

IMRAK 1400

Freestanding Cabinets



apw

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HOW TO USE THIS BOOK

Generally, the left hand column will offer the product description, features – where applicable – and ordering details, whilst the right hand column will offer product photography along with any dimensional data available.

Product family

Product name, description and features

Ordering information

Contents of kit



IMRAK 1400 Freestanding Cabinet

IMRAK 1400 is a versatile 19" racking system.

The cabinet's very strong yet lightweight frame can be configured to meet the special racking requirements of today's electronic data communication and audio/visual broadcast industries.

Features

- Supplied fully assembled and configured with accessories
- Glass or metal front door options
- 4 height options – 27U, 37U, 42U and 47U
- 2 depth options – 600mm and 800mm
- Cable entry provided in front or rear using access panels
- Cable entry provided in base of all product
- Adjustable 19" panel mounts as standard
- Lockable front door option
- Removable side for enhanced access
- Various ventilated top cover and base options
- Load rating 500kg
- Wide range of IMRAK accessories available



IMRAK 1400

IMRAK 1400 – Technical specifications

IMRAK 1400 – DIMENSIONS AND MOUNTING POSITIONS

Dimensions

Height	Dim 'A' mm	Dim 'B' mm
12U§	620,1	533,4
17U§	842,4	755,7
22U§	1064,6	977,9
27U	1286,9	1200,2
32U§	1509,1	1422,4
37U	1731,4	1644,7
42U	1953,6	1866,9
47U	2175,9	2089,2

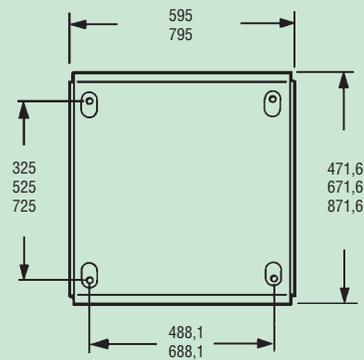
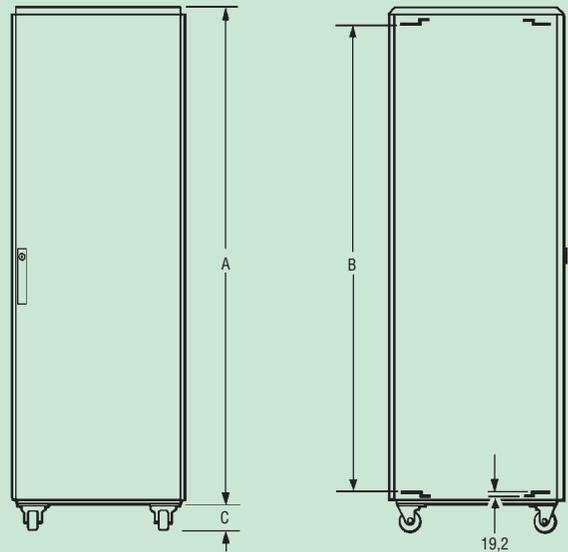
§ Minimum order quantity = 10

Description

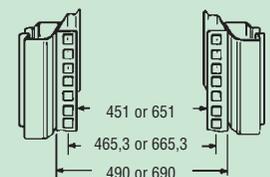
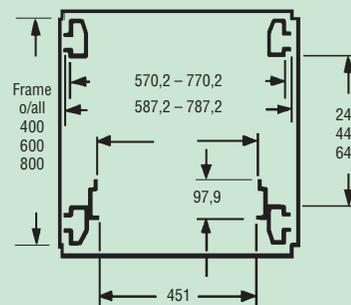
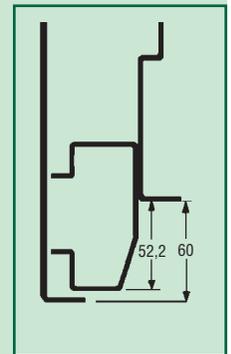
	Dim 'C' mm
Heavy duty castor	92,1
Light duty castor	66,0
Light duty castor – braked	66,0
Adjustable feet	25 (min.) – 40 (max.)
High top and high to side vented	Add 24
Adjustable foot adaptor to adjustable feet	Add 56

Standards

IEC 297-2
 DIN 41494, part 7
 DIN 41494, part 1 – mounting dimensions
 EN 60 950
 VDE 0100



Lifting eye centres (12mm)



IMRAK 1400 – Ready to use

IMRAK 1400 PRIMARY RACK BUILD

For popular sizes the IMRAK 1400 is now available with predefined cladding.

Contents of kit

Item/Description	Qty	Material/Finish
Corner verticals	4	1,6mm steel, painted RAL 7035
End frames	2	1,6mm steel, painted RAL 7035
Panel mounts	4	2,0mm steel, painted RAL 7035
Panel mount supports	4 or 6	1,6mm steel, painted RAL 7035
Side panels	2	0,9mm steel, painted RAL 7035
Side vented top cover	1	0,9mm steel, painted RAL 7035
Glass door	1	0,9mm steel, painted RAL 7035 and 4mm toughened, tinted glass
Reducing cable channels (on 800mm wide)	4	1,6mm steel, painted RAL 7035
Steel door	1	0,9mm steel, painted RAL 7035

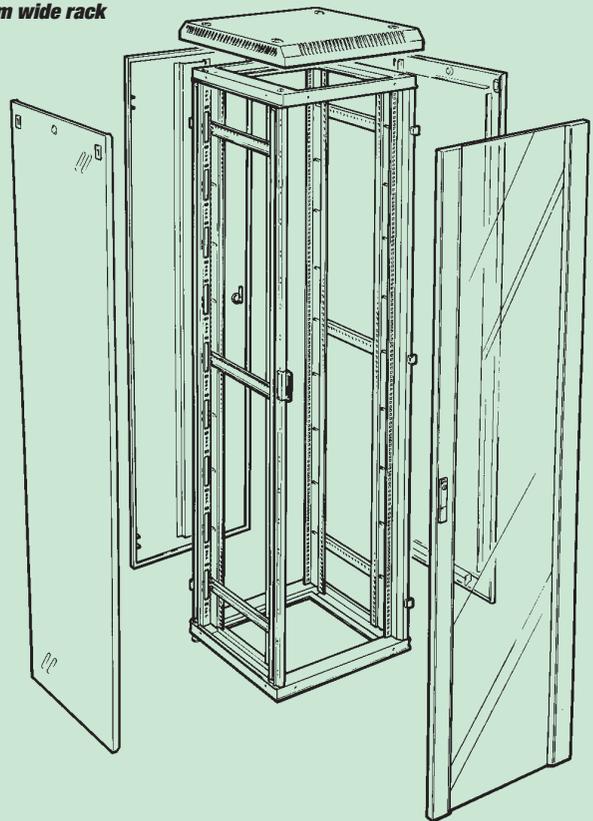
Note: If you require further accessories configured into your primary rack, please choose from the relevant sections and specify at the time of ordering.

