entry allows the panels to be retrofitted after cabling. The brush helps seal around the cables promoting air management and system efficiency. The pierced support tray allows cable to be secured and supported, reducing strain on connections.

#### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Pierced tray allows cables to be supported and tied
- Promotes cable bend radius control
- Finished black.

Part Code	Description
ETN-BSP1UB	1U cable entry & support panel (1pcs)



### Horizontal cable management accessories

#### Cable pass through 19-inch blanking panels

Available in 1U and 2U height options, these cable through panels allow cables to be passed through the 19-inch aperture without compromising in-rack air management.

##### Features / Benefits:

- Universal mount to all square pierced EIA 310 compliant rails
- Cable through feature with brush seal.

Part Code	Description
ETN-OBSP1	Blanking panel 19" - brush cable entry 1U (1pcs)
ETN-OBSP2	Blanking panel 19" - brush cable entry 2U (1pcs)



#### 19-Inch horizontal ring managers

Available in 1U and 2U panel heights, these cable management panels are the industry default to the management of patch cabling. Configured with four rings per panel the 1U version is designed to managed 24 cables and the 2U version 48 cables.

##### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Open rings allow easy management of cables
- Cable ring depth: 1U = 70mm 2U = 140mm
- Supplied with cage nuts and screws for rack mounting.

Part Code	Description
ETN-JRP1	1U horizontal 19" basic cable manager (1pcs)
ETN-JRP2	2U horizontal 19" basic cable manager (1pcs)



#### High density 19-inch horizontal managers

Horizontal cable managers are available in heights of 1U, 2U & 3U. The depth of the unit allows for higher density cabling. Units allow cable transitions across the rack space, front to rear through the 19-inch aperture and above and below the managers to adjacent devices or patch panels.

##### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Promotes cable bend radius control
- Clip-on hinged covers hide cable tails
- Unit depth 145mm

Part Code	Description
ETN-HDHCM1UB	1U high density horizontal 19" cable manager (1pcs)
ETN-HDHCM2UB	2U high density horizontal 19" cable manager (1pcs)
ETN-HDHCM3UB	3U high density horizontal 19" cable manager (1pcs)



#### DRS Series adjustable depth cable troughs

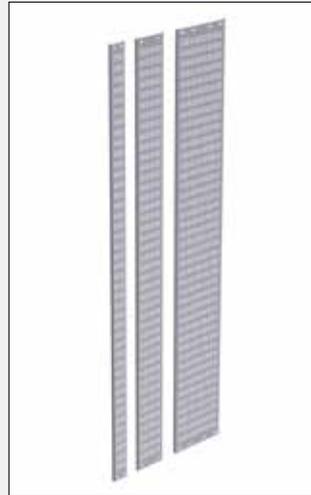
Horizontal cable managers are available in heights of 1U, 2U & 3U. The depth of the unit allows for higher density cabling. Units allow cable transitions across the rack space, front to rear through the 19-inch aperture and above and below the managers to adjacent devices or patch panels.

##### Features / Benefits:

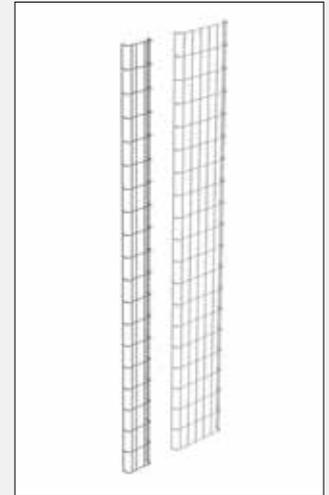
- Designed to mount into the side of 800mm wide DRS Series racks only
- Varying depth options to suit differing 19-inch rail centers
- Supplied with fixings

Part Code	Description
AFR2UCT-2B	2U front to rear cable trough (suits 19" rails set between 408 - 427D)
AFR2UCT-2B	2U front to rear cable trough (suits 19" rails set between 408 - 608D)
AFR2UCT-3B	2U front to rear cable trough (suits 19" rails set between 608 - 808D)
AFR2UCT-4B	2U front to rear cable trough (suits 19" rails set between 808 - 1006D)

# In-rack vertical cable management



Full height cable trays available in a range of widths



Full height cable baskets available in a range of widths



Can be used with rack vertical cable manager fingers



Can be used in conjunction with a range of cable rings

### Vertical cable management accessories

#### Rack vertical cable baskets

Like the vertical cable trays these mount into the side of the rack. They are designed to mount to the front to rear side frame members using slide nuts to allow them to be positioned to suit the application and space constraints.

##### Features / Benefits:

- Two width options for varying cabling volumes
- Ideally designed for 800mm wide rack applications
- Supplied with fixings and mounting instructions

Finish: Zinc plated.

Part code	Description	Height U	Width mm
D3SCBK4215	DRS Series cable basket	42U	150
D3SCBK4715		47U	150
D3SCBK5215		52U	150
D3SCBK4230		42U	300
D3SCBK4730		47U	300
D3SCBK5230		52U	300



#### Rack vertical cable trays

These vertical cable trays mount into the side of the rack. They are designed to mount to the front to rear side frame members using slide nuts to allow them to be positioned to suit the application and space constraints.

##### Features / Benefits:

- Three width options for varying cabling volumes
- Slotted profile allows services to be secured to trays
- Supplied with fixings and mounting instructions
- Finish: Pre galvanized zinc.

Part code	Description	Height U	Width mm
D3CTK42U100W	DRS Series cable tray	42U	100
D3CTK47U100W		47U	100
D3CTK52U100W		52U	100
D3CTK42U200W		42U	200
D3CTK47U200W		47U	200
D3CTK52U200W		52U	200
D3CTK42U300W		42U	300
D3CTK47U300W		47U	300
D3CTK52U300W		52U	300



## Vertical cable management accessories

### Rack vertical cable manager fingers

Supplied in pairs, these fingers are designed to mount to the side of the rack 19-inch rails. They will fit to all rack widths but they are ideally suited to 800mm wide rack variants. They can be used in conjunction with the rack front vertical channels to provide a flexible cable management solution.

#### Features / Benefits:

- Retrofit-able (needs access to the inside of the mounting rail at mounting points)
- Promotes cable bend radius control
- Requires 19-inch rails to be set back 150mm
- Finished black
- Supplied with fixings and mounting instructions.

Part code	Description	Height U
D3RCM42U		42U
D3RCM47U	DRS Series vertical cable management fingers	47U
D3RCM52U		52U



### Cable hoops

Available in two sizes these plastic rings provide cable management capabilities in multiple locations. Each hoop can be screw fixed into position using M6 screws.

#### Mounting positions include:

- Front of 19-inch rails
- Side of 19-inch rails
- 800mm wide front vertical cable channels
- Inside the vertical high density cable channels.

#### Features / Benefits:

- Clip locking facility allows easy management of cables with secure closure
- CTS cable hoop external dimensions: approximately 90mm x 55mm x 29mm
- CTL cable hoop external dimensions: approximately 127mm x 70mm x 29mm
- Finished light grey.



Part Code	Cable hoops
ETN-CTS	Cable ring - small plastic (1pcs)
ETN-CTL	Cable ring - large plastic (1pcs)
ACH6	600W cable management hoop
ACH8	800W cable management hoop
ETN-UCTFK	Fixing kit – screws, washers & cage nuts (10pcs) screws, washers & cage nuts (10pcs)

### Cable management accessories

#### 1U / 2U Cable Ring Kits

1U and 2U high metal cable rings provide cable management capabilities in multiple locations. Each hoop can be screw fixed into position using standard M6 screws.

**Mounting positions include:**

- Front of 19-inch rails
- Side of 19-inch rails

**Features / Benefits:**

- Open rings allow easy management of cables
- Cable ring depth:  
1U = 85mm 2U = 170mm
- Finished black.

Part Code	Description
ETN-CMDRNR031U	Cable ring - 1U metal (4pcs)
ETN-CMDRNR032U	Cable ring - 2U metal (4pcs)



#### Velcro® tie wraps

These Velcro® tie wraps are available in two lengths to suit varying cable volumes. Ideal for safely bundling cables and securing to various structures on or inside a rack, these re-useable ties are ideal for use with cable trays, cable baskets, side support channels, vertical high density cable channels, horizontal cable ring managers, high density horizontal cable managers as well as other applications.

