Rack Technologies

World Class Intelligent Solutions ▸ Designed & Manufactured in Australia ▸ Used Throughout The World

DATACENTRE ENCLOSURES & OPENFRAME SYSTEMS

iQ series

AUSTRALIAN MADE

iQ SERIES

iQ SERIES

DATACENTRE ENCLOSURES
AND
OPENFRAME SYSTEMS

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Rack Technologies

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Rack Technologies are a leading manufacturer of server rack, data enclosures and infrastructure products for the Australian IT and Datacentre market. Where you have a need for a cabinet or enclosure, a solution can be designed to meet your specification.

The iQ series product features an innovative range of Network/Server Racks, Open Frame Racks for high density cabling or patching, Cooling (Passive Ducting System), Intelligent PDU (monitored or switched PDUs/environmental monitoring) and Advanced Cable Management solutions.

Rack Technologies works closely with all major IT vendors and clients to ensure high quality standards to suit the needs and applications of the market. We pride ourselves on quality, service and on time delivery, backed by a big commitment to the Australian market.

Quality Assurance

Rack Technologies is compliant with the Australian Standard as approved by Global-Mark to the Quality Management System Standards: AS/NZS ISO 9001/2000. Certificate No: 100660

Frame Material and Construction

The iQ series cabinets and accessories are manufactured in Australia from durable welded steel (2mm) with a powder coating finish for longevity. Standard iQ frames are powder coated black although custom colours are available upon request. Rack Technologies stock a comprehensive range of accessories including PDUs, fan forced and passive cooling systems, extensive cable management in both vertical and horizontal form and a large range of fixed or telescopic shelving.

With it's comprehensive range of Australian made frames, cabinets and accessories, Rack Technologies also provide a complete solution for all data and cabling needs and ensure flexibility for all applications or future expansions.

Rack Technologies Enclosures Comply with the International Standard IEC297 and is Endorsed by SCEC

Consider The Environmental Savings When Buying Australian Made

BICSI is a Professional Association Supporting the Information Transport Systems (ITS) Industry

global-mark®

Certificate of Approval

This certificate confirms that the company below complies with the following standard:

Company Name	**Preformed Line Products Australia Pty Ltd**
Company Other Name	
Client ID	**100660**
Certification Standard	**AS/NZS ISO9001-2008: Quality Management Requirements**
Scope of Certification	**Design, manufacture and stockholding of hardware fittings and assemblies for overhead power transmission and distribution. Manufacture and stockholding of hardware fittings and assemblies for aerial and optical fibre cable. Manufacture and stockholding of communication and data equipment. Manufacture of plastic injection mouldings and extrusions for power transmission, distribution and general industries. Design and manufacture of metal cabinets and racking systems for electronic and similar equipment.**
Type of Certification	**Management System**

CERTIFICATE DATES:

Certification Review Date	**17/02/2009**
Certification Expiry Date	**17/02/2011**
Certificate Issue Date	**19/02/2008**
Certificate Last Update Date	**25/02/2009**

APPROVED COMPANY/SITE ADDRESS:

190 Power Street Glendenning 2761 NSW Australia

The use of the Accreditation Mark indicates accreditation by the Joint Accreditation System of Australia and New Zealand in respect to those activities covered by JAS-ANZ accreditation.

Refer to www.jas-anz.org/register for verification.

This certification remains valid until the above mentioned expiry date and subject to the organisation's continued compliance with the certification standard, and Global-Mark's Terms and Conditions.

This Certificate of Approval remains the property of Global-Mark Pty Ltd, Company Number: ACN.108-087-654

JAS-ANZ

Certification Manager

iQ Series Cabinets

The iQ series 600mm and 800mm wide cabinet range is the most advanced Server Rack featured on the Australian market. A robust construction made from durable welded steel with powder coated finish gives the iQ series a variety of applications, whether in a data centre or in a stand alone environment.

The extra width on the outside of the vertical mounting rails can also be utilised for cable management, like the iQ Series Vertical Cable Management System. This is perfect for high density patching as it keeps all cable runs neat and manageable. The 600mm and 800mm wide Server Range is available in 38RU and 45RU configurations, including 800mm, 900mm, 1000mm and 1200mm depths. It will house most servers on the market today without overcrowding and allows excellent air flow for maximum cooling of precious server hardware. The iQ series cabinet has been tested to 600kg UDL load rating and 1000kg without levelling feet.

The iQ Series has been designed so you can customise your data centre requirements by utilising a frame and modular system to bay cabinets together, as well as a large variety of door configurations including 3 Point Locking and Bi Fold designs.

Side, Privacy & Roof Panels

Side panels are used to totally enclose cabinets using locks provided. The panels sit flush with the cabinet when installed.

Privacy panels are used when baying cabinets together and a physical barrier is required between enclosures without the need for side panels. Privacy panels also prevent air leakage from one cabinet to another when bayed.

Roof panels are made with provision for fan cooling and cable entry which sits internally flush.

Cable Management

The T Finger Vertical Cable Management System is designed to handle high density cabling, whether for termination or patching applications.

It fits neatly alongside the vertical 19" rails within a 600mm or 800mm wide cabinet to ensure neat cabling as well as adherence to bend radius requirements. A hinged cover conserves any unsightly cables and has the ability to swing left or right for ease of cable installation.

Modular 8RU and 45RU single side cable management systems fitted to L-rail are also available.

The T fingers are mounted on steel channels in 2RU increments and can be removed to allow the bending and entry of larger cable bundles via the top or bottom, left or right. The fingers are available in 2 (two) length - 93mm and 146mm. 1, 2 & 4 RU horizontal cable management is also available.

Sizes given are inside dimensions of the T-fingers. Refer to cable capacity table on page 24 - 25.

Rails

L-Rails are fully adjustable to suit your requirements and are designed to accommodate most servers on the market. RU mounting holes are 9.5mm square and are designed for M6 cagenuts, and constructed from 2mm zinc annealed steel. RU labeling is pre-configured and supplied.

> Cable Management System (optional)

> Flush fitting doors and side panels

> Swing handle & key lock combo
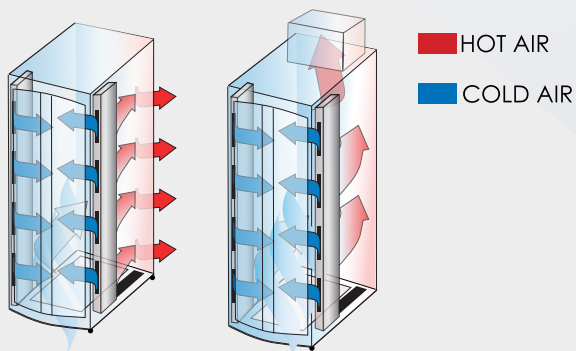
Passive Cooling Systems

The Rack Technologies Passive Cooling Systems have been designed to maximise cooling within Data Centre environments while reducing energy consumption. The unique design below channels the cool air from the intake ducts at the base of the cabinet, and diverts the airflow to the front of the cabinet via adjustable vents. The vents can be opened or closed to direct the airflow to the designated hot spots within the cabinet. This design can also incorporate solid front doors (steel or acrylic) to create a sealed cold air plenum.

■ HOT AIR
■ COLD AIR

Heat Extraction Duct

Heat extraction ducts are used when a hot ceiling plenum system is required - this helps direct heat through the chimney system.

Optional Accessories

> Monitored and switched PDU's available with environmental sensors
> Super quiet whisper fans available as option
> Thermostat fan control system
> Power rails - horizontal/vertical
> IEC power rails available in 12 way and 20 way
> Fixed, sliding or keyboard shelves
> Sliding drawer
> Vertical/horizontal cable management solutions
> Fibre management trays
> Brushed plates
> Blank panels

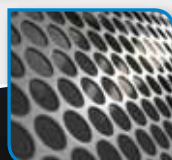## Doors

Whether your Data Centre set up is hot aisle/cold aisle ceiling extraction or you prefer a cold air plenum intake, we have a door solution to suit your requirement. There are six styles of doors available being: acrylic, solid steel, perforated steel, perforated steel hi-flow, perforated steel bi-fold and perforated steel hi-flow bi-fold.

Doors are manufactured with hinges assembled on the right side of the cabinet (viewing from the front) as standard. However cabinets can be manufactured with door hinges on the left - ensure that this is specified on your order.