Ordering information

Height (U)	Width x Depth (mm)	Order code
27	600 x 600	804-510592F
37	600 x 600	804-510593D
	600 x 600	804-510594B
	600 x 800	804-510595L
42	800 x 600	804-510596J
	800 x 800	804-510597G
	600 x 600	804-510598E
47	600 x 800	804-510599C
	800 x 600	804-510600L
	800 x 800	804-510601J
37	600 x 600	806-3634594
	600 x 800	806-3634595
47	600 x 600	804-2213703
	600 x 800	806-3634592
	800 x 800	806-3634593

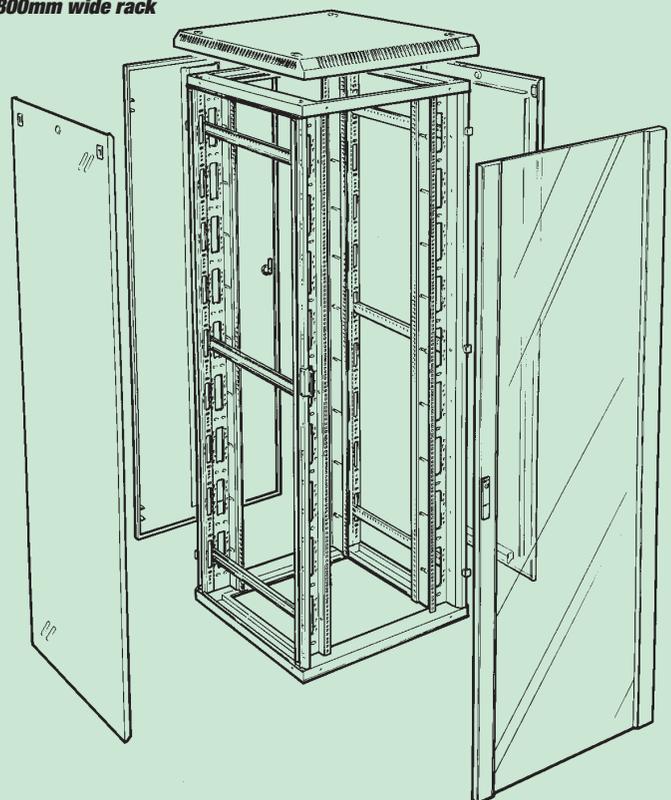
IMRAK Primary Rack Build

600mm wide rack



IMRAK Primary Rack Build

800mm wide rack



IMRAK 1400 – User configurable

This section is provided to aid customers in making the most of the comprehensive IMRAK 1400 product range. Use each of the drawings to locate the relevant cladding, mounting brackets, feet, castors or shelves. Page numbers are provided to guide you to the relevant section.

If you have selected an IMRAK 1400 primary rack, it is only necessary to select components from the castors, plinths, gland plates, fans and power, “shelving options” and “CableControl” section.

If you have selected an IMRAK 1400 open frame it is necessary to choose components from all sections.

IMRAK 1400, FRAME & CLADDING

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② Metal door	8
③ Metal door with vents	8
④ Metal door with vents (NSR)	8
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⑦ Cover trim	9
⑧ Ventilated infill panel	10
⑨ Unventilated infill panel	10
⑩ Side panel	10
⑪ Top cover, high top side vented	11
⑫ Top cover, high top fully ventilated	11

PANEL MOUNTING SYSTEMS & SUPPORTS

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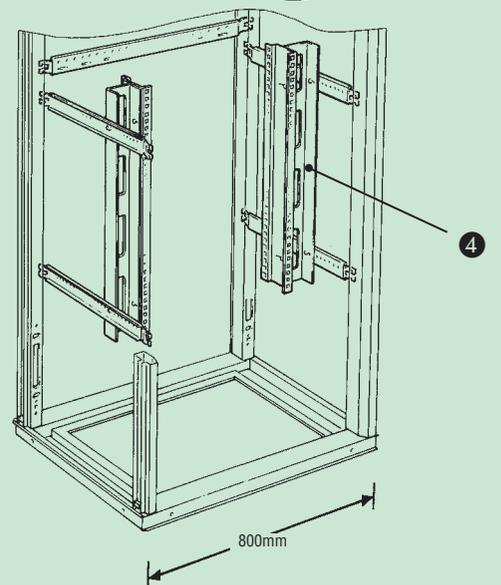
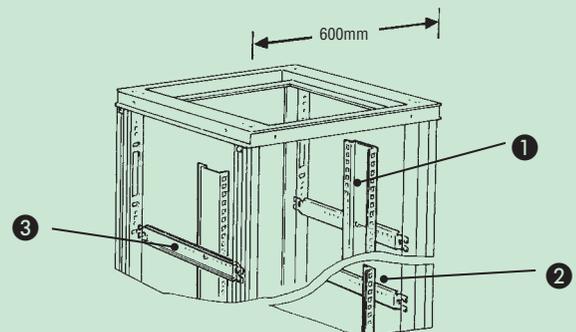
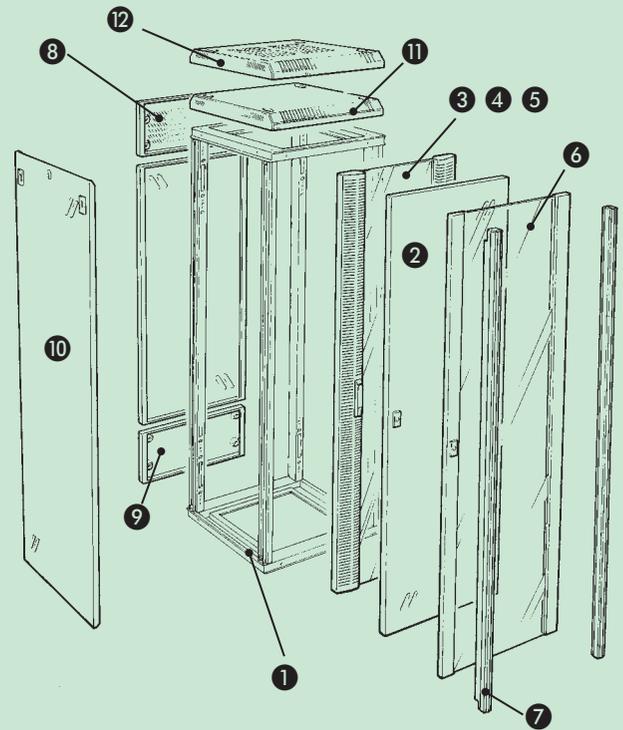
BUILDING YOUR OWN SYSTEM

To specify your own system, simply choose an Open Frame or Primary Rack and add parts as necessary. You will then be given a unique order code which will enable you to reorder an identical unit at any time in the future.

Example

For a 42U 800mm wide x 600mm deep rack with rear metal panel, glass front door, side panels, unventilated top and 19” mounts at front only, order:

Description	Qty.	Order code
Open frame	1 off	804-550305L
Side panels	1 off	802-560403K
Rear metal panel	1 off	802-560251G
Glass door	1 off	802-563460E
Fully vented top	1 off	802-560651B
Reducing cable channels	1 pair	802-563572E
600mm deep panel mount supports	3 pairs	802-560545A
19” panel mounts	1 pair	802-560528A



IMRAK 1400 – User configurable

IMRAK 1400 OPEN FRAME

IMRAK 1400 is offered in two basic forms:

- Open Frame
- Primary Rack Builds

For complete versatility an Open Frame can be ordered. This allows for configuration both internally and externally to your specification.