**Features / Benefits:**

- Can be used in many applications
- Helps avoid damage to cables and promotes tidy cabling structures
- Helps promote rack hygiene and promote efficient thermal operation
- Finished black.

Part Code	Description
ETN-BX45V8	Velcro tie wrap 200mm x 13mm (50pcs)
ETN-BX45V11	Velcro tie wrap 280mm x 13mm (50pcs)



#### Velcro® buckle straps

These Velcro® buckle straps are available in two lengths to suit varying cable volumes. Ideal for safely bundling cables and screw fixing to various structures on or inside a rack these reuseable ties are ideal for use with 19-inch mounting rails and other structures with secure screw mounting points.

**Features / Benefits:**

- Can be used in many applications
- Helps avoid damage to cables and promotes tidy cabling structures
- Helps promote rack hygiene and promote efficient thermal operation
- Finished black.

Part Code	Description
ETN-CMVBCKL	Velcro buckle straps 230mm x 13mm (10pcs)
ETN-CMVBCKL12	Velcro buckle straps 300mm x 13mm (10pcs)

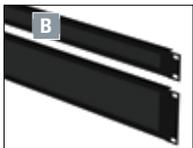


# In rack air management

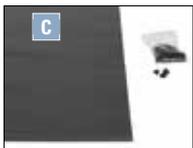
Fitting 19-inch blanking panels in vacant equipment slots and deploying rack baffling helps to avoid recirculation in the rack space. Managing the segregation of the supply and return air helps to maximize the cooling infrastructure effectiveness by delivering air to the equipment intakes at the optimal temperature and volume.



Clip in plastic blanking panels available in 1U, 2U & 8U heights



19-inch cable through blanking panels



PlenaFill® tear off blanking panels available in 27U sheets with clip in fixings



Adjustable height 19-inch blanking panels



### Air management blanking panels

#### Rack air baffles

Part code	Description	Height U	Depth mm	Colour
D3VBK42600	Vertical air baffle kit	42U	600	Silver
D3VBK47600		47U	600	Silver
D3VBK52600		52U	600	Silver
D3VBK42800		42U	800	Silver
D3VBK47800		47U	800	Silver
D3VBK52800		52U	800	Silver
D3HBK600	Top & bottom baffle kit	-	600	Silver
D3HBK800		-	800	Silver

#### Universal 19-inch blanking panels

Designed to be used in any 19-inch compliant rack, these simple clip-in panels are available in a range of U heights and pack quantities. Quick and easy to deploy, these panels simply snap into position without the need for any tools. 19-inch blanking panels help avoid the mixing and recirculation of air in the rack space.

##### Features / Benefits:

- Clip-in toolless installation
- Universal 19-inch compliant (will fit 3rd party racks)
- Eaton branded.

Part Code	Description
ETN-PBP1U10	19" Blanking panel - clip-on plastic 1U (10pcs)
ETN-PBP1U100	19" Blanking panel - clip-on plastic 1U (100pcs)
ETN-PBP2U10	19" Blanking panel - clip-on plastic 2U (10pcs)
ETN-PBP2U100	19" Blanking panel - clip-on plastic 2U (100pcs)
ETN-PBP8U10	19" Blanking panel - clip-on plastic 8U (10pcs)
ETN-PBP8U100	19" Blanking panel - clip-on plastic 8U (100pcs)



#### Universal 19" steel blanking panels

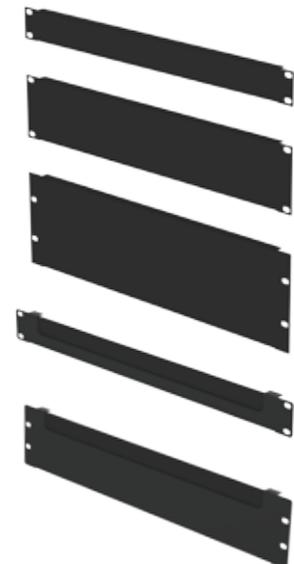
Designed to be used in any 19-inch compliant rack, these simple panels are available in a range of U heights. 19-inch blanking panels help avoid the mixing and recirculation of air in the rack space.

##### Features / Benefits:

- Universal 19-inch compliant (will fit 3rd party racks)

##### Universal 19" plain steel blanking panels

Part code	Description	Height U
PPS1B	Blanking panel steel, painted	1U
PPS2B		2U
PPS3B		3U
PPS4B		4U
PPS5B		5U
PPS6B		6U
PPS12B		12U



## Air management blanking panels

### PlenaFill® tear off 19-inch blanking panels

Each sheet comprises of 27 off 1U tear-off blanking panels manufactured from UL-VO, class 94 fire retardant plastic. Users can simply tear the panel to the desired U height allowing simple and easy adaption to individual installation requirements.

#### Features / Benefits:

- Universal mount to all square pierced EIA 310 compliant rails
- Tear to unit height to suit application
- Quick fit mounting allowing fitting in seconds
- Fully re-usable
- Low weight.

Part Code	Description
ETN-PFBP27U1	19" Blanking panel - 27U tear off PlenaFill® kit (1pcs)
ETN-CBLPF-BR	19" Blanking panel - snap rivets square hole PlenaFill® (50pcs)
ETN-PFBP27U10	19" Blanking panel - 27U tear off PlenaFill® panels (10pcs)



### Cable pass through 19-inch blanking panels

Available in 1U and 2U height options, these brush strips allow cables to be passed through the 19-inch aperture without compromising in-rack air management. Toolless 1/4 mounting ensures the units can be mounted quickly and easily on any racks with EIA 310 compliant square pierced 19-inch rails.

#### Features / Benefits:

- Universal mount to all square pierced EIA 310 compliant rails
- Fast tool-less 1/4 turn mounting
- Cable through feature with brush seal.

Part Code	Description
ETN-OBSP1	19" Blanking panel - brush cable entry 1U (1pcs)
ETN-OBSP2	19" Blanking panel - brush cable entry 2U (1pcs)



### Adjustable plain steel 19-inch blanking panels

Available in a two height configurations, these sliding blanking panels are adjustable in height. Manufactured from painted mild steel these panels secure quickly to square pierced 19-inch mounting rails.

#### Features / Benefits:

- Universal mount to all square pierced EIA 310 compliant rails
- Fast tool-less 1/4 turn mounting
- Simple sliding height adjustment.

Part Code	Description
SBP712USQ	19" Blanking panel - adjustable height steel panel 7U to 12U
SBP1222USQ	19" Blanking panel - adjustable height steel panel 12U to 22U



### Air management

#### Base blanking options

Part code	Description	Width mm	Depth mm
D3BB0608		600	875
D3BB0610	DRS Series base blanking kit	600	1000
D3BB0612		600	1200
D3BB0808		800	875
D3BB0810	DRS Series base blanking frame	800	1000
D3BB0812		800	1200

#### Roof mounted fan trays

Part code	Description	Width mm	Colour
D3FTS062W2VDL		600	Grey
D3FTS082W2VDL		800	Grey
D3FTS063W2VDL		600	Grey
D3FTS083W2VDL	DRS Series roof mounted fan tray 220/230v	800	Grey
D3FTS062W2VDB	complete with UK lead	600	Black
D3FTS082W2VDB		800	Black
D3FTS063W2VDB		600	Black
D3FTS083W2VDB		800	Black

#### Universal 19" rack mounted fan trays

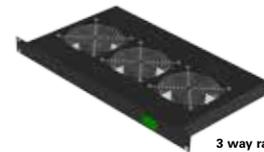
Part code	Description	Height U	Colour
IVU3L	Universal 3-Way standard fan tray and uk lead - (220/230v)	1U	Grey
IVU3BL		1U	Black
IVU6L	Universal 6-Way standard fan tray and uk lead - (220/230v)	1U	Grey
IVU6BL		1U	Black
RMHPFU230	Universal scavanger fan tray & uk lead - (220/230v)	2U	-



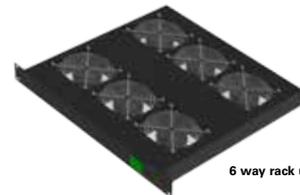
2 way roof unit



3 way roof unit



3 way rack unit



6 way rack unit



scavanger rack unit

## Air management return air ducts

A simple, scalable solution to more effectively manage the ever-increasing heat loads in today's Data Centre. This design mounts easily onto the DRS Series rack system.