> Available in depths up to 1200mm deep

> Hi-flow doors available

> Frame Only

> Complete Cabinet

38RU

38RU	600 WIDE FRAMES

Part Number	Description
iQ3804	38RU 600 (w) x 800 (d)
iQ3810	38RU 600 (w) x 900 (d)
iQ3801	38RU 600 (w) x 1000 (d)
iQ3808	38RU 600 (w) x 1200 (d)

38RU	800 WIDE FRAMES

Part Number	Description
iQ3806	38RU 800 (w) 800 (d)
iQ3800	38RU 800 (w) 900 (d)
iQ3807	38RU 800 (w) 1000 (d)
iQ3809	38RU 800 (w) 1200 (d)

45RU	600 WIDE FRAMES

Part Number	Description
iQ4504	45RU 600 (w) x 800 (d)
iQ4510	45RU 600 (w) x 900 (d)
iQ4501	45RU 600 (w) x 1000 (d)
iQ4508	45RU 600 (w) x 1200 (d)

45RU	800 WIDE FRAMES

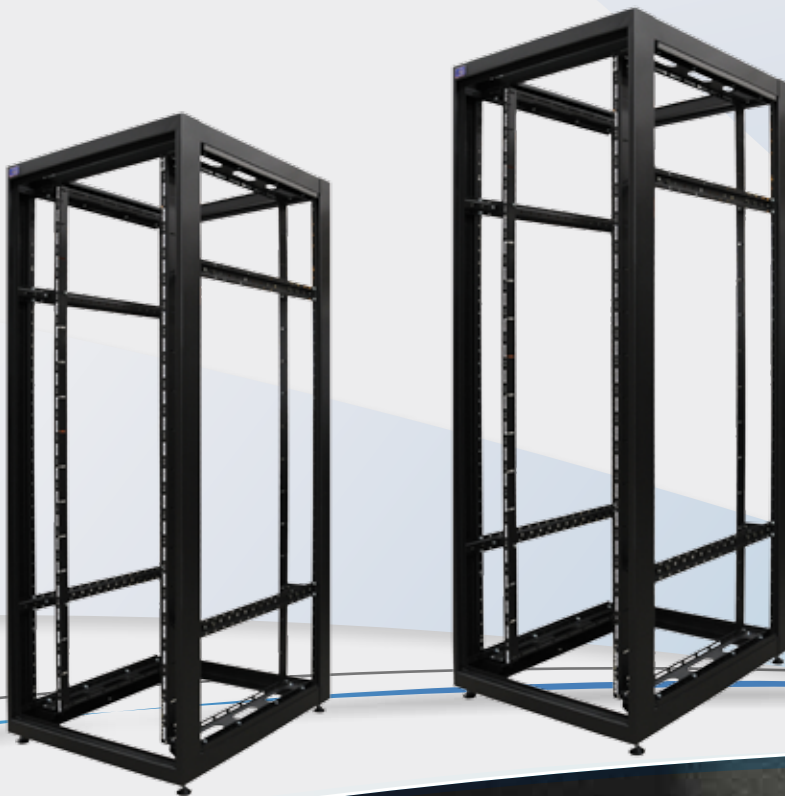| Part Number	Description
iQ4506	45RU 800 (w) x 800 (d)
iQ4500	45RU 800 (w) x 900 (d)
iQ4507	45RU 800 (w) x 1000 (d)
iQ4509	45RU 800 (w) x 1200 (d)

45RU
600mm **FRAME**

38RU
600mm **FRAME**

BASIC FRAME INCLUSIONS

> Frame
> L rails (front and rear)
> RU labels (x4) - front and rear
> Levelling feet

RAILS

RU LABELS

LEVELLING FEET

38RU
> **800mm FRAME**

45RU
> **800mm FRAME**

Cabinet Height Guide

	Rack Units
2173mm	45RU
1862mm	38RU

Note: Levelling feet adds 60mm to these heights

AUSTRALIAN MADE

iQseries

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38RU   DOORS (600/800 wide)

> Swing handle locking system and key/lock combo as standard
> Doors are flush fitting

> Bifold doors used in restricted/narrow aisle

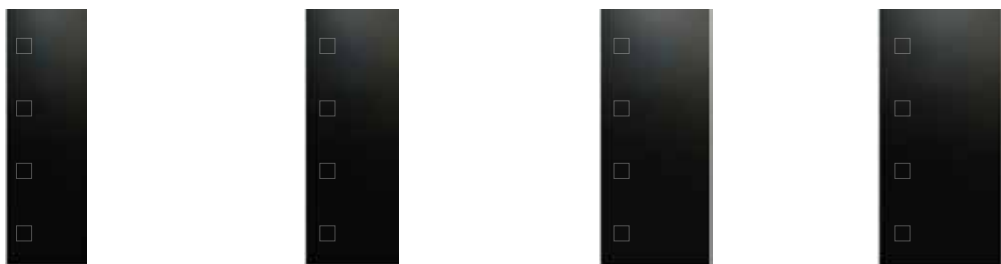| iQ 600mm	iQ3811	iQ3821	iQ3823	iQ3823-HF	iQ3823-BI FOLD	iQ3823-BI FOLD-HF
iQ 800mm	iQ3812	iQ3822	iQ3814	iQ3814-HF	iQ3814-BI FOLD	iQ3814-BI FOLD-HF
Description	38RU Acrylic	38RU Solid Steel	38RU Perforated Steel	38RU Hi-Flow Perforated Steel	38RU Bi-Fold Perforated Steel	38RU Bi-Fold Hi-Flow Perforated Steel

38RU   SIDE PANELS

> Flush fittings
> Includes key lock

iQ 600/800mm	iQ3834	iQ3836	iQ3838	iQ3839
Description	38RU 800mm Deep	38RU 900mm Deep	38RU 1000mm Deep	38RU 1200mm Deep

38RU   PRIVACY PANELS

> Used to separate cabinets when used in a joining/baying situation
> Cable routing knockouts on panels

iQ 600/800mm	iQ3834-PP	iQ3836-PP	iQ3838-PP	iQ3839-PP
Description	38RU 800mm Deep	38RU 900mm Deep	38RU 1000mm Deep	38RU 1200mm Deep

45RU   DOORS (600/800 wide)

iQ4511	iQ4521	iQ4523	iQ4523-HF	iQ4523-BI FOLD	iQ4523-BI FOLD-HF
iQ4512	iQ4522	iQ4514	iQ4514-HF	iQ4514-BI FOLD	iQ4514-BI FOLD-HF
45RU Acrylic	45RU Solid Steel	45RU Perforated Steel	45RU Hi-Flow Perforated Steel	45RU Bi-Fold Perforated Steel	45RU Bi-Fold Hi-Flow Perforated Steel

45RU   SIDE PANELS

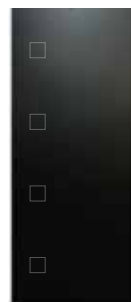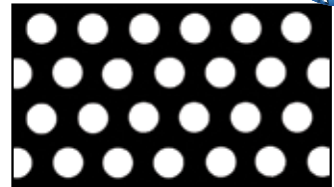| iQ4534	iQ4536	iQ4538	iQ4539
45RU 800mm Deep	45RU 900mm Deep	45RU 1000mm Deep	45RU 1200mm Deep

PERFORATED SHEET SPECS

Standard Perforated Sheet

R03230
Dia 3.25
Centres 5.59
Open Area 30%

Note: The open area value is the complete door including frame.

Hi-Flow Perforated Sheet

R07962
Dia 7.94
Centres 9.55
Open Area 62%

Note: The open area value is the complete door including frame.

45RU   PRIVACY PANELS

iQ4534-PP	iQ4536-PP	iQ4538-PP	iQ4539-PP
45RU 800mm Deep	45RU 900mm Deep	45RU 1000mm Deep	45RU 1200mm Deep

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ROOF PANELS

> Roof Panels come with extensive cable entry provision on both sides and rear

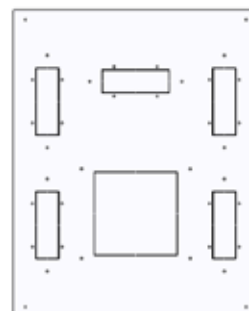| Part No.	Description
iQ4584	For 600mm (w) Cabinet - 800mm (d)
iQ4589	For 600mm (w) Cabinet - 900mm (d)
iQ4591	For 600mm (w) Cabinet - 1000mm (d)
iQ4596	For 600mm (w) Cabinet - 1200mm (d)
iQ4586	For 800mm (w) Cabinet - 800mm (d)
iQ4590	For 800mm (w) Cabinet - 900mm (d)
iQ4592	For 800mm (w) Cabinet - 1000mm (d)
iQ4595	For 800mm (w) Cabinet - 1200mm (d)

600 Wide: Roof Panel and Roof Canopy knock-outs

ROOF CANOPIES

> Roof Canopies come with extensive cable entry provision on both sides and rear
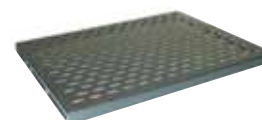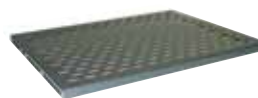> Canopies add 40mm to cabinet height

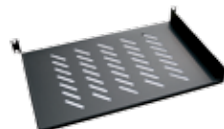| Part No.	Description
iQ4576	For 600mm (w) Cabinet - 800mm (d)
iQ4588	For 600mm (w) Cabinet - 900mm (d)
iQ4593	For 600mm (w) Cabinet - 1000mm (d)
iQ4594	For 600mm (w) Cabinet - 1200mm (d)
iQ4579	For 800mm (w) Cabinet - 800mm (d)
iQ4597	For 800mm (w) Cabinet - 900mm (d)
iQ4598	For 800mm (w) Cabinet - 1000mm (d)
iQ4599	For 800mm (w) Cabinet - 1200mm (d)