Remember to specify accessories such as tops, sides, doors, castors etc. when placing your order.

IMRAK 1400 OPEN FRAME

The IMRAK Open Frame is available in an extensive range of standard sizes. Heights from 12U, rising in 5U increments, to 47U. Standard IEC 297-2 sizes of 600mm and 800mm deep are available to accommodate various applications.

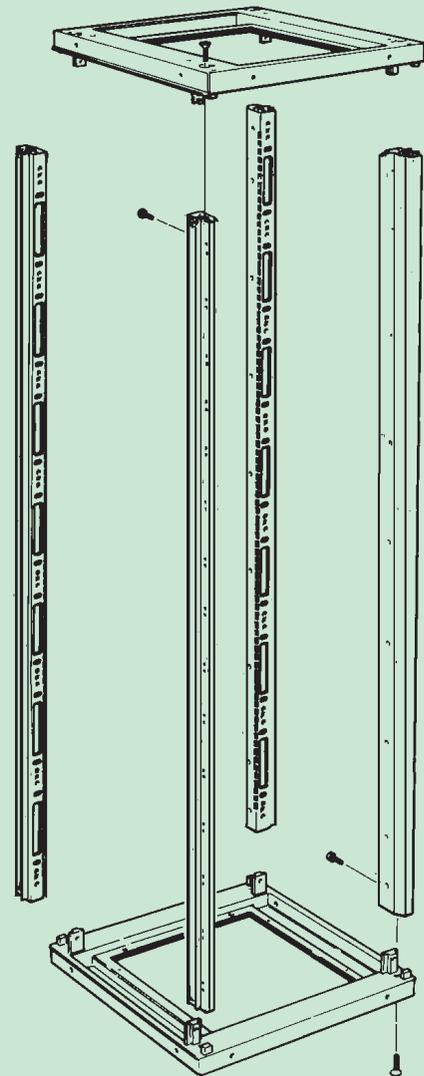
Contents of kit

Item/Description	Qty.	Material/Finish
Corner verticals	4	1,6mm steel, painted RAL 7035
End frames	2	1,6mm steel, painted RAL 7035

Ordering information

Height (U)	Width x Depth (mm)	Order code
12	600 x 800	§ 804-550002G
	800 x 600	§ 804-550185F
17	600 x 600	§ 804-550021C
	600 x 800	§ 804-550022A
22	600 x 600	§ 804-550041H
	600 x 800	§ 804-550042H
	600 x 600	804-550061B
27	600 x 800	804-550062L
	800 x 600	804-550245C
	800 x 800	804-550246A
	600 x 600	§ 804-550081G
32	600 x 800	§ 804-550082E
	800 x 600	§ 804-550265H
	800 x 800	§ 804-550266F
	600 x 600	804-550101E
	600 x 800	804-550102C
37	800 x 600	804-550285B
	800 x 800	804-550286L
	600 x 600	804-550121K
42	600 x 800	804-550122H
	800 x 600	804-550305L
	800 x 800	804-550306J
47	600 x 600	804-550141D
	600 x 800	804-550142B
	800 x 600	804-550325E
	800 x 800	804-550326C

§ Minimum order quantity = 10



IMRAK 1400 – User configurable

GLASS AND METAL DOORS

Doors suitable for the front or rear of IMRAK are available in metal and glass. Shortened doors can also be fitted to provide space above or below the door for accommodating fan units, grills, touch panels or cable entries.

Contents of kit

Description	Material/Finish
Metal door option	0,9mm steel, painted RAL 7037
Glass door option	4mm toughened tinted grey glass (6mm for 37U, 42U and 47U doors, 800mm wide)
Brackets	
Fixings	
Lock and keys	

Ordering information

Height	Order code – metal door		Order code – glass door	
	600mm wide	800mm wide	600mm wide	800mm wide
U				
12	802-563389G	802-563397H	802-563446K	802-563454L
17	802-563390L	802-563398F	802-563447H	802-563455J
22	802-563391J	802-563399D	802-563448F	802-563456G
27	802-563392G	802-563400A	802-563449D	802-563457E
32	802-563393E	802-563401K	802-563450H	802-563458C
37	802-563394C	802-563402H	802-563451F	802-563459A
42	802-563395A	802-563403F	802-563452D	802-563460E
47	802-563396K	802-563404D	802-563453B	802-563461C
	Order code – Plain vented doors			
42	802-559251A	802-559252K	802-559284H	802-590171J

DOUBLE DOORS

The double doors can be mounted at the front or rear of an 800mm wide IMRAK 1400. They are available in metal or glass versions.

Contents of kit

Description	Material/Finish
Metal double door option	0,9mm steel, painted RAL 7037
Glass double door option	0,9mm steel, painted RAL 7037 (4mm toughened tinted grey glass)
Brackets	
Fixings	
Swing handle	

Ordering information

Height	Order code	Order code
	Metal door	Glass door
42U x 800mm	802-563389G	802-563397H

Note: alternative height on request

VENTED DOORS FOR SERVER APPLICATIONS

Contents of kit

Description	Material/Finish
Glass double door option	4mm toughened tinted glass and 0,9mm epoxy powder painted trims
Vented metal door option	0,9mm epoxy powder painted trims
Swing handles with all doors	

Ordering information

Description	Qty	Order code
37U high x 600mm wide glass vented door	1	802-563639K
42U high x 600mm wide glass vented door	1	802-563640C
37U high x 600mm wide steel vented door	1	802-563647L
42U high x 600mm wide steel vented door	1	802-563648J



Glass front door and Metal door



Double doors



Vented doors for server applications

IMRAK 1400 – User configurable

COVER TRIMS

For applications where no doors are required, a set of aluminium trims may be fitted. Cover trims are supplied in pairs painted in RAL 7037 and with an inset green plastic “coach line”.

As an option, red, blue or yellow coach lines may be specified at extra cost. See below for details.

Note: These trims cannot be fitted at the same time as a door.

Contents of kit

Description	Qty.	Material/Finish
Covers trims	2	Aluminium extrusion, painted RAL 7037

Ordering information

Rack width (mm)	Height (U)	Order code
600 or 800	12	§ 802-560600H
	17	§ 802-560605J
	22	§ 802-560610E
	27	802-560615F
	32	§ 802-560620B
	37	802-560625C
	42	802-560630K
	47	802-560635L

§ Minimum order quantity = 10

COACH LINES

A green plastic coach line is fitted to the ‘cover trims’ and ‘glass door’ as a standard, free-of-charge highlight colour.

Alternative colours – or extra green coach lines – may be specified for an additional cost.