Combining the roof mounted return air duct with the in-rack air management ensures that the hot exhaust air, from the IT equipment, is contained in the rear of the rack avoiding recirculation. The return air duct directs the exhaust air from the rack to room air conditioners via a plenum ceiling or return duct work.

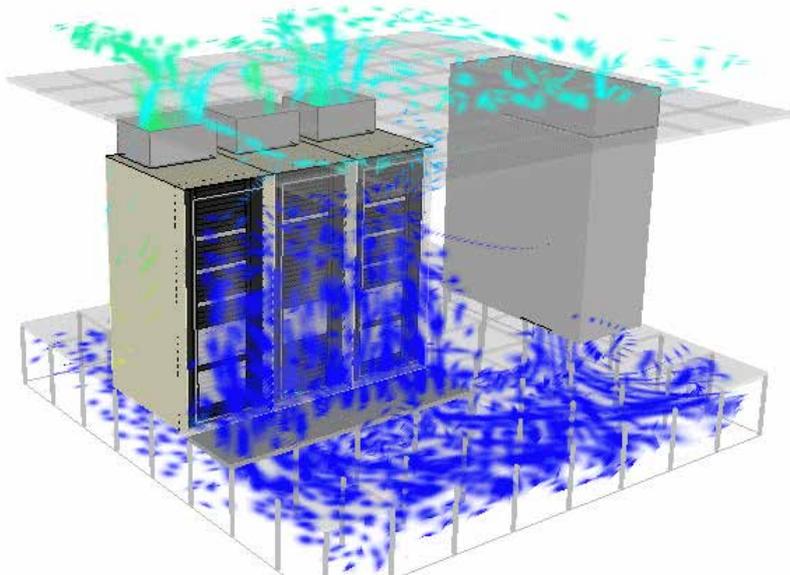
### Features

- Retro fitted onto standard rack configurations
- 600W and 800W options
- Replaces a single full size top panel
- Adjustable in height from 350 - 650 mm or 650 - 1200mm
- Available in grey or black
- Ships flat packed for easy on-site assembly



### Roof mounted return air ducts

Part code	Description	Height mm	Width mm
D36HDCHIM350L	DRS Series HD double depth passive chimney kit	350-650	600
D38HDCHIM350L		350-650	800
D36HDCHIM650L	DRS Series HD double depth passive chimney kit	650-1200	600
D38HDCHIM650L		650-1200	800



### Air management in-rack heat exchangers

In-rack heat exchangers are ideal for rooms with either solid or raised floors. Providing true flexibility, the units remove the need to pre-plan or over provision cooling at day one, avoiding unnecessary capital expenditure. Their design allows users the ability to scale the cooling provision to match demand, helping to reduce operational costs whilst offering optimal efficiency. Eaton's in-rack solutions provides the perfect balance, optimising users CAPEX and OPEX demands.

Duties vary according to supply temperatures. Normal operation is based on a "coolant on" temperature of 12°C and a "coolant off" temperature of 16°C. Designed to mount within the 19" aperture in racks with a minimum rack depth of 1000mm, the coolers can be mounted into Eaton's entire rack range as well as third party racks.



#### Universal high density standard width server cooler kits

Part code	Description	Colour	Min rack depth	Mounting U	Rating
SC10KWK				11U	10kW
SC30KWK	Air/water floor mounted server cooler kit 220/230v AC	Black	1000 mm	20U	30kW
SC60KWK				29U	60kW
SC10KWEK				9U	10kW
SC30KWEK	Air/water floor mounted server cooler kit 220/230v AC	Black	1000 mm	18U	30kW
SC60KWEK				27U	60kW
SC35KWK	Air/water floor mounted server cooler kit 220/230v AC	Black	1000 mm	20U	35kW
SC77KWK				38U	75kW



Floor kit

Floor mounting kits comprise of:

- floor mounting frame - server cooler unit and coupling brackets
- 3m EPDM over-braided flexible hose (pair - supply/return)
- controller connection lead

#### Universal high density server cooler control modules

Part code	Description	Colour	Min rack depth	Units	Mounting U	Rating
SCCM2	19" mounted server cooler control module	Black	1000 mm	2	4U	10kW
SCCM4				4	4U	30kW



Control module

Controller kits comprise of:

- 19" x 4U rack mounted control unit
- controller power lead (IEC C19 to UK)

## Air management accessories

### Universal high density server cooler accessories

Part code	Description	Colour	Mounting U	Min rack depth
SC10KWES	10kW server cooler extension shroud	Black	9U	1200
SC30KWES	30kW server cooler extension shroud	Black	18U	1200
SC60KWES	60kW server cooler extension shroud	Black	27U	1200
SCFMK	Server cooler floor mounting kit	Black	-	1000
SCFHA1	10kW / 30kW / 60kW server cooler braided hose kit (pair)	-	-	-
SCFHA2	35kW / 75kW server cooler braided hose kit (pair)	-	-	-

### Temperature strips

These simple self-adhesive labels have a scaled indicator which changes colour according to the localized air temperature. The labels allow users to see at a quick glance the current condition of the rack and help identify potential locations of concern.

#### Features / Benefits:

- Simple graphical indication of localized air temperature
- Temperature range 10°C - 40°C
- Labels measure 202mm x 18mm
- Durable self-adhesive backing.



Part Code	Description
WLTEMPSTRIP10	Temperature strip (10pcs)

### Floor grommets

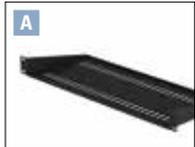
By sealing gaps around pipe work or cabling infrastructure, floor grommets reduce air loss and leakage, eliminating the possibility of the hot air return mixing with the cold air feed.

- Manufactured from high strength flame retardant ABS with Nylon 6 brush (where applicable)
- Overlapping brush to improve efficiency
- Easy to install
- RoHS compliant

Part code	Colour	Size		Cutout Size	
		Width mm	Height mm	Width mm	Height mm
GTAG1		328	162	265	115
GTAG3		250	250	200	200
GT085	Black		Ø233		Ø209
GT065			Ø185		Ø169
GT005			Ø140		Ø127
GT003			Ø114		Ø102



# Rack shelving



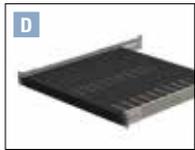
1U, 2U & 3U  
19-inch mounted  
cantilever



Standard duty & heavy  
duty 19-inch mounted fixed  
adjustable shelves



Standard duty 19-inch  
mounted sliding shelves  
adjustable mounting depth



Heavy duty 19-inch mounted  
sliding shelves - adjustable  
mounting depth



## Chassis runners

Part code	Description	Colour	Load kgs	Width mm	Depth mm
CR39				-	390
CR45				-	450
CR58	Chassis runner - pair	Silver	35	-	580
CR62				-	620



## Shelving accessories

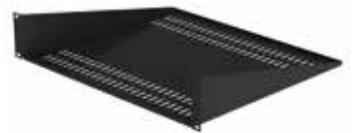
### Cantilever Shelves

These shelves are designed to mount into any EIA 310 compliant 19-inch rack. They can be used to support non rack mounted IT components such as monitors and modems. Perforated mounting surface provides tie down points.

#### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Load capacity 35kg evenly distributed (2 point mounting)
- Finished black
- Supplied with fixings and mounting instructions.

Part Code	Description
ETN-MS19B	Shelf - 19" cantilever 1U x 190mm D
ETN-MS40B	Shelf - 19" cantilever 2U x 400mm D
ETN-MS403B	Shelf - 19" cantilever 3U x 400mm D



### Standard duty fixed adjustable shelves

These shelves are designed to mount into any EIA 310 compliant 19-inch rack. They can be used to support non rack mounted IT components such as monitors or modems. Perforated mounting surface provides the down points.

#### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Load capacity 100kg evenly distributed (4 point mounting)
- Usable depth 450mm - Mounting rails centres 450 -750mm
- Finished black
- Supplied with fixings and mounting instructions.

Part Code	Description
ETN-SDFAS1U45B	Shelf - 19" std duty fixed adjustable 1U x 450D



### Heavy duty fixed adjustable shelves

These shelves are designed to mount into any EIA 310 compliant 19-inch rack. They can be used to support non rack mounted IT components such as monitors and modems. Perforated mounting surface provides tie down points.

#### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Load capacity 250kg evenly distributed (4 point mounting)
- Usable depth 450mm - mounting rails centres 450 -750mm
- Usable depth 650mm - mounting rails centres 650 - 950mm
- Finished black
- Supplied with fixings and mounting instructions.

Part Code	Description
ETN-HDFAS1U45B	Shelf - 19" Heavy Duty Fixed Adjustable 1U x 450D
ETN-HDFAS1U65B	Shelf - 19" Heavy Duty Fixed Adjustable 1U x 650D



### Shelving accessories

#### Fixed shelves

Part code	Description	Colour	Load kgs	Width mm	Depth mm
SV45B	Fixed shelf	Black	35	-	450
SV58B				-	580
SV62B				-	620
SV72B				-	720
ETN-QRSV45B	Quick fit 19" fixed shelf	Black	35	-	450
ETN-QRSV55B				-	550
ETN-QRSV65B				-	650
QETN-RSV75B				-	750
QRSVFW55B	Quick fit full width fixed shelf	Black	35	-	550
QRSVFW65B				-	650
QRSVFW75B				-	750



#### Standard duty sliding shelves

These shelves are designed to mount into any EIA 310 compliant 19-inch rack. They can be used to support non rack mounted IT components such as monitors and modems. Perforated mounting surface provides tie down points.

##### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Finished black
- Supplied with fixings and mounting instructions.

Part code	Description	Colour	Load kgs	Width mm	Depth mm
LDATSV45B	19" Sliding shelf	Black	50	-	450
LDATSV55B				-	550
LDATSV70B				-	700



#### Heavy duty sliding shelves

These shelves are designed to mount into any EIA 310 compliant 19-inch rack. They can be used to support non rack mounted IT components such as monitors and modems. Perforated mounting surface provides tie down points.

##### Features / Benefits:

- Universal mount to EIA 310 compliant rails
- Load capacity 125kg evenly distributed (4 point mounting)
- Finished black
- Supplied with fixings and mounting instructions.

Part Code	Description
QRTSV45B	Shelf - 19" heavy duty sliding 1U x 450mm D
QRTSV60B	Shelf - 19" heavy duty sliding 1U x 600mm D
QRTSV75B	Shelf - 19" heavy duty sliding 1U x 750mm D

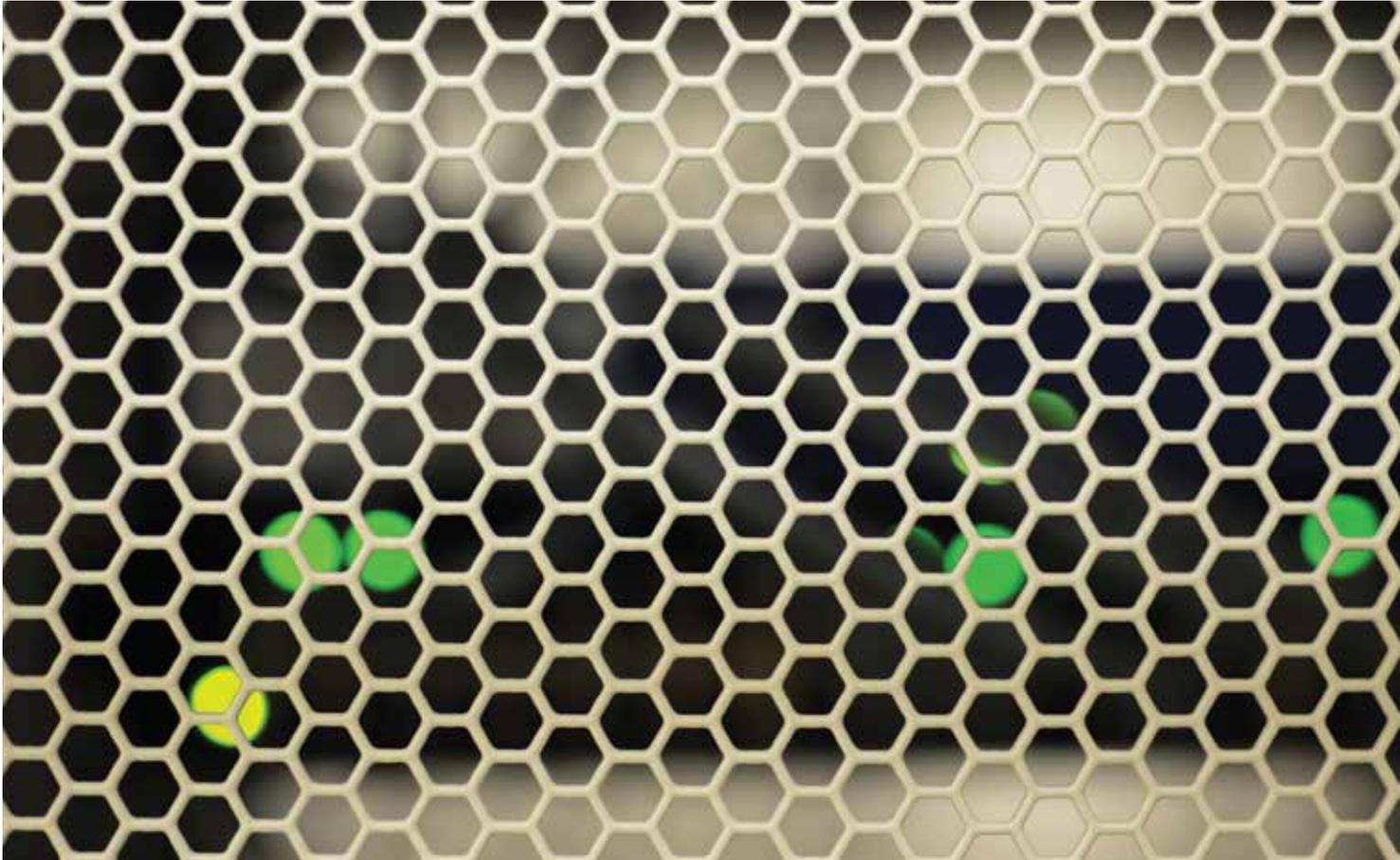


#### Keyboard shelf

Part Code	Description	Load kg	Colour
KT750B	Keyboard shelf	35	Black

# Thermal management

Managing thermal loads is a major challenge for all Data Centre operators



## Description

Effecting proper control of the thermal environment drives energy consumption and ultimately can improve PUE by up to 20%. Achieving optimum cooling and PUE is the result of careful planning of the Data Centre infrastructure layout, rack design and IT load. This is essential to achieve long-term OPEX goals and secure compliance to current and future regulation.

Eaton has developed a range of flexible solutions designed to provide complementary and up gradeable thermal management options to cater for any application. Our products offer thermal management solutions for localised rack environments; standard racks bayed in rows or pods and high density rack applications.