800 Wide: Roof Panel and Roof Canopy knock-outs

SHELVING OPTIONS

> All shelves are vented for air circulation
> All shelves are 19" wide and come with hardware and mounting brackets

Part No.	9080	9086	9088	9089-ST
Description	Fixed shelf 700 deep 100kg UDL	Fixed shelf 800 deep 100kg UDL	Fixed shelf 900 deep 100kg UDL	Fixed shelf 1000 deep 100kg UDL

Part No.	S-SHELF-MOD-200-BL	S-SHELF-MOD-300-BL	S-FTR-4F-A-BL
Description	1RU Cantilever/modem shelf 200mm (d) 10 kg rating (Mounts to front rails only)	1RU Cantilever/modem shelf 300mm (d) 10 kg rating (Mounts to front rails only)	Rack Mount, 4 Fans Flow rate 348 CFM (Where fan is required mid rack)

FAN OPTIONS

> Part numbers below depict our standard fan at 46db
> Whisper fans at 26db are available on request

> Thermostatically controlled fans are also available

Part No.	S-FBOX-R-BL	S-FTR-2F-R-COM-BL	S-FTR-4F-R-COM-BL	9189
Description	Single Fan Box Flow rate 614 CFM (Sits on top of roof panel)	Compact 2 Fan Flow rate 174 CFM (Sits neatly within top panel)	Compact 4 Fan Flow rate 348 CFM (Sits neatly within top panel)	3RU Vertical Fan Unit Flow Rate 261 CFM (Installs anywhere on mounting rails)

iQ SERIES ACCESSORIES

Part No.	S-KIT-CAST-BP	iQ9072	9075	S-KIT-SRL-01-500925
Description	Castor Kit	Baying Kit (See photo gallery - page 28)	Fastener Kit x 100 (set)	Adjustable Support Rail Kit 410 - 620mm

CABLE TRAYS

> Used in 38RU/45RU Cabinets and 4-post open frames and cable zones

Part No.	Description
S-CTRAYFF-38-102-BL	38RU - 102mm Wide (For 600/800mm Cabinets)
S-CTRAYFF-38-152-BL	38RU - 152mm Wide (For 600/800mm Cabinets)
S-CTRAYFF-38-300-BL	38RU - 300mm Wide (For 600/800mm Cabinets)
S-CTRAYFF-45-102-BL	45RU - 102mm Wide (For 600/800mm Cabinets)
S-CTRAYFF-45-152-BL	45RU - 152mm Wide (For 600/800mm Cabinets)
S-CTRAYFF-45-300-BL	45RU - 300mm Wide (For 600/800mm Cabinets)

REMOTE THERMOSTAT

> Temperature control for fans/air-conditioners

Part No.	Description
9031	Mountable anywhere within the enclosure

BLANK PANELS

> Used for aesthetics or to create an air dam
> Complete with fixing hardware

Part No.	Description
9041	1RU x 483mm (19")
9042	2RU x 483mm (19")
9043	3RU x 483mm (19")
9044	4RU x 483mm (19")
9202	6RU x 483mm (19")

BRUSH CABLE ENTRY
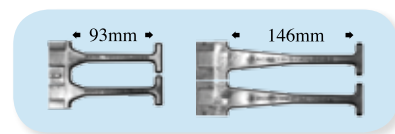
> For routing cables and maintaining an air lock
> Made from nylon memory brush
> Complete with fixing hardware

Part No.	Description
9284	1RU x 483mm (19")
9285	2RU x 483mm (19")
9286	Roof Brush Cable Entry (Fits within the cable knockouts of all roof panels/roof canopies and heat extraction canopy)

38RU VERTICAL CABLE MANAGEMENT

> Supports and ensures bending radii are met
> Routing of cable to maximise capacity
> Refer to cable fill table on page 24

← 93mm →   ← 146mm →

Part No.	iQCM08100	iQCM38100	iQCM3870	iQCM3860
Description	93mm T-Finger 8RU Single Modular	93mm T-Finger 38RU Single Piece	93mm T-Finger 40mm(w) 155mm(d) (For 600mm Cabinets - Fitted to L Rails)	93mm T-Finger 80mm(w) 155mm(d) (For 800mm Cabinets)
Part No.	iQCM08100-150	iQCM38100-150	iQCM3870-150	iQCM3860-150
Description	146mm T-Finger 8RU Single Modular *-150 denotes longer finger*	146mm T-Finger 38RU Single Piece *-150 denotes longer finger*	146mm T-Finger 40mm(w) 155mm(d) (For 600mm Cabinets - Fitted to L Rails) *-150 denotes longer finger*	146mm T-Finger 80mm(w) 155mm(d) (For 800mm Cabinets) *-150 denotes longer finger*

45RU VERTICAL CABLE MANAGEMENT

> Supports and ensures bending radii are met
> Routing of cable to maximise capacity
> Refer to cable fill table on page 24

Part No.	iQCM08100	iQCM45100	iQCM4570	iQCM4560
Description	93mm T-Finger 8RU Single Modular	93mm T-Finger 45RU Single Piece	93mm T-Finger 40mm(w) 155mm(d) (For 600mm Cabinets - Fitted to L Rails)	93mm T-Finger 80mm(w) 155mm(d) (For 800mm Cabinets)
Part No.	iQCM08100-150	iQCM45100-150	iQCM4570-150	iQCM4560-150
Description	146mm T-Finger 8RU Single Modular *-150 denotes longer finger*	146mm T-Finger 45RU Single Piece *-150 denotes longer finger*	146mm T-Finger 40mm(w) 155mm(d) (For 600mm Cabinets - Fitted to L Rails) *-150 denotes longer finger*	146mm T-Finger 80mm(w) 155mm(d) (For 800mm Cabinets) *-150 denotes longer finger*

HORIZONTAL CABLE MANAGEMENT

> Supports and ensures bending radii are met
> Routing of cable to maximise capacity
> Refer to cable fill table on page 25

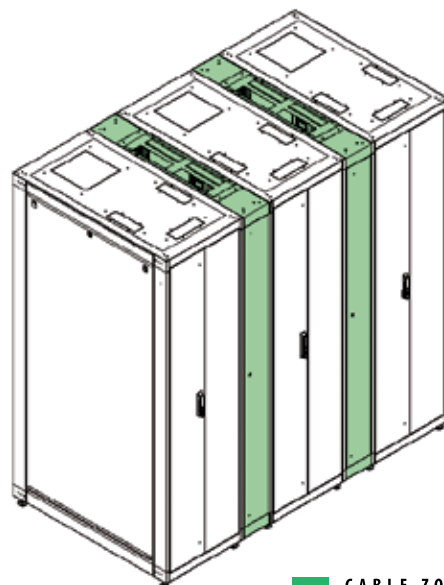| Part No.	iQOF9509	iQOF9502	iQOF9512
Description	1RU 93mm T-Finger 130mm Usable Depth	2RU 93mm T-Finger 130mm Usable Depth	4RU 93mm T-Finger 130mm Usable Depth
Part No.	iQOF9509-150	iQOF9502-150	iQOF9512-150
Description	1RU 146mm T-Finger 195mm Usable Depth *-150 denotes longer finger*	2RU 146mm T-Finger 195mm Usable Depth *-150 denotes longer finger*	4RU 146mm T-Finger 195mm Usable Depth *-150 denotes longer finger*

The iQ Series Cable Zones are designed to optimise accessibility and provide suitable space for high volume cabling. They can incorporate vertical cable management solutions like the iQ T-Finger design, rack mountable PDUs and cable ladder or tray.

iQ series cable zones can be used in applications such as bayed or suites of racks, or stand alone to suit 38 or 45RU cabinets. They consist of front and rear full depth sections including cover panels, top and bottom sections with hardware for on-site application to the rack frame.

Note: Not available in 800mm (d) cabinets

CABLE ZONES

iQ 38RU 100mm (w)

Part No.	Description	Components	Rack Suitability
iQ3810-100-CZ	38RU 100mm (w) x 900mm (d)	Top & bottom section, front & rear section with cover panels	iQ3810
iQ3801-100-CZ	38RU 100mm (w) x 1000mm (d)	Top & bottom section, front & rear section with cover panels	iQ3801
iQ3808-100-CZ	38RU 100mm (w) x 1200mm (d)	Top & bottom section, front & rear section with cover panels	iQ3808

iQ 38RU 200mm (w)

Part No.	Description	Components	Rack Suitability
iQ3810-200-CZ	38RU 200mm (w) x 900mm (d)	Top & bottom section, front & rear section with cover panels	iQ3810
iQ3801-200-CZ	38RU 200mm (w) x 1000mm (d)	Top & bottom section, front & rear section with cover panels	iQ3801
iQ3808-200-CZ	38RU 200mm (w) x 1200mm (d)	Top & bottom section, front & rear section with cover panels	iQ3808

iQ 45RU 100mm (w)

Part No.	Description	Components	Rack Suitability
iQ4510-100-CZ	45RU 100mm (w) x 900mm (d)	Top & bottom section, front & rear section with cover panels	iQ4510
iQ4501-100-CZ	45RU 100mm (w) x 1000mm (d)	Top & bottom section, front & rear section with cover panels	iQ4501
iQ4508-100-CZ	45RU 100mm (w) x 1200mm (d)	Top & bottom section, front & rear section with cover panels	iQ4508

iQ 45RU 200mm (w)