Ordering information

Length	Colour	Order code
2 x 2,15m	Green	802-562230E
	Red	802-562232A
	Blue	802-562231C

EARTHING KIT FOR GLASS DOOR

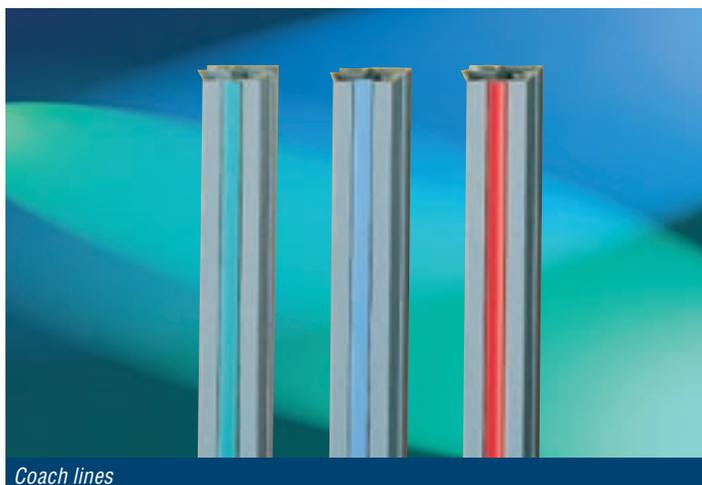
This earthing kit electrically joins the lock member to the hinge member on the glass door via a conductive self-adhesive tape. For all-rack earthing an ‘Earth Continuity Kit’ is required.

Ordering information

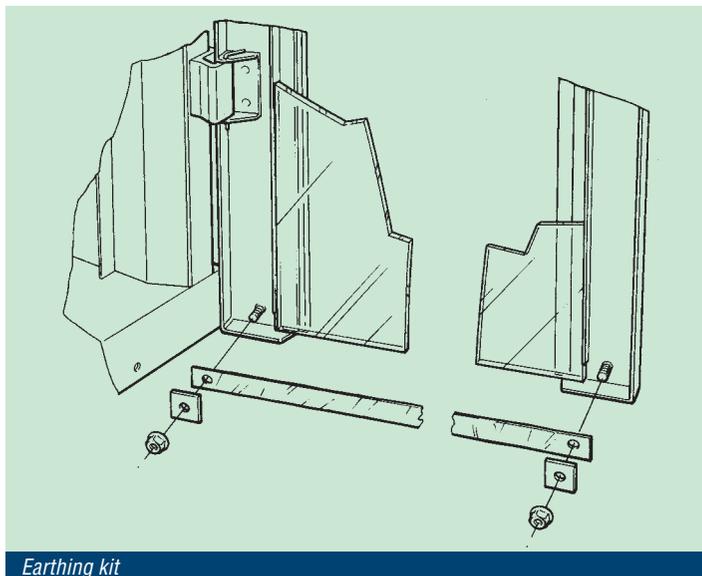
Description	Order code
Earthing kit 600mm wide	802-563520B
Earthing kit 800mm wide	802-563521L



Cover trims



Coach lines



Earthing kit

IMRAK 1400 – User configurable

INFILL PANELS

These panels have a nominal size of 5U. For example, a panel plus 32U door would fit a 37U rack. They may be fitted above and/or below a door (glass or steel) or a rear panel.

Typical uses are to allow mechanical handling of cables i.e. to accept connectors/cable glands, or bulk cable access using the cable brush version.

Contents of kit

Description	Qty.	Material/Finish
5U Panel	1	1,6mm epoxy powder coated RAL 7037
Fixings		

Ordering information

Description: Infill panels	Order code
600mm wide unventilated	802-561042L
800mm wide unventilated	802-561043J
600mm wide ventilated	802-561044G
800mm wide ventilated	802-561045E
600mm wide with cable brush	802-563581D
800mm wide with cable brush	802-563528B

SIDE PANELS

Strong, lightweight side panels are easily fitted into position using smooth action slam latches. A centre grommet may be removed and replaced with a lock if required.

Contents of kit

Description	Qty	Material/Finish
Side panels	1	0,9mm steel, painted RAL 7035
Slam latches	2	
Lock blanks	1	

Ordering information

Height	Order code	Order code
U	600mm deep	800mm deep
12 §	802-560283E	802-560284C
17 §	802-560303C	802-560304A
22 §	802-560323H	802-560324F
27	802-560343B	802-560344L
32 §	802-560363G	802-560364E
37	802-560383A	802-560384H
42	802-560403K	802-560404H
47	802-560423D	802-560424B

§ Non-standard heights available to special order

SIDE PANEL LOCKS

For lockable side panels, simply order a kit of two locks.

Two versions are available; a standard version using the same key as the standard lock, and a high security version which uses the same key as the swing-handle.

Ordering information

Description	Type	Order code
Side panel lock	Standard security	802-560004B
Side panel lock	High security	802-563738H



Unventilated infill panel



Ventilated infill panel



Cable brush infill panel



IMRAK 1400 showing slam-latch fitting



IMRAK 1400 side panel lock

IMRAK 1400 – User configurable

HIGH TOP SIDE VENTED

High top side vented – allows air flow through side slots.

Gland plate version – allows cable glands to be fitted and has an aperture of 360mm x 190mm (width x depth).

HIGH TOP FULLY VENTED

High top fully vented – allows air flow through a matrix of square top holes as well as side slots.

Contents of kits

Description	Qty	Material/Finish
Top cover	1	0,9mm steel, painted RAL 7037
Screw cover mouldings	4	
Fixings		

HIGH TOP, SIDE VENTED WITH GLAND PLATE

High top side vented with gland plate – allows air flow through side slots. Gland plate has an aperture of 360mm x 190mm (width x depth)

Contents of kit

Description	Qty	Material/Finish
Top cover	1	0,9mm steel, painted RAL 7037
Gland plate	1	1,6mm steel, painted RAL 7037
Screw cover mouldings	4	
Fixings		

Ordering information

Description: High top, side vented (standard offering)

Width	Depth	Order code
600	600	802-560655E
	800	802-560656C
800	600	802-560659H
	800	802-560660A

High top, fully vented

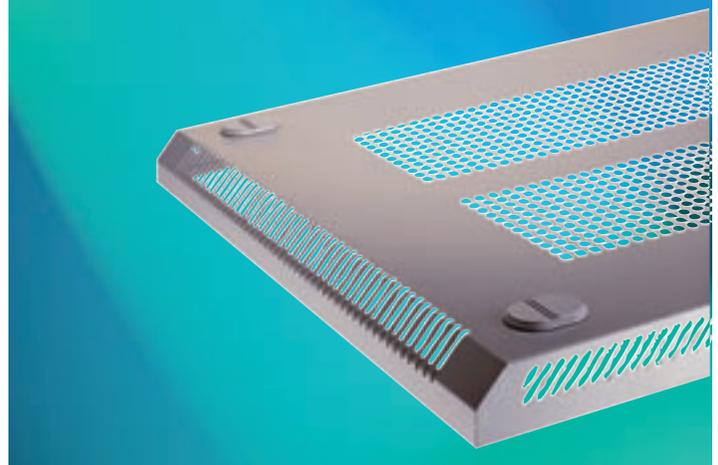
600	600	802-560647D
	800	802-560648B
800	600	802-560651B
	800	802-560652L

High top, side vented with gland plate

600	600	802-562982B
	800	802-562983L
800	600	802-562985G
	800	802-562986E



IMRAK 1400 high top, side vented



IMRAK 1400 high top, fully vented



IMRAK 1400 high top, side vented with gland plate covers

IMRAK 1400 – User configurable

BOTTOM GLAND PLATES

Gland plates are used to seal off the cable aperture in the base of the rack. Half gland plates allow a cable entry kit to be fitted in the centre position. The cable entry kit consists of two brushes through which cable may be pushed.