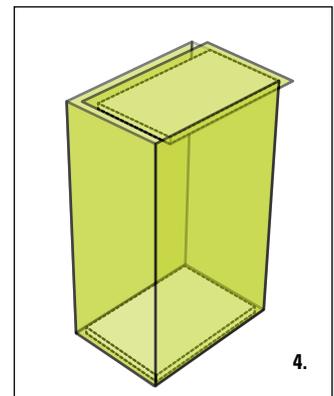
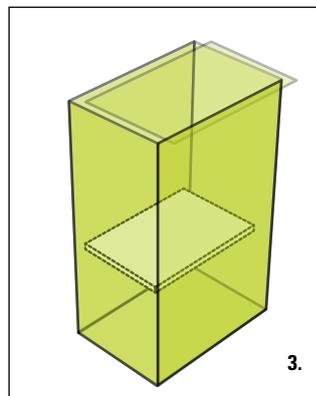
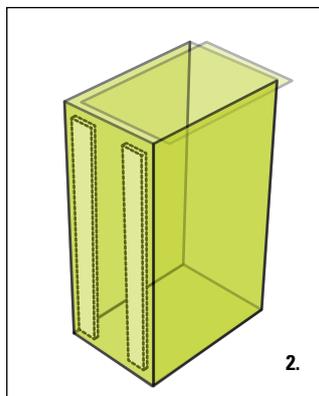
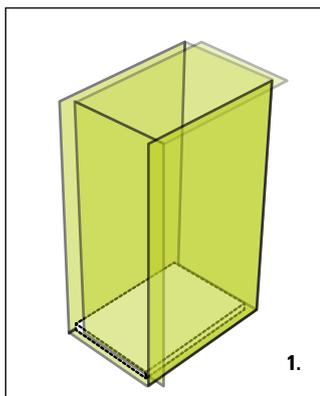
Eaton is a sponsor of the EU Code of Conduct for Data Centres. Our Data Centre applications team are available to provide direct design support and to engage our technical partners to help you design and build the complete thermal management solution for your Data Centre project.

# Passive air

## Room level

Maximising the segregation of heat laden air and cooled air has several benefits for the Data Centre operator and can be achieved relatively simply. Segregating the incoming cooled and heat laden return air improves the efficiency of Data Centre air conditioning or cooling plant. Furthermore, air segregation ensures the utilisation of the full cooling potential of the cooled air and eliminates the inefficiencies associated with bypass air. The result is greater cooling effectiveness at reduced air volumes, improved cooling plant performance and ultimately an improved PUE.

Eaton offer a comprehensive range of modular rack air segregation and blanking options designed to optimise airflow into and out of the rack space.



### 1. Base Blanking

- Manage bypass air by sealing around incoming services.

### 2. Vertical Baffle Blanking

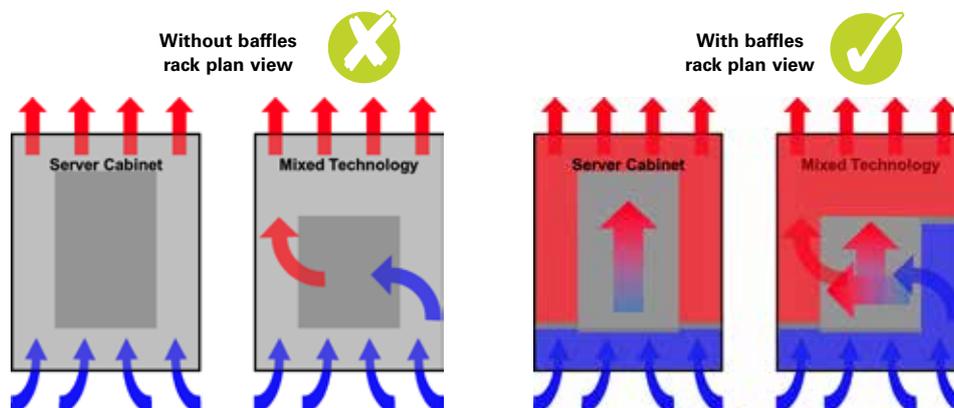
- Seals the area between the 19" rails and the side panels.
- Avoids warm exhaust air recirculating and mixing with the cold supply air.

### 3. 19" Blanking Panels

- Closes off any gaps between the 19" rails where no equipment is fitted.
- Avoids warm exhaust air recirculating and mixing with the cold supply air.

### 4. Top / Bottom Baffle Blanking

- Closes off any gaps between the 19" rails and the top / bottom of the rack.
- Avoids warm exhaust air recirculating and mixing with the cold supply air.



No internal segregation allows uncontrolled air movement with supply and return air mixing reducing equipment cooling effectiveness and efficiency.

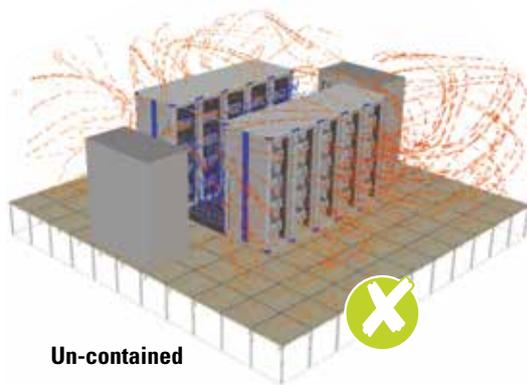
Internal segregation avoids the mixing or crossing over of supply and return air ensuring maximum equipment cooling effectiveness and efficiency.

# Passive air

## Room level

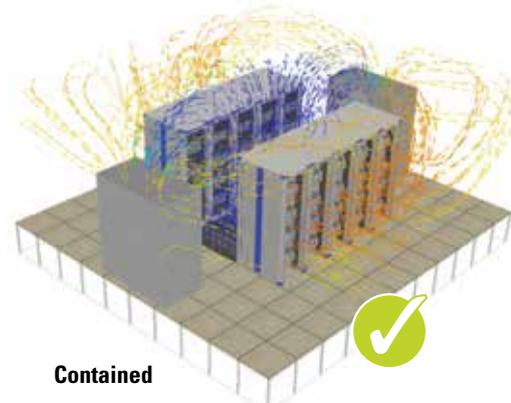
Following the same principle as in-rack air management, the management and segregation of air in a room environment can offer some significant improvements in cooling effectiveness and efficiency helping to significantly reduce operational costs.

Eaton offers a complete range of passive room level air management options including contained aisle and ducted return plenums. Combining our in-rack air management products and our in-room solutions, our racks can be configured to offer the most efficient rack platforms available in today's market. Whether you are looking to manage a simple Data Room or a large Data Centre, we have an air management solution to suit your application.



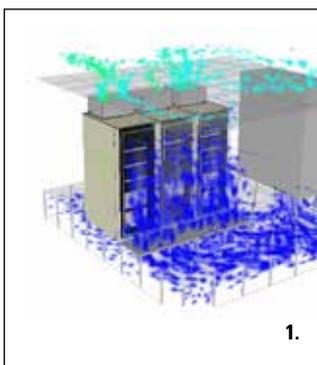
**Un-contained**

Un-contained systems allow supply air to bypass the rack. Bypass air provides no cooling effect to the equipment and reduces the ambient room temperature, reducing cooling plant efficiency.



**Contained**

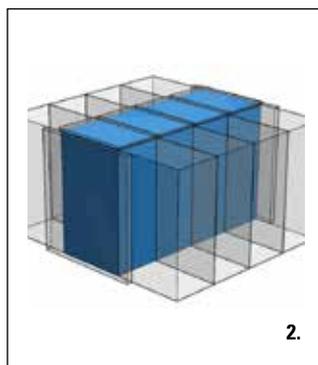
Contained segregation avoids the mixing of supply and return air ensuring maximum equipment cooling effectiveness and efficiency. Supply air only has one direction to flow and that's through the active equipment.



1.

### 1. Rack Ducted Return

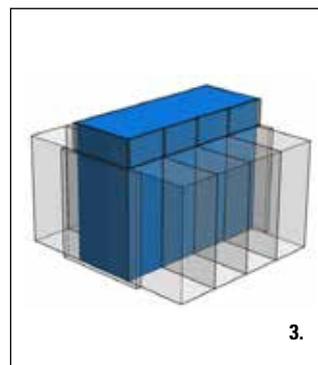
- Ducts the exhaust air out of the rack to a plenum above the rack space or in the ceiling void connected to the computer room cooling system (typically down flow CRAC).
- Cold air supply comes from the ambient room environment.
- Utilises vented front doors and solid rear doors.



2.

### 2. Aisle Containment

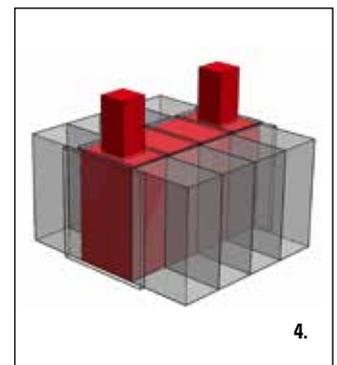
- End of aisle doors and roof panels contain the supply air typically fed from a raised floor plenum.
- Used in conjunction with in-rack air management the supply air has to pass through active equipment mounted in the rack.
- The return air path to the CRAC is typically the ambient room environment.