Part No.	Description	Components	Rack Suitability
iQ4510-200-CZ	45RU 200mm (w) x 900mm (d)	Top & bottom section, front & rear section with cover panels	iQ4510
iQ4501-200-CZ	45RU 200mm (w) x 1000mm (d)	Top & bottom section, front & rear section with cover panels	iQ4501
iQ4508-200-CZ	45RU 200mm (w) x 1200mm (d)	Top & bottom section, front & rear section with cover panels	iQ4508

iQ SERIES CHIMNEYS

> For cable management
> To facilitate and enclose cable entry from ceiling
> Can be retrofitted around an existing cable installation

Part No.	S-TOPLD-500772-BL	9078-BL	9079-BL	9230-BL
Description	Centre Mount Telescopic Chimney 290(w) x 270(d) Adjustable 500mm(h) - 772mm(h) (Adapts to roof panels & roof canopies)	Fixed Chimney 900(h) x 225(w) x 75(d) (Adapts to roof panels & roof canopies)	Fixed Chimney 1200(h) x 225(w) x 75(d) (Adapts to roof panels & roof canopies)	Telescopic Chimney 375 (w) x 75 (d) Adjustable 750(h) - 1270(h) (Adapts to roof panels & roof canopies)

POWER RAILS

> Rack Technologies stock a large range of managed power rails including switched, metered, remote-monitored and environmental monitoring units.
> All PDUs are available on request.

Part No.	9001-BL	9003-BL	S-PRAIL-10V-N-C	S-PRAIL-20V-N-C
Description	5 Way Horizontal 10Amp 3 pin face plate	10 Way Horizontal 10Amp 3 pin face plate	10 Way Vertical 10Amp 3 pin face plate	20 Way Vertical 10Amp 3 pin face plate

Part No.	9008	9009	9012
Description	12 Way Vertical 10Amp C13 pin face plate	20 Way Vertical 10Amp C13 pin face plate	12 Way Horizontal 10Amp C13 pin face plate

Intelligent Power Rails *Available On Request*

FACE PLATE OPTIONS

10A 3Pins (Flat Earth)	10A 3 Pins (Round Earth)	15A 3 Pins (Flat Earth)	20A 3 Pins (Flat Earth)	10A 3Pins (IEC)	16A 3 Pins (IEC)
Standard 10A mains	10A mains with round earth pin	Standard 15A mains	Standard 20A mains	Standard 10A mains C13	Standard 16A mains C19

iQ Series Cabinet Checklist

This section is to assist you in designing/ordering a new iQ Series cabinet and accessories.

Rack Technologies products are a combination of the world's best practices incorporated with local designs and needs.

Note: Please consider the carbon offset when buying Australian made products.

STEP 1
CHOOSING YOUR FRAME
> pages 6 - 7

STEP 2
DOOR DESIGN
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STEP 3
SIDE OR PRIVACY PANELS
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STEP 4
ROOF PANELS OR CANOPIES
> page 10

STEP 5
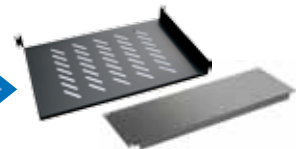**CABLE TRAY & FANS**
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STEP 6
SHELVES & BLANK PANELS
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STEP 7
CHIMNEY OR HEAT EXTRACTION DUCT
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> pages 18 - 19
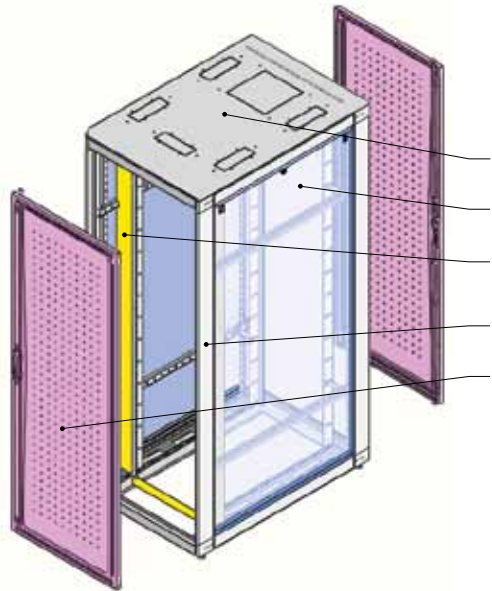
STEP 11
ACCESSORIES
> page 11

PASSIVE COOLING ▶ **OPTION** 1
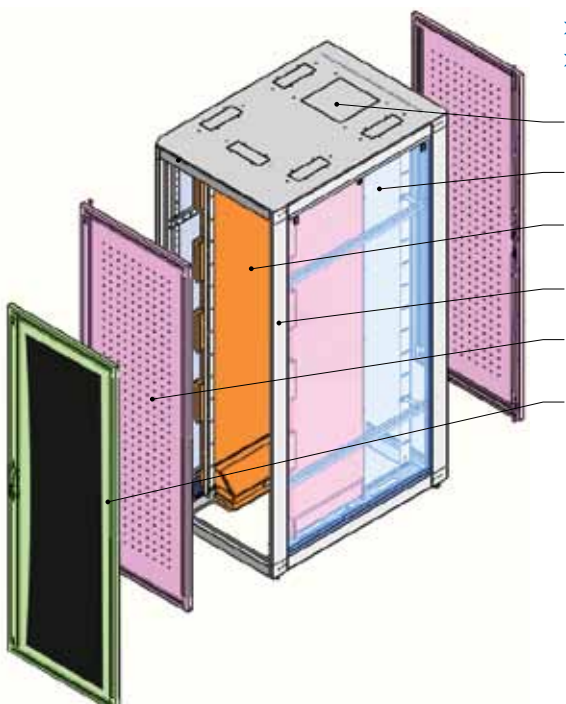
Hot Aisle Cold Aisle Configuration

> Can be used with solid or raised floor systems
> Recommended cooling capacity: 3kW - 4kW

iQ4592	ROOF PANEL	1x piece
iQ4538	SIDE PANEL	2x piece
iQ4577	AIR DAM KIT	1x set
iQ4507	FRAME	1x piece
iQ4514-HF	HI-FLOW PERFORATED DOOR	2x piece

Note: Depending on room conditions and environments, this recommended cooling capacity can be higher or lower.

PASSIVE COOLING ▶ **OPTION** 2

Hot Aisle Cold Aisle Utilising Hot Spot Vertical Cooling System or Sealed Cold Air Plenum Configuration
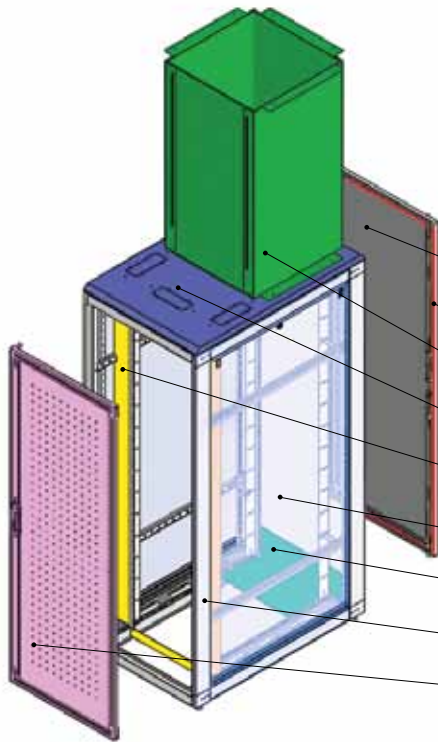
> Must be used with raised floor/under floor cooling
> Recommended cooling capacity: 6kW - 8kW

iQ4592	ROOF PANEL	1x piece
iQ4538	SIDE PANELS	2x piece
iQPCS45800	VERTICAL COOLING DUCTS	1x pair
iQ4507	FRAME	1x piece
iQ4514-HF	HI-FLOW PERFORATED DOOR	2x piece
iQ4512	ACRYLIC DOOR	1x piece

Acrylic front door can also be used to create a sealed cold air plenum.

Note: Depending on room conditions and environments, this recommended cooling capacity can be higher or lower.

PASSIVE COOLING ▶ OPTION 3

Ceiling Extraction Duct Configuration

› Can be used with solid or raised floor systems
› Recommended cooling capacity: 18kW - 19kW

Code	Description	Quantity
iQ4522	STEEL DOOR	1x piece
iQ9261	SEAL KIT	1x piece
iQ4574	CEILING EXTRACTION DUCT	1x piece
iQ4598-RE	HEAT EXTRACTION CANOPY	1x piece
iQ4577	AIR DAM KIT	1x set
iQ4538	SIDE PANELS	2x piece
iQ4578	AIR DEFLECTOR	1x piece
iQ4507	FRAME	1x piece
iQ4514-HF	HI-FLOW PERFORATED DOOR	1x piece

Note: Depending on room conditions and environments, this recommended cooling capacity can be higher or lower.