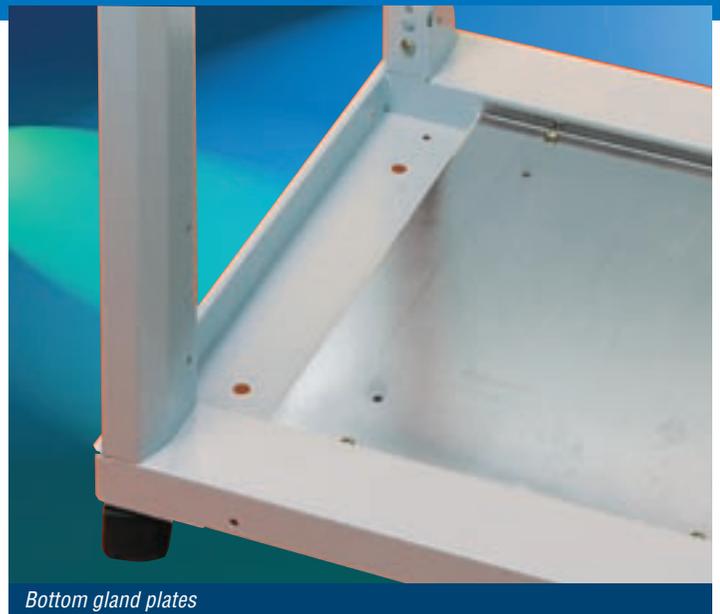
Contents of kit

Description	Qty	Material/Finish
Full gland plate	1	2,0mm steel, painted RAL 7035
Half gland plate	1	1,6mm steel, painted RAL 7035
Fixings		

Ordering information

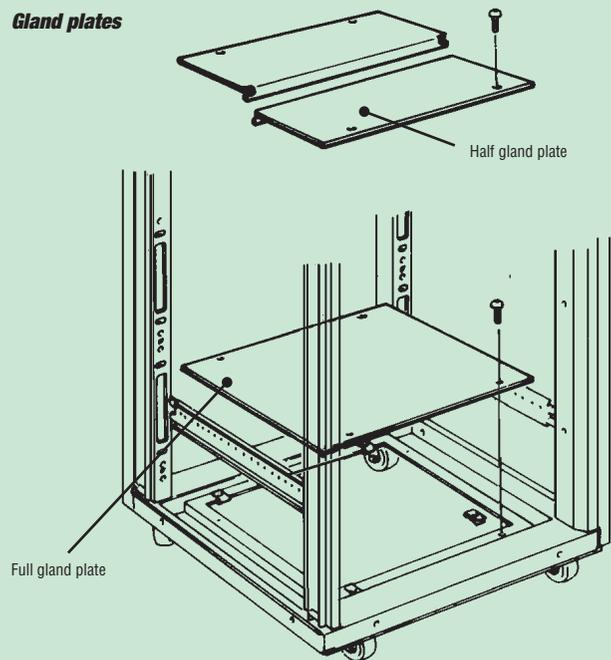
Description: Gland plate

Width	Depth	Type	Order code
600	600	Full gland plate	802-560946E
	600	Half gland plate	802-560954F
	600	Cable entry kit	802-561007B
800	800	Full gland plate	802-560947C
	800	Half gland plate	802-560955D
	800	Cable entry kit	802-561007B
600	600	Full gland plate	802-560950C
	600	Half gland plate	802-560958L
	600	Cable entry kit	802-561008L
800	800	Full gland plate	802-560951A
	800	Half gland plate	802-560959G
	800	Cable entry kit	802-561008L



Bottom gland plates

Gland plates



BAYING KIT

The baying kit is designed for joining two IMRAKs side by side.

Contents of kit

Description	Qty	Material/Finish
Baying brackets	4	Painted in RAL 7035
Fixings		

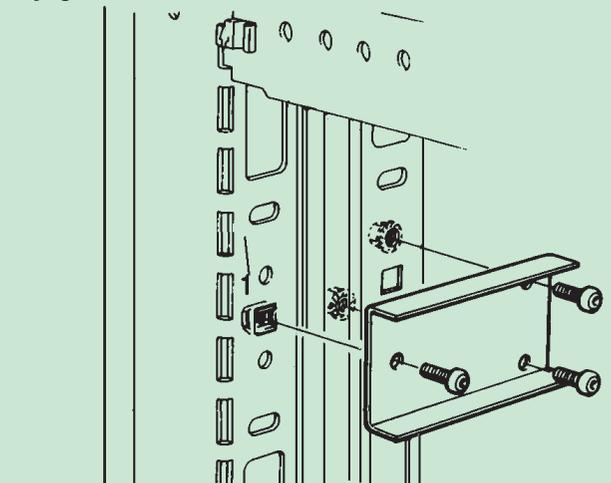
Note: Cage nuts should be fitted in the square hole of one rack.

Ordering information

Description	Order code
Baying kit	802-560943L

Note: Bayed rack infill trims are available

Baying kit



IMRAK 1400 – User configurable

VERTICAL TRIM KIT

A vertical trim kit is used to create a smooth, neat appearance when two racks are bayed together. Fit is by means of attaching to one rack and allowing the other leg to “float”.

Contents of kit

Description	Qty	Material/Finish
Vertical trims	1 front, 1 rear	0,9mm steel, painted in RAL 7035
Fixings		

Ordering information

Height U	Order code
27	802-560820E
32	802-560825F
37	802-560830B
42	802-560835C
47	802-560840K

HORIZONTAL TRIM KIT

A horizontal trim kit is used to complement the vertical trim kit and prevent foreign bodies falling down the slot between the two racks.

Contents of kit

Description	Qty	Material/Finish
Horizontal trim	1	0,9mm steel, painted in RAL 7035
Fixings		

Ordering information

Rack depth	Order code
600mm	802-561047A
800mm	802-561048K

PANEL MOUNTING ANGLE SUPPORTS

These fit between vertical members to allow adjustment of the panel mounts at any position along IMRAK’s framework. Equipment can, as a result, be fitted flush with the front face of the side panel or inset all the way to the rear of the unit.

Contents of kit

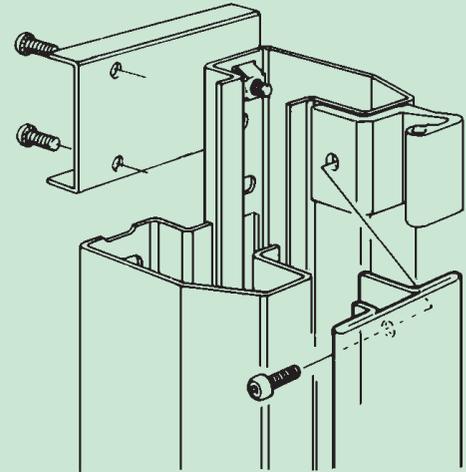
Description	Qty	Material/Finish
Panel mounting angle supports	2	1,6mm steel, painted RAL 7035
Clips	4	
	(2 left hand, 2 right hand)	