3.

### 3. Vertical Aisle Containment

- End of aisle doors and vertical curtains contain the air between the rack rows.
- Can be fed from floor or ceiling plenum.
- Can be configured in either hot or cold contained systems.
- In a cold aisle containment configuration the return air path to the CRAC is typically the ambient room environment.



4.

### 4. Ducted Contained Return

- End of aisle doors and roof panels contain the return air which is ducted to a plenum above the rack space or in the ceiling void connected to the computer room cooling system (typically down flow CRAC).
- Vertical aisle containment can be configured to operate in the same manner.

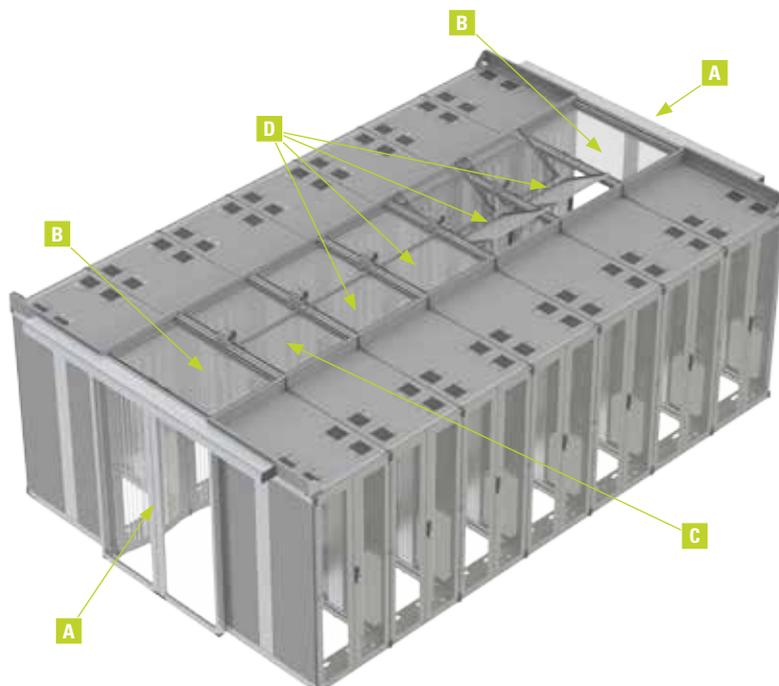
# Passive air

## DRS aisle containment

The DRS Series aisle containment pod provides the optimum solution to the most testing Data Centre applications. These pods are completely modular allowing racks and components to be added as a facility changes and expands. The Active Roof Panels will open when power is cut, so they can be incorporated into the facilities BMS system for example.

Aisle width	Description	U height	Rack width mm		Part code	
			600	800	Manual operation	Electronic operation
1200mm	Sliding door kit	42	•	•	RDACDDK420112L	RDACDEN420112L
		47	•	•	RDACDDK470112L	RDACDEN470112L
	Fixed roof panel	-	•	-	RDACFR0612L	-
		-	-	•	RDACFR0812L	-
1200mm	Active roof panel master	-	•	-	-	RDACMR0612L
		-	-	•	-	RDACMR0812L
	Active roof panel slave	-	•	-	-	RDACSR0612L
		-	-	•	-	RDACSR0812L
1800mm	Sliding door Kit	42	•	•	RDACDDK420118	RDACDEN420118L
		47	•	•	RDACDDK470118	RDACDEN470118L
	Fixed roof panel	-	•	-	RDACFR0618L	-
		-	-	•	RDACFR0818L	-
1800mm	Active roof panel master	-	•	-	-	RDACMR0618L
		-	-	•	-	RDACMR0818L
	Active roof panel slave	-	•	-	-	RDACSR0618L
		-	-	•	-	RDACSR0818L

The Master Active Roof Panel includes a power supply which can be daisy-chained to other Slave Roof Panels, and it will support the power for up to 19 of the Slave Roof Panels. Each 'Active' aisle must therefore contain at least 1 Master Active Roof Panel. Product launch later in 2017.



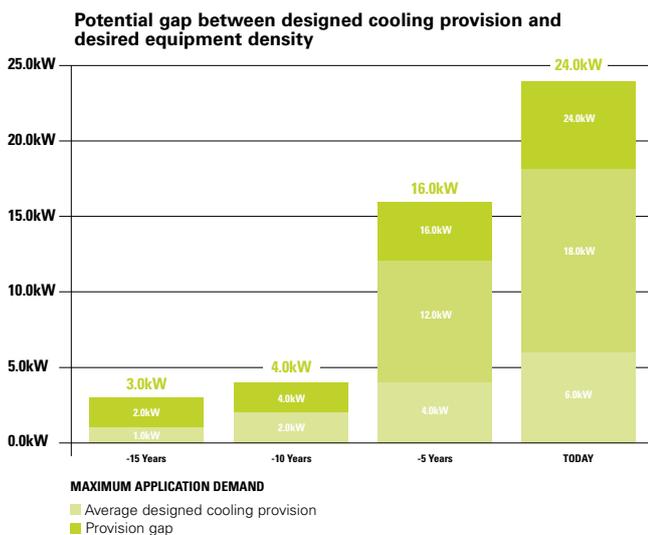
### COMPONENTS IN THIS POD

- A.** Sliding door kit
- B.** Fixed roof panel
- C.** Active roof panel master
- D.** Active roof panel slave

# Active air

## Active air management

Most legacy Data Room designs incorporating under floor or plenum fed cooling have been designed to support thermal loads of 2kW to 4kW per rack. The need to maximise space utilisation and accommodate increased IT and thermal loads is resulting in rack equipment densities of more than 4kW becoming the norm.



## Basic active air management

It is often the case that the condition and availability of air to the rack space, not the rack configuration, is what limits the capacity of active equipment that can be hosted in a rack space. A rack configured with high flow doors, fitted with internal air management baffles and blanking, has the ability to comfortably house equipment loads of up to 8kW in the right environment. Higher than 8kW per rack loads can be achieved through a combination of active and passive air management.

It is common for hosted rack densities to exceed the "Average designed cooling provision," creating a hotspot. Some racks will have no active equipment fitted and will be hosting passive structures such as patching and cabling. In these cases, higher cooling provision can be achieved in selected racks by diverting cooling air from a lower density or passive rack to an active rack.

In such instances it may be beneficial to deploy fans to help divert or move air to and from desired locations. Eaton has a range of fan options which are available across all the rack platforms to improve or enhance air management.

### 1. Rack roof mounted fan trays

Available in 2-Way and 3-Way configurations these fans trays are available in a range of voltages to suite local power requirements. Units are available in either standard or thermostatically controlled versions.

Fan trays can be positioned in multiple positions or allow for multiple fan trays to be fitted.

See page 49 for more details

### 2. Rack mounted fan trays

Available in 3-Way and 6-way configurations these fans trays mount directly to the 19" mounting rails and are designed to enhance air movement in the rack space. They are available in a range of voltages to suite local power requirements and like the roof mounted fan trays are available in either standard or thermostatically controlled versions.