PASSIVE COOLING ▶ OPTION 4

Ceiling Extraction Duct Configuration Utilising Hot Spot Vertical Cooling System or Sealed Cold Air Plenum Configuration

› Must be used with raised floor/under floor cooling
› Recommended cooling capacity: 21kW - 22kW

Code	Description	Quantity
iQ4522	STEEL DOOR	1x piece
iQ9261	SEAL KIT	1x piece
iQ4574	CEILING EXTRACTION DUCT	1x piece
iQ4598-RE	HEAT EXTRACTION CANOPY	1x piece
iQ4538	SIDE PANELS	2x piece
iQ4507	FRAME	1x piece
iQPCS45800	VERTICAL COOLING DUCTS	1x pair
iQ4578	AIR DEFLECTOR	1x piece
iQ4514-HF	HI-FLOW PERFORATED DOOR	1x piece
iQ4512	ACRYLIC DOOR	1x piece

Note: Depending on room conditions and environments, this recommended cooling capacity can be higher or lower.

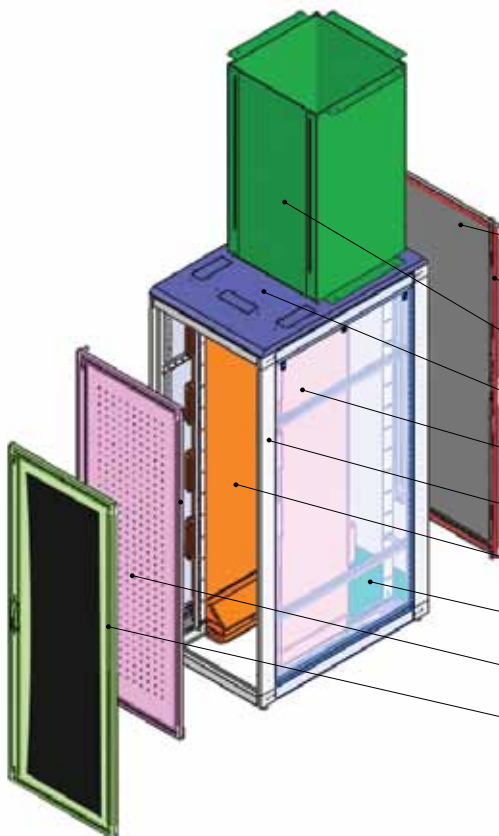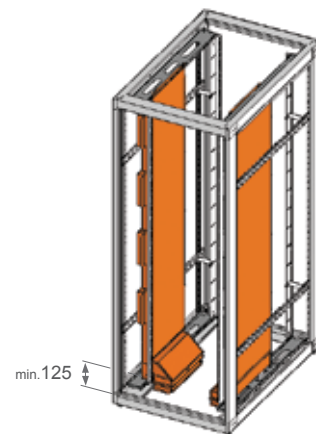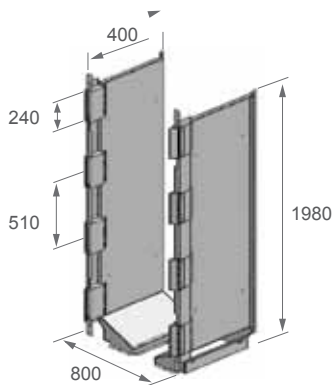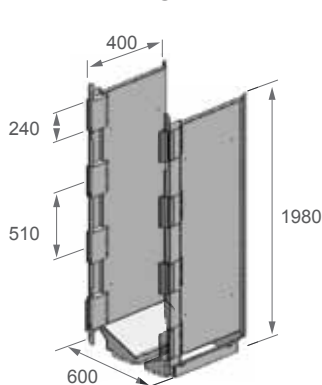Acrylic front door can also be used to create a sealed cold air plenum.

VERTICAL COOLING OPTIONS

> Vertical Hot Spot Cooling Systems are available in 45RU cabinets only
> Only available with raised floor/under floor cooling
> Bottom 2RU are lost using this system

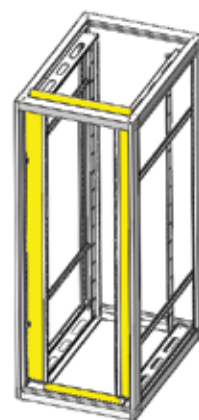| Part No.	iQPCS45600	iQPCS45800
Description	600 wide	800 wide

AIR DAM KIT

> Available for all sizes
> Cannot be used in conjunction with forward-facing vertical cable managers

Part No.	iQ3875	iQ3877	iQ4575	iQ4577
Description	38RU 600mm (w)	38RU 800mm (w)	45RU 600mm (w)	45RU 800mm (w)

AIR DEFLECTOR

> Can be used in both 38RU & 45RU combinations
> Compatible with all depths

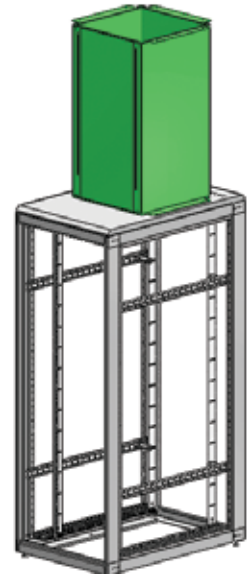| Part No.	iQ4576	iQ4578
Description	Air Deflector For 600mm(w)	Air Deflector For 800mm(w)

HEAT EXTRACTION DUCT

› Adapts to Heat Extraction Canopy only (below)
› Used when expelling hot air through ceiling space

Part No.	iQ4574
Description	Heat Extraction Duct 450mm (w) x 500mm (d) Adjustable height 500mm - 772mm

HEAT EXTRACTION CANOPY

› For heat extraction
› Must be used in conjunction with Heat Extraction Duct (above)
› EKOs can be utilised with chimneys or brushed cable entry (refer to pages 11/14)

iQ 600mm	iQ4576-RE	iQ4588-RE	iQ4593-RE	iQ4594-RE
iQ 800mm	iQ4579-RE	iQ4597-RE	iQ4598-RE	iQ4599-RE
Description	800mm Deep	900mm Deep	1000mm Deep	1200mm Deep

RAISED FLOOR BRUSHED CABLE ENTRY

› Mounted to raise floor tiles allowing cables
  to enter without loss of air
› Three piece nylon memory brush

Part No.	9287
Description	95mm x 200mm Cut-Out (cable area) 165mm x 270mm Overall Size

SEAL KIT

› Used when roof extraction is needed
  to seal the rear door
› Used for both 38RU & 45RU cabinets (600mm & 800mm)

Part No.	iQ9261
Description	38RU or 45RU Rear Door Seal Kit

iQ Open Frame Series

The iQ Open Frame series has been designed specifically for high density patching applications associated with Data Centres.

There are several cable management options available utilising the Rack Technologies T-Finger design. The vertical cable managers are available in widths of 150mm, 300mm and 400mm.

The iQ Open Frame Rack can be bayed as many times as required in conjunction with the vertical cable management system. The 2-way hinged door cover design allows for ease of cable management as well as a neat and tidy finish. The iQ series 2-post open frame has a 500kg UDL load rating (dependent on application), while 4-post open frames have a 1000kg UDL load rating.

iQ SERIES **BASIC FRAME INCLUSIONS**

> Frame
> RU labels (2x) - factory installed (see page 28)

iQ SERIES **OPEN FRAME**

Part Number	Description
iQOF3801	38RU 1748 (h) x 515 (w) x 145 (d)
iQOF4501	45RU 2150 (h) x 515 (w) x 145 (d)

2 & 4 Post Open Frame

The iQ Open Frame 2 and 4 Post Rack is designed to accommodate server/active equipment while still providing a high cable capacity or cable management solution. The iQ vertical cable management channels can be fitted to 2 and 4 post open frames both front & rear, as well as being bayed together with another 2-post or 4-post rack.

A full height cable tray can also be fitted providing another form of cable management within the 4-post rack. (Cable tray part no & descriptions on page 11).
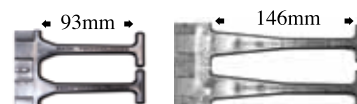
Cable Management

The T-Finger Vertical Cable Management System is designed to handle high density cabling for termination or patching applications.
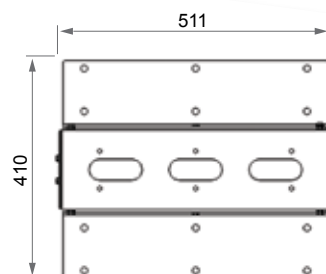
This system ensures neat cabling as well as adherence to bend radius requirements. A hinged door cover conserves any unsightly cables and has the ability to swing left or right for ease of cable installation.

The T-Fingers on our managers are mounted in 2RU increments and can be removed to allow the bending and entry of larger cable bundles via the top or bottom, left or right. The fingers are available in 2 (two) lengths - 93mm and 146mm.