Note: Use two kits up to 37U high, three kits for 42U and 47U high

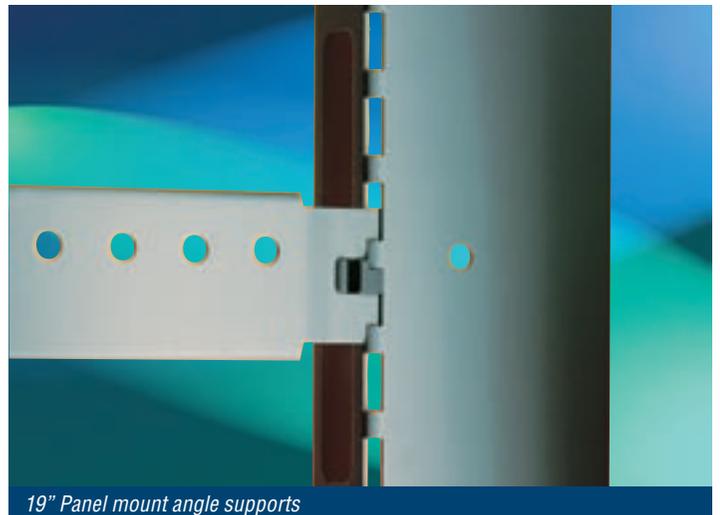
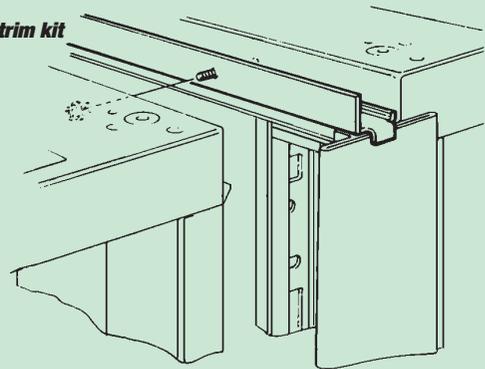
Ordering information

Depth	Order code
600mm	802-560545A
800mm	802-560546K

Vertical trim kit



Horizontal trim kit



19" Panel mount angle supports

IMRAK 1400 – User configurable

SIMPLE 19" FIXED PANEL MOUNTING ANGLES

Simple 19" panel mounts are supplied in pairs to provide 19" mounting positions on universal centres. The centre of each U height is notched, making the positioning of cage nuts much simpler.

Simple 19" panel mounts may be attached directly to the corner vertical, 60mm from the front door, or onto panel mount angle supports giving adjustment throughout the depth of the rack in 20mm increments. They allow directly fixed chassis trays – see page 24 – to be used when the panel mounts are fitted onto the verticals.

Simple 19" panel mounts have no side mounting positions.

Contents of kit

Description	Qty	Material/Finish
Fixed panel mounting angle	2	2mm steel, painted RAL 7035
Fixing screws		

Ordering information

Height (U)	Order code	Height (U)	Order code
12	802-562367L	32	802-562387E
17	802-562372G	37	802-562392A
22	802-562377H	42	802-562397B
27	802-562382D	47	802-562402B

19" PANEL MOUNTING ANGLES – PAINTED OR CONDUCTIVE

Panel mounts are supplied in pairs to provide 19" mounting positions with hole patterns to accept captive nuts on universal centres. Incorporated into the design of the mounts are notches in the centre of each U height which makes the positioning of the cage nuts much easier. The panel mounting may be attached directly to the corner vertical, in which case front to rear adjustment is 60mm per panel mount. Alternatively the panel mount may be fitted onto panel mount angle supports giving infinite adjustment throughout the depth of the rack.

Conductive version

The conductive 19" panel mount angles provide earth continuity between the panel mount and the equipment mounted onto it.

Contents of kit

Description	Qty	Material/Finish
19" Panel mounting angles	2	2,0mm steel, painted RAL 7035 2,0mm steel, conductive zinc and passivate

Ordering information

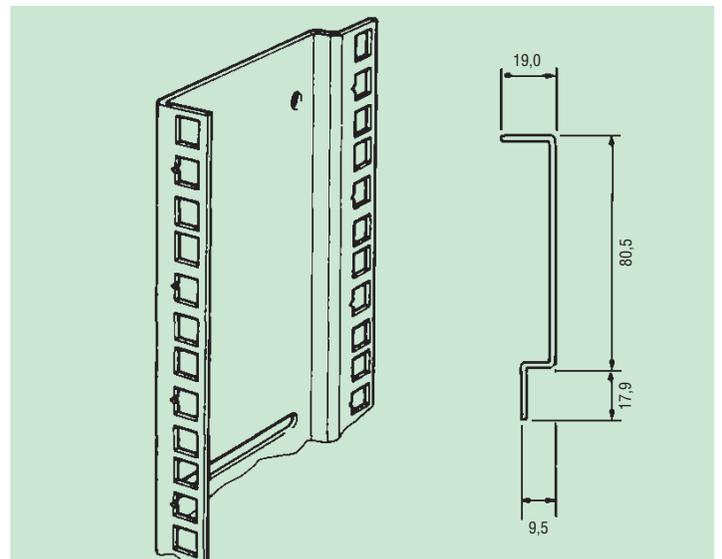
Height U	Finish	Order code
6	Painted	802-562413H
12	Painted	802-560498F
17	Painted	802-560503F
22	Painted	802-560508G
27	Painted	802-560513C
32	Painted	802-560518D
37	Painted	802-560523L
42	Painted	802-560528A
42	Conductive	802-563592K
47	Painted	802-560533H



19" Panel mount angle supports



19" Panel mounting angle



IMRAK 1400 – User configurable

REDUCING CABLE CHANNELS

Reducing cable channels are suitable for 800mm wide racks only. These units are supplied in pairs and may be attached directly to the corner vertical, or fitted onto panel mount angle supports.

Reducing cable channels have been designed to support panel mounting angles. The appropriate size and type of panel mounting angles also need to be ordered.

Contents of kit

Description	Qty	Material/Finish
Reducing cable channels	2	1,6mm steel, painted RAL 7035

Ordering information

Height U	Order code
6	802-563565B
12	802-563566L
17	802-563567J
22	802-563568G
27	802-563569E
32	802-563570J
37	802-563571G
42	802-563572E
47	802-563573C



Reducing cable channel

PANEL MOUNT ANGLE SPACING KIT

This bracket can only be used when the panel mounting angle supports have been mounted out towards the side panel. Using the panel mount angle spacing bracket extra cable management room can be gained outside the 19" width, and behind the vertical.