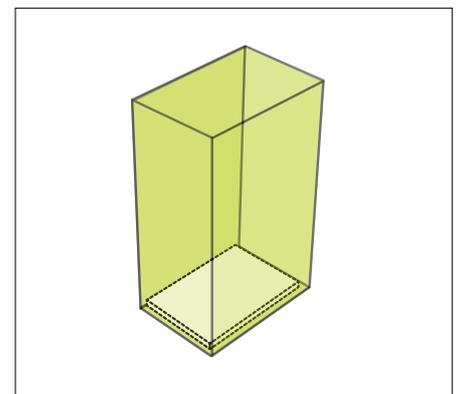
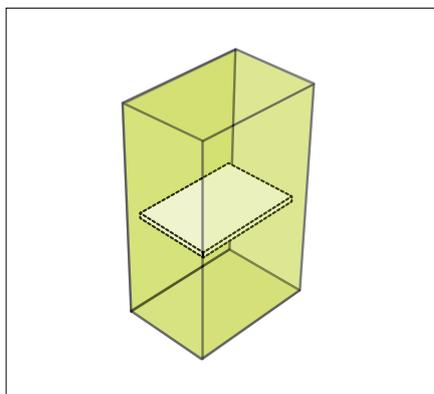
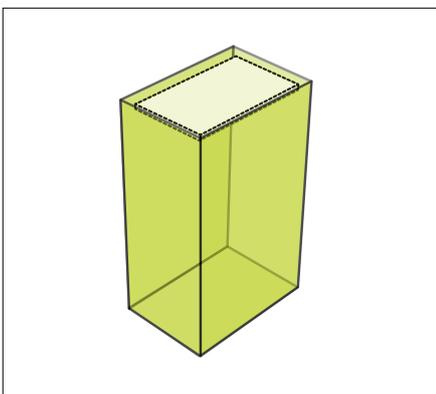
See page 49 for more details

### 3. Scavenger fan trays

These fan trays are designed to be mounted into the bottom of the rack where the racks are mounted onto a plenum fed floor. The scavenger fan tray gathers air from the floor void and ducts it to the space in front of the 19" mounting rails. Ideal for rack positions with low static air feed pressures.

Like all the other fan tray configuration scavenger fan trays are available in a range of voltage configurations.

See page 49 for more details



# Active air

## High density

With end users looking to host equipment loads of 20kW plus in data rooms designed to provide 4kW provision per racks space, you can quickly see a provision gap between “available” and “desired”. There are a number of solutions or options available to end users depending on site constraints.

## Cooling mediums

**Fresh air** – Commonly referred to as forced air or free cooling.

- The air in the data room is purged and replaced with external ambient air
- No temperature / humidity control
- Very low cost
- Limited ability to cool high density loads

**Chilled water** - Sometimes referred to as water to air heat exchangers.

- Simple water pumped through radiators (like your car).
- Tight control of temperature and humidity.
- Higher CAPEX cost when compared to DX but lower OPEX
- Can cool high density loads
- Best free cooling solution (apart from fresh air)
- Smaller Data Centre units
- Some resistance in DC managers

**Direct expansion gas** - Commonly referred to as DX or split system.

- Freon gas expanded rapidly
- Tight control of temperature / humidity
- Relatively low cost
- Can cool high density loads
- Limited ability to offer free cooling and inherently higher OPEX
- Large Data Centre units required but smaller external condensers

**Chilled water** - Remains one of the most popular mediums for removing heat from the air within a contained data room due to;

- Offers the option of maintaining a contained and controlled environment.
- Is a proven and safe medium for heat transfer in the data room environment
- Many sites already having chilled water available as most CRAC units employ technology
- Offers scalability and when coupled with free cooling technology offers low OPEX costs



## Cooling systems

### In-rack rack heat exchangers

Eaton's range of in-rack heat exchangers are ideal for rooms with or without a floor void. Providing true flexibility these within rack units remove the need to pre-plan or over provision cooling at day one. Offering the ability to truly scale the cooling provision to match demand these units provide the perfect balance of CAPEX and OPEX and can provide up to 12% more useable mounting space when compared to other leading manufacturers solutions.

- Designed for chilled water cooling
  - Can be set up in open loop or closed loop configurations
  - Can be deployed in rooms with or without raised floor plenums
  - Can be deployed with contained aisle configurations
  - Rack mounted control drawer options include either two system or four system connectivity
  - Hot swap fans
  - Available in configurations from 10kW - 75kW.
- See page 51 for more details

## IMPORTANT

**Managing heat is critical in avoiding downtime, reducing energy consumption and ultimately improving PUE.**

**Eaton offers a comprehensive range of air management, active and passive cooling products to suit any Data Centre application.**

# Active air

## Cooling systems

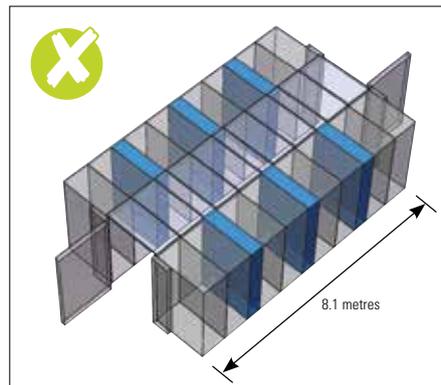
### Eaton's space saving in-rack solution

Simple and easy to install within the 19" rail space, the in-rack cooling solution connects the to Data Centre chilled water infrastructure.

Eaton's in-rack cooling, in cold aisle configuration, provides scalable cooling and can be retro-fitted into existing whitespace as cooling loads change, without the need for extensive reconfiguration of the rack and aisle layout.

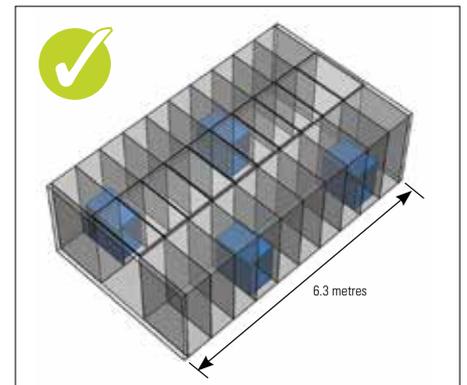
#### IN RACK BENEFITS

- Cooling units can be installed or removed while racks are bayed
- 20 racks v 16 in same footprint
- 11% greater cooling capacity
- Increase of 91U of usable rack space
- Up to 30% improvement in cost per kW of deployed cooling



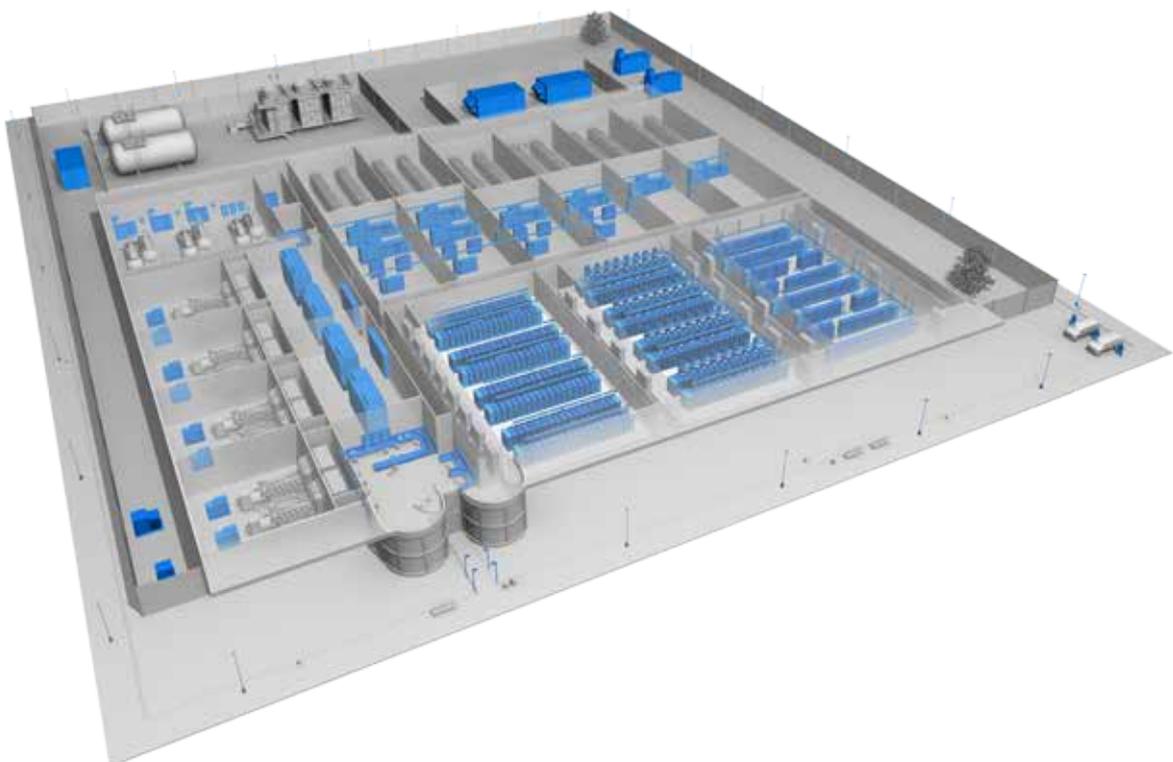
**Schematic of 16 rack pod with side pod cooling**

16 x Racks 48U x 600W x 1070D  
6 x Side mounted 300w heat exchanger pods  
2 x End of aisle hinged door assemblies  
1 x Contained roof assembly



**Schematic of a 20 rack pod with in rack cooling**

20 x Rack 47U x 600W x 1000D  
4 x 18u heat exchangers  
2 x End of aisle sliding door assemblies  
1 x Contained roof assembly



# Intelligent infrastructure for IT rooms and data centres



By complimenting Eaton IT racks with other products from Eaton's wide product portfolio, you can build a complete physical infrastructure for your IT rooms and data centres as well as monitor and manage it from your virtualisation dashboard.