Sizes given are inside dimensions of the T-fingers. Refer to cable capacity table on pages 24 - 25.
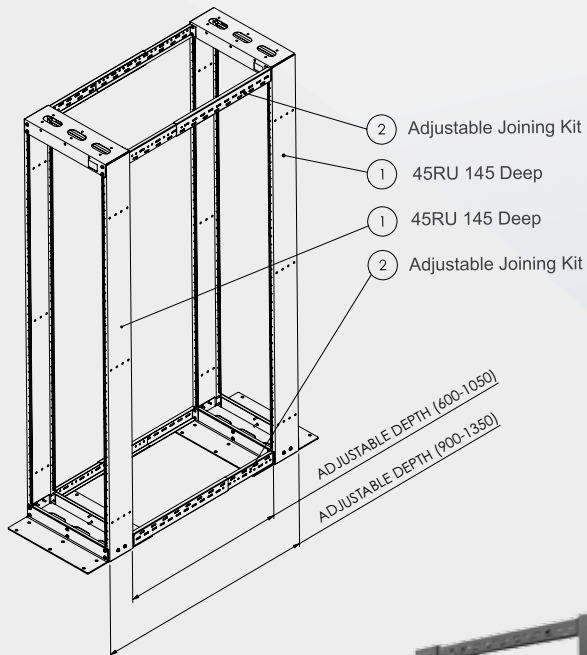
93mm   146mm

Open Frame Foot Print

511
410

38RU
19" FRAME

45RU
19" FRAME

Adjustable Joiner Kit

The adjustable joiner kit (iQOF9511) is used to join the frames together, turning a 2-post frame into a 4-post frame. The kit allows you to manually adjust the depth of the rack from 600mm to 1000mm to accommodate your equipment.

Part Number	Description
ADJUSTABLE	**JOINER KIT**
iQOF9511	Adjustable Joiner Kit for 4-Post Frame - Set of 4

2 Adjustable Joining Kit
1 45RU 145 Deep
1 45RU 145 Deep
2 Adjustable Joining Kit

ADJUSTABLE DEPTH (600-1050)
ADJUSTABLE DEPTH (900-1350)

Part Number	Description
CABLE	**HANGING BRACKET**
9099	Used in computer rooms to hang leads Must be used with Cable Slack Spool (not incuded) This product is not rack mountable

Cable Slack Spool

Cable slack spools are used for both copper and fibre (allowing minimum bend radius) where the slack of the cable length is to be spooled inside the vertical management channels. See page 22 for more details.
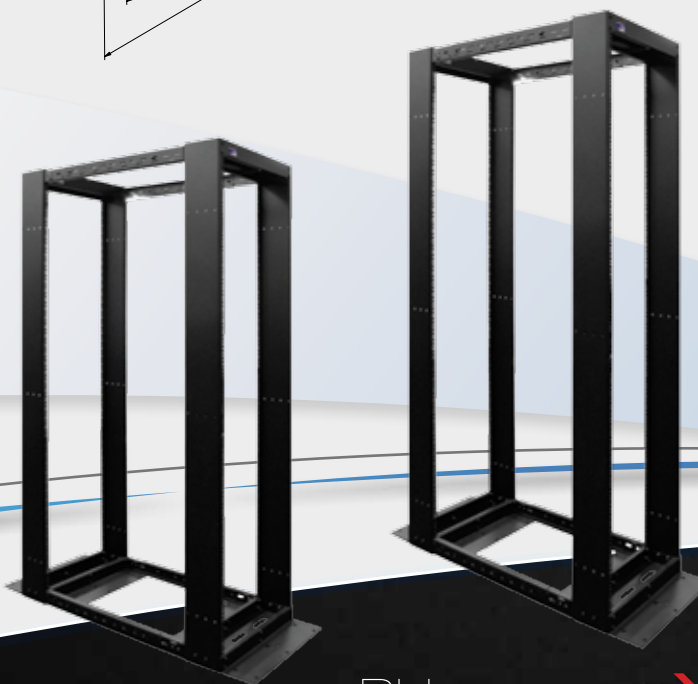
Optional Accessories

> Power Rails (refer to page 14)
> Cantilever and fixed shelves (refer to page 10)
> Cable tray - 4-post rack only (refer to page 11)
> Cage nuts & bolts (refer to page 11)

38RU
> **19" 4 POST FRAME**

45RU
> **19" 4 POST FRAME**

Cabinet Height Guide

Rack Units

2148mm — 45RU
1837mm — 38RU

AUSTRALIAN MADE

iQseries

Rack Technologies

38RU   VERTICAL CABLE MANAGEMENT

> All vertical cable management channels come with a two-piece dual-hinged covers
> Refer to cable fill table on page 25

Part No.	iQOF3820	iQOF3840	iQOF3850
Description	38RU - 150mm (w) 93mm T-Finger	38RU - 300mm (w) 93mm T-Finger	38RU - 400mm (w) 93mm T-Finger
Part No.	iQOF3820-150	iQOF3840-150	iQOF3850-150
Description	38RU - 150mm (w) 146mm T-Finger *-150 denotes longer finger*	38RU - 300mm (w) 146mm T-Finger *-150 denotes longer finger*	38RU - 400mm (w) 143mm T-Finger *-150 denotes longer finger*

Note:
Vertical cable managers can be easily mounted back to back utilising different sizes available.

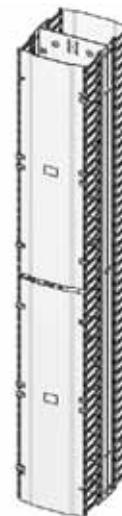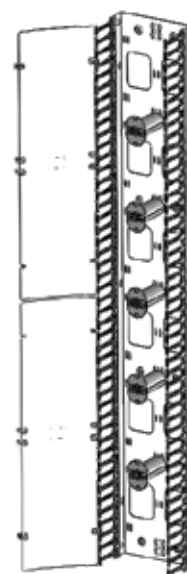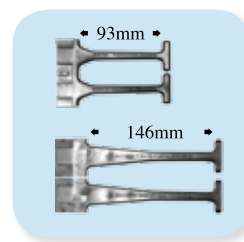## 45RU   VERTICAL CABLE MANAGEMENT

> All vertical cable management channels come with a two-piece dual-hinged covers
> Refer to cable fill table on page 25

Part No.	iQOF4520	iQOF4540	iQOF4550
Description	45RU - 150mm (w) 93mm T-Finger	45RU - 300mm (w) 93mm T-Finger	45RU - 400mm (w) 93mm T-Finger
Part No.	iQOF4520-150	iQOF4540-150	iQOF4550-150
Description	45RU - 150mm (w) 146mm T-Finger *-150 denotes longer finger*	45RU - 300mm W 146mm T-Finger *-150 denotes longer finger*	45RU - 400mm (w) 143mm T-Finger *-150 denotes longer finger*

93mm

146mm

CABLE   SLACK SPOOL

> Supports and ensures bending radii are met
> Neatly attaches to vertical cable managers and cable hanging bracket

Part No.	iQOF9506	iQOF9507	iQOF9508
Description	70mm (L)	140mm (L)	210mm (L) (For extended finger & brackets only)

Note:
Vertical cable managers have pre-manufactured cable slack spool mounting holes.

HORIZONTAL CABLE MANAGEMENT

› Supports and ensures bending radii are met
› Routing of cable to maximise capacity

› Refer to cable fill table on page 25

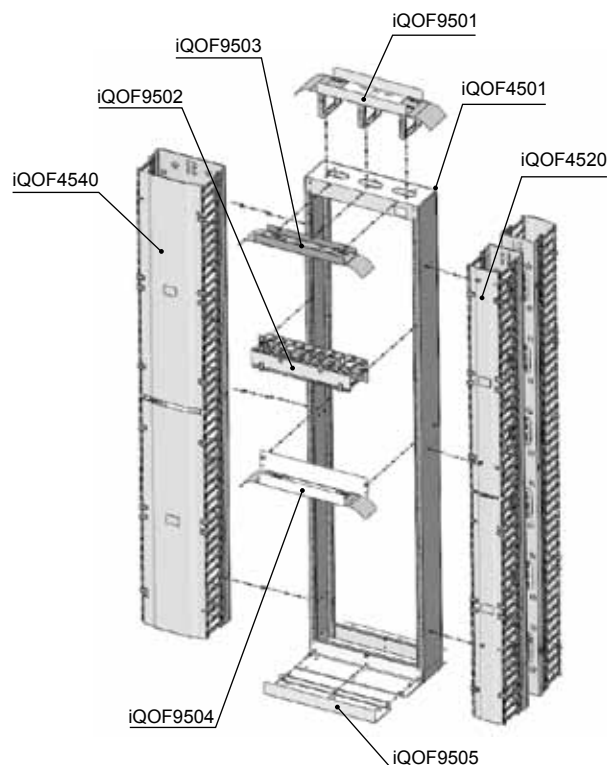| Part No.	iQOF9509	iQOF9502	iQOF9512
Description	1RU 93mm T-Finger 130mm Usable Depth	2RU 93mm T-Finger 130mm Usable Depth	4RU 93mm T-Finger 130mm Usable Depth
Part No.	iQOF9509-150	iQOF9502-150	iQOF9512-150
Description	1RU 146mm T-Finger 195mm Usable Depth *-150 denotes longer finger*	2RU 146mm T-Finger 195mm Usable Depth *-150 denotes longer finger*	4RU 146mm T-Finger 195mm Usable Depth *-150 denotes longer finger*

OPEN FRAME ACCESSORIES

› Supports and ensures bending radii are met
› Allows the entry of cables within 'the frame'

Part No.	iQOF9501	iQOF9503	iQOF9504	iQOF9505
Description	Adjustable Top Water Fall Tray (Height adjustable to 60mm)	Top Water Fall Support Tray (To route leads between managers)	2RU Horizontal Cable Tray (To route leads between managers)	Bottom Cable Tray (Used to take up the slack of leads)

OPENFRAME CHIMNEY

› Used for 38RU & 45RU open frames
› Telescopic cable management chimney
› Adjustable 750mm (h) to 1270mm (h)
› Can be retro-fitted around existing cable installation
› Other sizes avilable on request
› Refer to photo gallery on page 28

Part No.	Description
iQOF9520	Suits iQOF3820 & iQOF4520

STIFFENER PLATE

› Optional product to support open frames - see page 28

Part No.	Description
iQOF9513	Used for 150mm, 300mm and 400mm (w) Managers

Note: Above is the recommended assembly configuration.