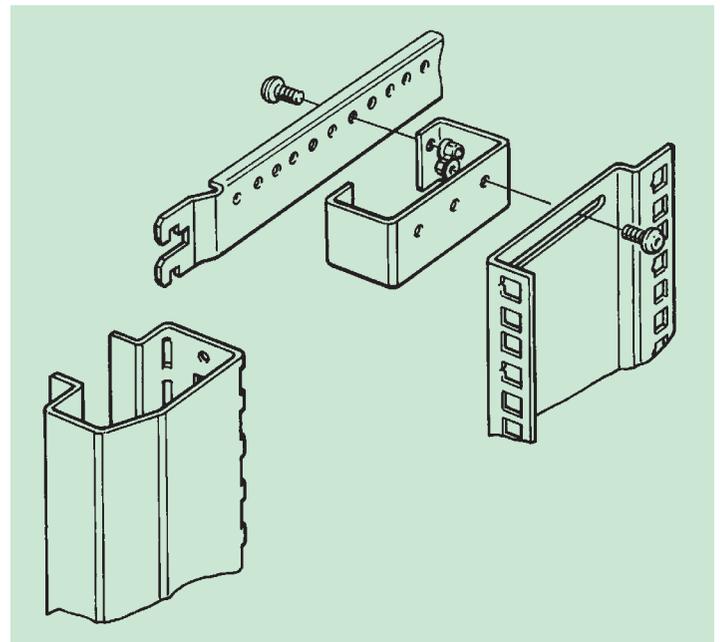
Contents of kit

Description	Qty	Material/Finish
Panel mount angle spacing brackets	2	1,6mm steel, painted RAL 7035

Fixings

Ordering information

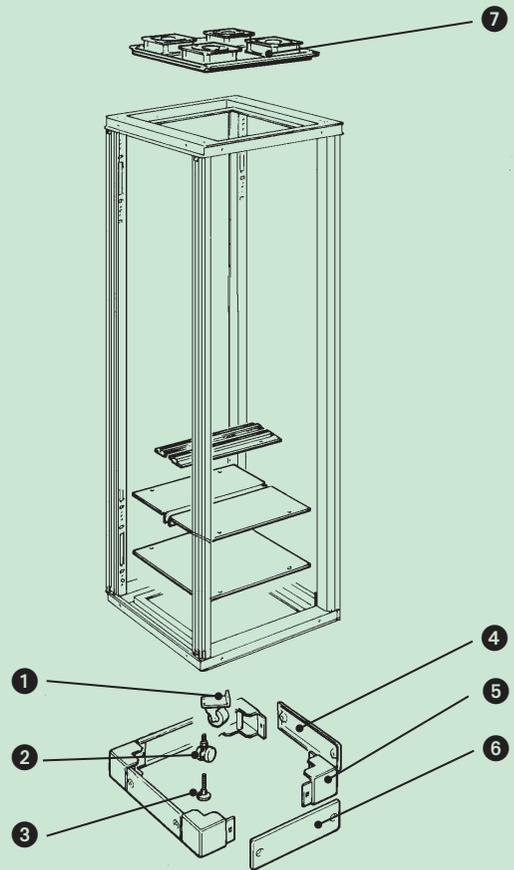
Height U	Order code
Panel mount angle spacing brackets	802-563574A



Panel mounting angle spacing bracket

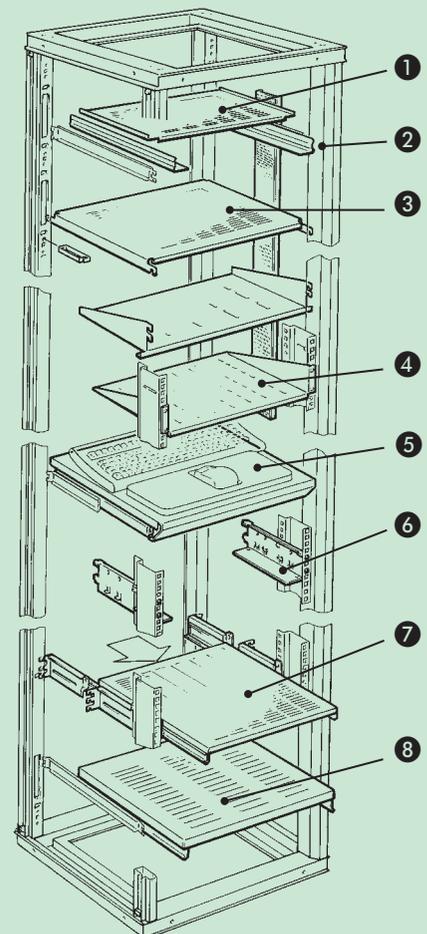
CASTORS, PLINTHS, FANS & POWER

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① Heavy duty castors _____	17
② Light/medium duty castors _____	17
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SHELVING OPTIONS

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① Chassis tray – mount onto chassis supports _____	22
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③ Chassis trays to fix directly to vertical members _____	24
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IMRAK 1400 – User configurable

BOLTING DOWN PLATE

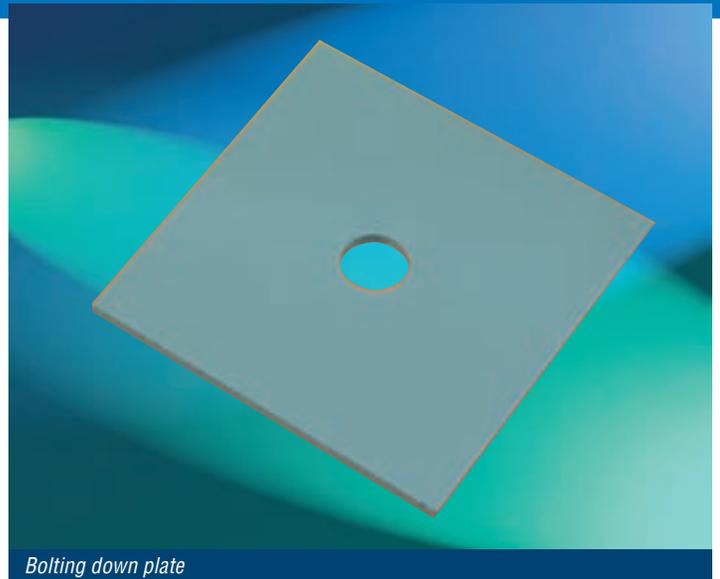
This kit of 4 rectangular plates allows the base frame to be bolted down, using 12mm bolts (not supplied).

Contents of kit

Description	Qty	Material/Finish
Bolting down plates	4	Painted RAL 7035

Ordering information

Description	Qty	Order code
Bolting down plates	4	802-562415D



Bolting down plate

CASTORS

Two types of castor are available. All castor loads are stated under average conditions, fitted to the rack bolt on mounting plates.

Available in braked and unbraked versions.

Load rating

Type	Load per castor
Light/medium duty	65kg each
Heavy duty	115kg each

Ordering information

Description	Qty	Order code
Heavy duty castor	4	802-560003D
Heavy duty braked/unbraked castor kit	2/2	802-561556B
Light/medium duty castor	4	802-561557L
Light/medium duty braked/unbraked castor kit	2/2	802-561556B

Note: Adjustable feet cannot be used together with the light/medium duty castors, as both use the same mounting hole.



Heavy duty castor



Light/medium duty castor

IMRAK 1400 – User configurable

ADJUSTABLE FEET

These allow you to align your rack on uneven surfaces. Adjustable feet are screwed directly into the corner blocks, using 10mm threads. An adaptor is required when feet are to be fitted as well as heavy duty castors. Adjustment is between 25mm and 40mm.

Ordering information

Description	Qty	Order code
Adjustable feet	4	802-56001H

Note: This item cannot be used with light/medium duty castors.