Ensure power protection of your IT equipment with Eaton rack based UPSs. Organise power distribution to individual IT appliances through intelligent rack power distribution units and monitor your entire power infrastructure through your existing virtualization dashboard by simply plugging in Eaton's power management software. The software will also help trigger pre-defined disaster recovery policies in case of power and environmental events.

## Power protection

To protect your IT equipment installed in the IT rack, Eaton offers a range of highly effective Energy Star qualified rack-based UPS solutions. In combination with Eaton's Intelligent Power Software, Eaton UPSs can be monitored and managed from your virtualization dashboard – initiating disaster recovery policies in the event of an alarm.



### Eaton 5PX UPS 1500-3000 VA

The Eaton 5PX Rack/Tower UPS provides line-interactive backup power and scalable runtimes for servers, storage systems, VoIP gear and network equipment.

### Eaton 9PX UPS 1000-3000W

The Eaton 9PX UPS (1000-3000 W) provides advanced protection for small & medium datacenters, IT rooms and Infrastructure. Delivering double conversion protection and being the first in its class to provide Unity power factor (VA=W).

### Eaton 9PX UPS 5-22 kVA

The Eaton 9PX UPS (5-22 kVA) provides energy-efficient power protection for small & medium data centers, IT rooms and infrastructure. Delivering double conversion protection with 40% less energy usage and 28% more power. 9PX is the perfect UPS for IT and Facility managers who are concerned by energy cost and are looking for next generation power protection solutions.



## Power distribution

While a UPS protects your IT application, power distribution takes care that the power from the UPS is distributed between IT appliances you have in your rack. The next generation of Eaton advanced rack PDUs (ePDU G3) incorporate monitoring and management capabilities. In addition to distributing power from the UPS to your IT appliances safely and efficiently, modern distribution units will enable you to monitor and measure power consumption in an IT rack, remotely shut down power during an outage and help initiate disaster recovery policies.



### Eaton ePDU G3 basic

Models available in 0U and 1U

Designed for reliable and cost effective power distribution, the ePDU G3 Basic models feature Eaton's patented IEC outlet grip plug retention, color-coded outlet sections, a low-profile form factor and a high operating temperature. 0U models include both rear and side button mounting systems as well as Eaton's patented variable mounting system.



### Eaton ePDU G3 in-line metered and dual

Add metering to upgrade basic PDUs

ePDU G3 In-Line Metered models allow existing basic PDUs to be upgraded to include IEC class 1 billing grade metering and can be mounted either horizontally in the rack or vertically on the 0U space. Models include IEC Class 1 ( $\pm 1\%$ ) billing grade accuracy, an advanced hot-swap meter with LCD pixel display showing V, W, A and kWh and the ability to daisy chain 8 ePDUs to share the same network connection and IP address.



### Eaton ePDU G3 metered input

Models available in 0U, 1U and 2U

ePDU G3 Metered Input models allow metering to the branch and phase level for effective load balancing, with no switching. Models include IEC Class 1 ( $\pm 1\%$ ) billing grade accuracy, an advanced hot-swap meter with LCD pixel display showing V, W, A and kWh, and the ability to daisy chain 8 ePDUs to share the same network connection and IP address.



# Power distribution



## Eaton ePDU G3 metered outlet

Meter the input, branch, individual outlets & IT equipment across A and B feed

ePDU G3 Metered Outlet models allow device level metering over multiple power feeds and includes kWh, peak power and current draw. Analyze and understand the consumption of individual devices powered over A and B feeds and view available power. Metered Outlet units have no switching. They include IEC Class 1 ( $\pm 1\%$ ) billing grade accuracy, an advanced hot-swap meter with LCD pixel display showing V, W, A and kWh, and the ability to daisy chain 8 ePDUs to share the same network connection and IP address.



## Eaton ePDU G3 switched

Switch outlets & IT equipment across A and B feed + meter the input and branch circuits

ePDU G3 Switched models allow lights-out control of devices including switching devices powered across multiple ePDUs. They include IEC Class 1 ( $\pm 1\%$ ) billing grade accuracy, an advanced hot-swap meter with LCD pixel display showing V, W, A and kWh and the ability to daisy chain 8 ePDUs to share the same network connection and IP address.



## Eaton ePDU G3 managed

Switch and meter outlets & IT equipment across A and B feed:

Combines both Switched and Metered Outlet functionality together in one ePDU

ePDU G3 Managed models allow complete lights-out control and metering of devices including devices that are powered across multiple ePDUs. They include IEC Class 1 ( $\pm 1\%$ ) billing grade accuracy, an advanced hot-swap meter with LCD pixel display showing V, W, A and kWh and the ability to daisy chain 8 ePDUs to share the same network connection and IP address.

## Eaton ATS 16 & ATS 30

The Eaton ATS offers an affordable solution for customers willing to add power redundancy to networking equipment like switches and routers. This automatic transfer switch will power them from two different sources. Should one power source fail, the alternate one will switch over with no interruption to the connected equipment. Eaton ATS can be connected to multiple devices at the same time while saving the cost of expensive redundant power supplies.



## Intelligent infrastructure for data centres

Power protection, distribution, monitoring and management

# Power management

Eaton's Intelligent Power Manager (IPM) software integrates with leading virtual machine management systems such as VMware vCenter, Citrix XenCenter, Microsoft SCVMM and RedHat and provides the tools needed to monitor and manage power equipment in your physical and virtual environments. IPM allows you to easily define business continuity policies to keep your IT devices up and running during power and environmental events. This innovative software solution ensures system uptime and data integrity by allowing you to remotely monitor, manage and control devices on your network.

In addition, Eaton's Microsoft SCOM management pack makes it possible to monitor Eaton UPSs directly within Microsoft Systems Center Operations Manager, while Eaton's Infrastructure Management Pack for VMware vRealize® helps monitor and manage the health, risk and efficiency of power devices through vRealize dashboard.



# Data center infrastructure monitoring

Embedded within an Eaton Intelligent Power Controller, the new IPM Infrastructure software provides data center managers with an easy to use and simple to deploy infrastructure monitoring solution. From the rack view to the data center dashboard, IPM Infrastructure allows IT professionals to understand and monitor data center power, environmental and physical capacity metrics, all within the context of their IT infrastructure. With the flexibility of the 42iTY™ Open Source data center monitoring software stack, Eaton IPM Infrastructure simplifies





Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customized, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority.

For more information, visit [www.eaton.uk.com/electrical](http://www.eaton.uk.com/electrical)

**Eaton Electric Ltd**  
270 Bath Road, Slough  
Berkshire, SL1 4DX, England  
Tel: +44 (0) 1753 608 700  
Fax: +44 (0) 1753 608 995  
[www.uk.eaton.com](http://www.uk.eaton.com)

**Eaton**  
EMEA Headquarters  
Route de la Longeraie 7  
1110 Morges, Switzerland  
[Eaton.eu](http://Eaton.eu)

© 2017 Eaton  
All Rights Reserved  
Printed in England  
Registered Pub Number : CA159003EN  
Description : DRS Series rack catalogue, UK version. March 2017