VERTICAL CABLE MANAGERS (FOR OPEN FRAMES)

Part Number	Description	Cable Manager Specs			Recommended Cable Capacity				Maximum Cable Capacity			
		Interior Width (mm)	Interior Depth (mm)	Usable Area (sq. mm.)	Cat 5e	Cat 6	Cat 6a	Cat 7/6a shielded	Cat 5e	Cat 6	Cat 6a	Cat 7/6a shielded
					5.5	6.2	8.5	7.5	5.5	6.2	8.5	7.5
					50%	50%	50%	50%	100%	100%	100%	100%
iQOF3820	38ru 150mm wide cab/man 93mm T-Fingers	131.00	173.0	22663.0	238	188	100	128	477	375	200	256
iQOF3840	38ru 300mm wide cab/man 93mm T-Fingers	281.00	173.0	48613.0	512	403	214	275	1023	805	428	550
iQOF3850	38ru 400mm wide cab/man 93mm T-Fingers	381.00	173.0	65913.0	694	546	290	373	1387	1092	581	746
iQOF3820-150	38ru 150mm wide cab/man 146mm T-Fingers	131.00	235.0	30785.0	324	255	136	174	648	510	271	348
iQOF3840-150	38ru 300mm wide cab/man 146mm T-Fingers	281.00	235.0	66035.0	695	547	291	374	1390	1094	582	747
iQOF3850-150	38ru 400mm wide cab/man 146mm T-Fingers	381.00	235.0	89535.0	942	741	394	507	1884	1483	789	1013
iQOF4520	45ru 150mm wide cab/man 93mm T-Fingers	131.00	173.0	22663.0	238	188	100	128	477	375	200	256
iQOF4540	45ru 300mm wide cab/man 93mm T-Fingers	281.00	173.0	48613.0	512	403	214	275	1023	805	428	550
iQOF4550	45ru 400mm wide cab/man 93mm T-Fingers	381.00	173.0	65913.0	694	546	290	373	1387	1092	581	746
iQOF4520-150	45ru 150mm wide cab/man 146mm T-Fingers	131.00	235.0	30785.0	324	255	136	174	648	510	271	348
iQOF4540-150	45ru 300mm wide cab/man 146mm T-Fingers	281.00	235.0	66035.0	695	547	291	374	1390	1094	582	747
iQOF4550-150	45ru 400mm wide cab/man 146mm T-Fingers	381.00	235.0	89535.0	942	741	394	507	1884	1483	789	1013

-150 denotes longer finger

VERTICAL CABLE MANAGERS (FOR CABINETS)

Part Number	Description	Cable Manager Specs			Recommended Cable Capacity				Maximum Cable Capacity			
		Interior Width (mm)	Interior Depth (mm)	Usable Area (sq. mm.)	Cat 5e	Cat 6	Cat 6a	Cat 7/6a shielded	Cat 5e	Cat 6	Cat 6a	Cat 7/6a shielded
					5.5	6.2	8.5	7.5	5.5	6.2	8.5	7.5
					50%	50%	50%	50%	100%	100%	100%	100%
iQCM3870	38ru 600mm wide Cabinets 93mm T-Fingers	28.50	122.0	3477.0	37	29	15	20	73	58	31	39
iQCM3860	38ru 800mm wide Cabinets 93mm T-Fingers	61.50	158.5	9747.8	103	81	43	55	205	161	86	110
iQCM3870-150	38ru 600mm wide Cabinets 146mm T-Fingers	28.50	184.0	5244.0	55	43	23	30	110	87	46	59
iQCM3860-150	38ru 800mm wide Cabinets 146mm T-Fingers	61.50	220.5	13560.8	143	112	60	77	285	225	119	153
iQCM4570	45ru 600mm wide Cabinets 93mm T-Fingers	28.50	122.0	3477.0	37	29	15	20	73	58	31	39
iQCM4560	45ru 800mm wide Cabinets 93mm T-Fingers	61.50	158.5	9747.8	103	81	43	55	205	161	86	110
iQCM4570-150	45ru 600mm wide Cabinets 146mm T-Fingers	28.50	184.0	5244.0	55	43	23	30	110	87	46	59
iQCM4560-150	45ru 800mm wide Cabinets 146mm T-Fingers	61.50	220.5	13560.8	143	112	60	77	285	225	119	153

-150 denotes longer finger

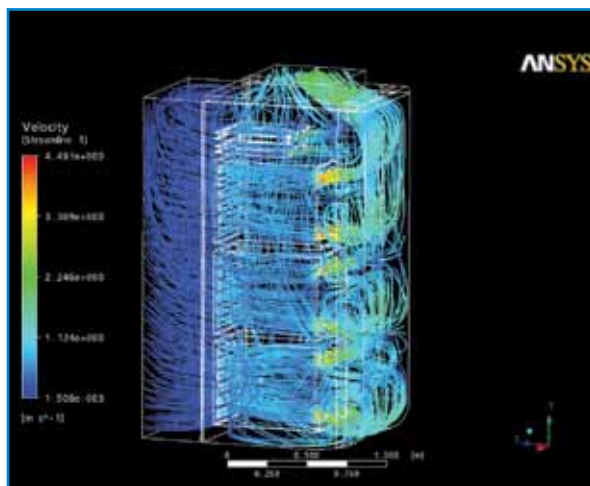| Part Number	Description	Cable Manager Specs			Recommended Cable Capacity				Maximum Cable Capacity			
		Interior Width (mm)	Interior Depth (mm)	Usable Area (sq. mm.)	Cat 5e	Cat 6	Cat 6a	Cat 7/6a shielded	Cat 5e	Cat 6	Cat 6a	Cat 7/6a shielded
					5.5	6.2	8.5	7.5	5.5	6.2	8.5	7.5
					50%	50%	50%	50%	100%	100%	100%	100%
iQOF9509	1ru horizontal cab/man 93mm T-Fingers	25.50	127.0	3238.5	34	27	14	18	68	54	29	37
iQOF9502	2ru horizontal cab/man 93mm T-Fingers	68.00	127.0	8636.0	91	72	38	49	182	143	76	98
iQOF9512	4ru horizontal cab/man 93mm T-Fingers	153.00	127.0	19431.0	204	161	86	110	409	322	171	220
iQOF9509-150	1ru horizontal cab/man 146mm T-Fingers	25.50	188.0	4794.0	50	40	21	27	101	79	42	54
iQOF9502-150	2ru horizontal cab/man 146mm T-Fingers	68.50	188.0	12878.0	136	107	57	73	271	213	113	146
iQOF9512-150	4ru horizontal cab/man 146mm T-Fingers	154.00	188.0	28952.0	305	240	128	164	609	479	255	328

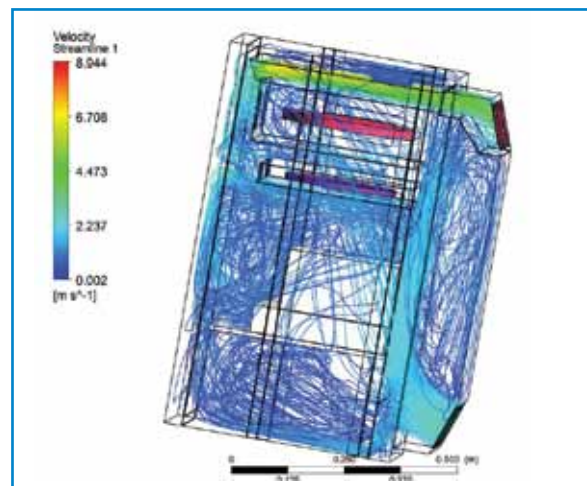*-150 denotes longer finger*

Notes:
This table lists estimated cable capacity for iQ Series cable management products. Cable capacity are estimates based on 5.5mm OD Cat 5e, 6.2mm OD Cat 6, 8.5mm OD Cat 6a, 7.5mm OD Cat 7/6a shielded 4-pair UTP horizontal cable. Cable OD varies with different size cables and specific manufacturer's cable types. To calculate recommended cable capacity for other size cables, divide the product's usable area by the area of the cable and multiply by 25% (50% for maximum fill). While every effort has been made to ensure the accuracy of all information, Rack Technologies does not accept liability for any errors or omissions.

THERMAL ANALYSIS & TESTING

> Rack Technologies can conduct full Thermal Analysis and Velocity Lines of existing/new equipment within a data centre.
> Ask Rack Technologies today how we can help reduce your energy consumption.

Velocity Streamlines

Velocity Streamline Plot

❯ 45RU **COMPLETE CABINET** WITH SOLID STEEL DOOR

❯ 45RU **COMPLETE CABINET** WITH PERFORATED DOOR

❯ 45RU **COMPLETE CABINET** WITH PERFORATED BIFOLD DOOR

❯ 45RU **COMPLETE CABINET** WITH ACRYLIC DOOR

❯ 45RU **COMPLETE CABINET** WITH CABLE MANAGERS

❯ 45RU **2-POST OPEN FRAME** WITH CABLE MANAGERS

❯ 45RU **2-POST OPEN FRAME BAYED** WITH CABLE MANAGERS

❯ 45RU **4-POST OPEN FRAME** WITH CABLE MANAGER**S**

❯ 45RU **4-POST OPEN FRAME BAYED** WITH CABLE MANAGERS

COMPLETE CABINET
WITH 1RU, 2RU & 4RU HORIZONTAL
CABLE MANAGERS

COMPLETE CABINET
WITH VERTICAL CABLE MANAGER

COMPLETE CABINET
WITH SIDE-BY-SIDE VERTICAL
CABLE MANAGERS

COMPLETE CABINET BAYED
WITH DATA EQUIPMENT

OPEN FRAME
WITH 400mm WIDE VERTICAL
CABLE MANAGER
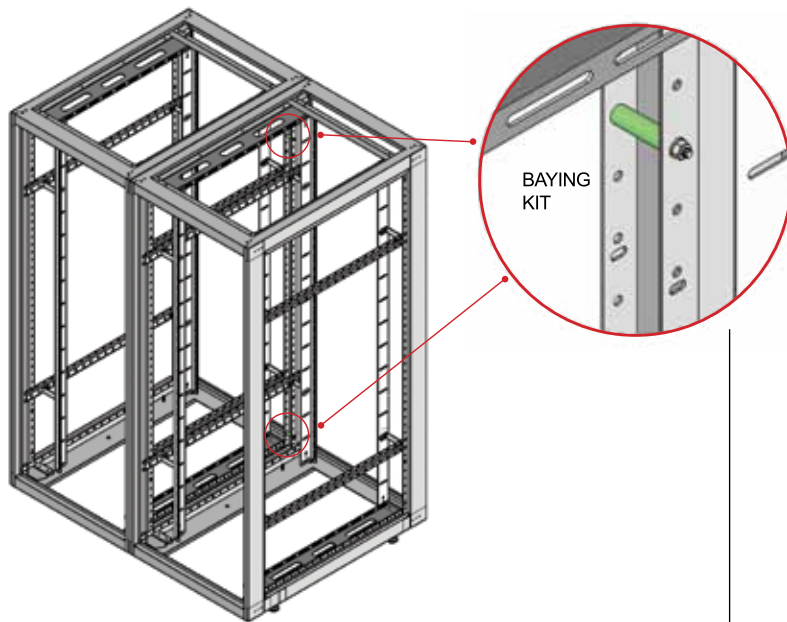

OPEN FRAME
WITH VERTICAL & HORIZONTAL
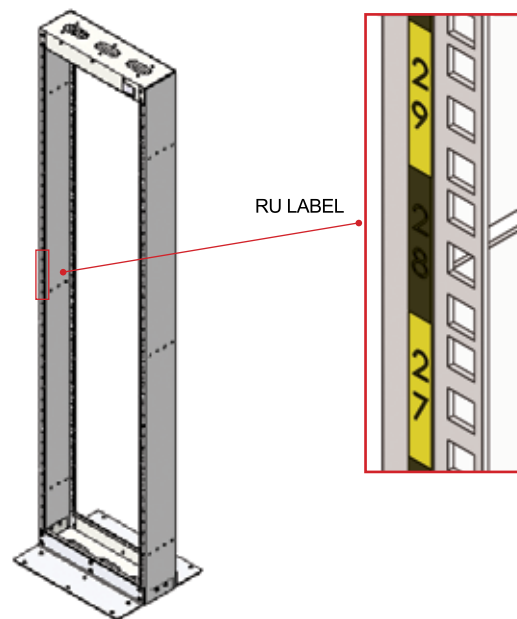CABLE MANAGERS

T-FINGERS - 93mm
ON VERTICAL CABLE MANAGERS
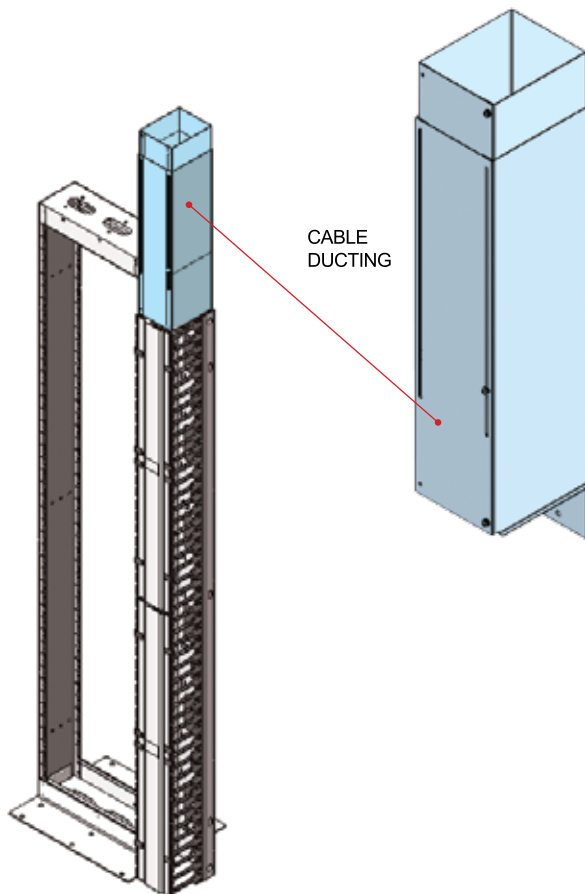

CABLE SLACK SPOOL
ATTACHED TO VERTICAL
CABLE MANAGER

OPEN FRAME
WITH CABLE WATERFALL
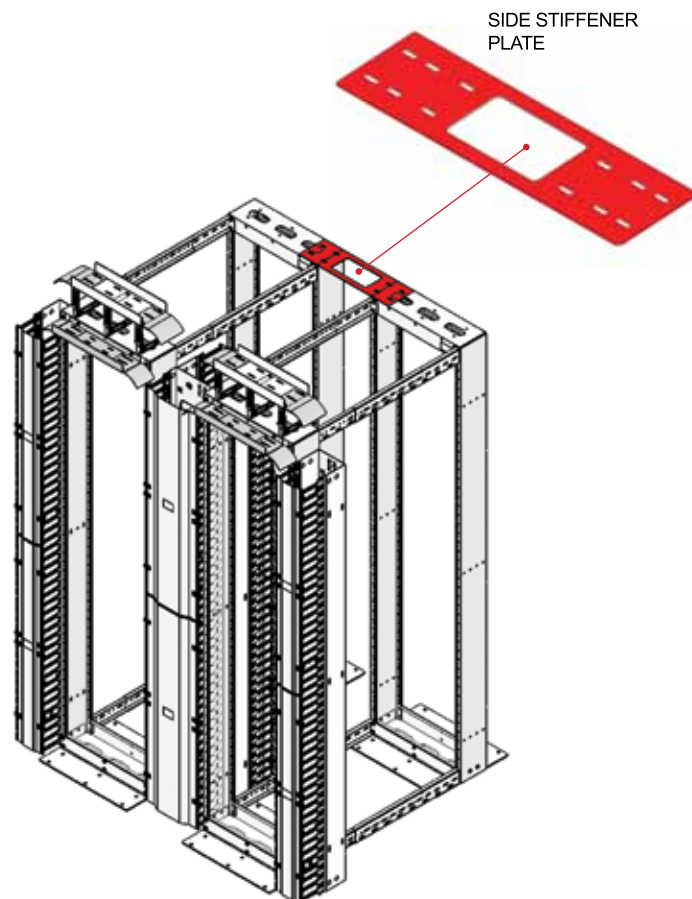
27

BAYING
KIT

45RU **COMPLETE CABINET BAYED**
USING BAYING KIT - Page 11

RU LABEL

45RU **2-POST OPEN FRAME**
WITH RU LABELS - Page 20

CABLE
DUCTING

45RU **2-POST OPEN FRAME**
WITH TELESCOPIC CABLE
MANAGEMENT CHIMNEY - Page 23
(Other sizes available on request)

SIDE STIFFENER
PLATE

45RU **4-POST OPEN FRAME BAYED**
WITH SIDE STIFFENER PLATE - Page 23

iQ
SERIES

DATACENTRE ENCLOSURES
AND
OPENFRAME SYSTEMS

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