ADJUSTABLE FOOT ADAPTOR

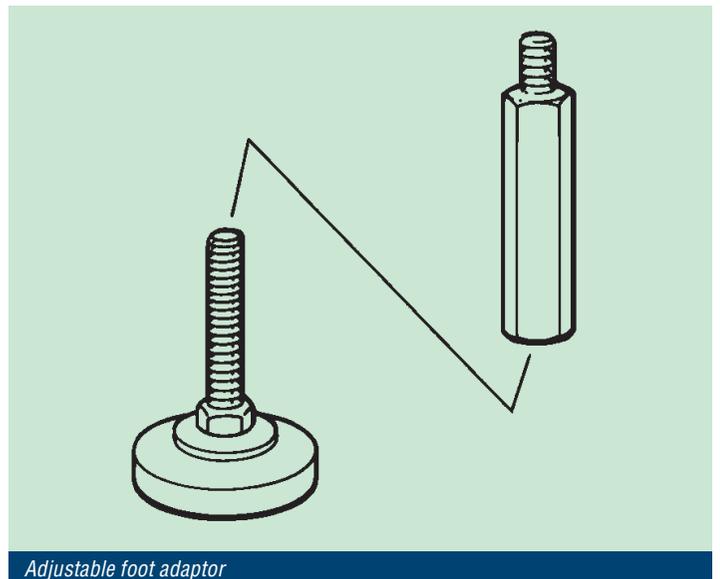
Adjustable foot adaptors are for use when plinth or heavy duty castors are required with adjustable feet.

Ordering information

Description	Qty	Order code
Adjustable foot adaptors	4	802-560944J



Adjustable feet



Adjustable foot adaptor

IMRAK 1400 – User configurable

PLINTH AND PLINTH TRIM KITS

Plinth kits are available in two heights; 100mm or 200mm. Plinth kits consist of four identical corner sections and four infill sections which allow easy modification for cable entry. Adjustable feet, which will align IMRAK on uneven surfaces, can be fitted to a plinth. Plinths may be stacked to provide additional height.

Contents of kit

Description	Qty	Material/Finish
100mm/200mm Plinth corners	4	1,6mm steel, painted RAL7035
Side trim, front/rear trim kit	1	0,9mm steel, painted RAL 7035
Fixings		

Ordering information

Description: Complete plinth kits

Rack dimensions	Order code	
Width x Depth	100mm high	200mm high
600 x 600mm	802-592667C	–
600 x 800mm	802-592668A	–
800 x 800mm	802-592669K	–
800 x 800mm	802-592670C	–

Description: Plinth Corners

Description	Order code	
Plinth corners – set of four	802-561033A	802-563030H

Description: Plinth trim kits

Description	Order code	
600 x 600mm Side trim kit	802-561035H	802-563032D
600 x 600mm Front/rear trim kit	802-561038B	802-563034G
600 x 800mm Side trim kit	802-561036F	802-563033B
600 x 800mm Front/rear trim kit	802-561038B	802-563034G
800 x 600mm Side trim kit	802-561035H	802-563032D
800 x 600mm Front/rear trim kit	802-561039L	802-563035J
800 x 800mm Side trim kit	802-561036F	802-563033D
800 x 800mm Front/rear trim kit	802-561039L	802-563035J

Note: All three items (corners, side and front and rear trims) must be ordered to create a full plinth kit

EXTENSION PLINTH

Extension plinths are designed to provide increased stability when using heavy equipment, and are recommended for racks fitted with 800mm glass doors or swing frames. Each plinth has fixing studs for heavy duty castors, and threads fitted to take adjustable feet.

Castors and adjustable feet must be ordered separately.

Contents of kit

Description	Qty	Material/Finish
Extension plinths	2	1,6mm steel, painted RAL 7035

Ordering information

Description	Unit depth	Order code
Extension plinth	600mm	802-561030G
	800mm	802-561031E

PLINTH LEVELLING KIT

When fitting a 100mm or 200mm high plinth with adjustable feet, a stiffening kit is needed. The kit consists of 4 spacers and fixings to pass the load from the lower flange to the frame of the rack and also M10 hexagon nuts to lock the adjustable foot in place.

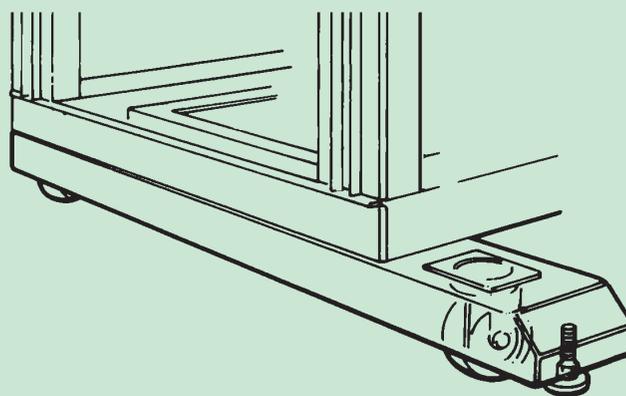
Ordering information

Description	Unit height	Order code
Levelling kit	100mm	802-552997F
	200mm	802-563158D

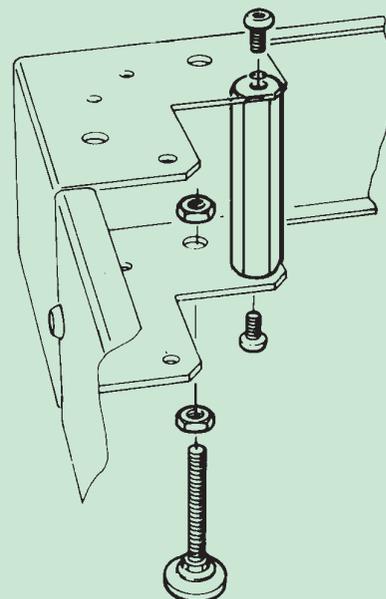


Plinth and plinth trim kits

Extension plinths



Plinth levelling kits



IMRAK 1400 – User configurable

STANDARD FAN TRAYS

Top mounted fan trays are available to aid the cooling of your rack-housed equipment. These may be retro-fitted to the IMRAK 1400, and occupy none of the useable U height. Fan trays are supplied with or without fans.

Top fan trays have blanking plates fitted in all unused positions. Connection to all fans is by means of a CEE 22 mains inlet, which must be ordered separately. Select appropriate mains lead from lower table

Ordering information

Dimensions (Width x depth)	Fans fitted (max)	Order code
600 x 600mm	4 (6)	802-560475G
600 x 600mm	0	802-560483H
600 x 800mm	4 (6)	802-560476E
600 x 800mm	0	802-560484F
800 x 600mm	4 (6)	802-560479K
800 x 600mm	0	802-560487L
800 x 800mm	4 (9)	802-560480C
800 x 800mm	0	802-560488J

Note: Ventilated top covers must be fitted when top mounted fan trays are fitted.

IMRAK FAN TRAY ACCESSORIES

Ordering information

Description	Order code
Additional blanking plates	802-503897B
2m mains lead with CEE22 plug and 13A (UK) plug fitted	802-561559G
2m mains lead with CEE22 plug and Schuko plug (French/German)	802-562463D

LOW NOISE FAN TRAYS

Low noise top mounted fan trays are available to aid the cooling of your rack-mounted equipment. They may be fitted after your equipment on the IMRAK 1400, and occupy none of the useable U height.

Connection to all fan trays is by means of a CEE22 mains inlet, which must be ordered separately – see above for details

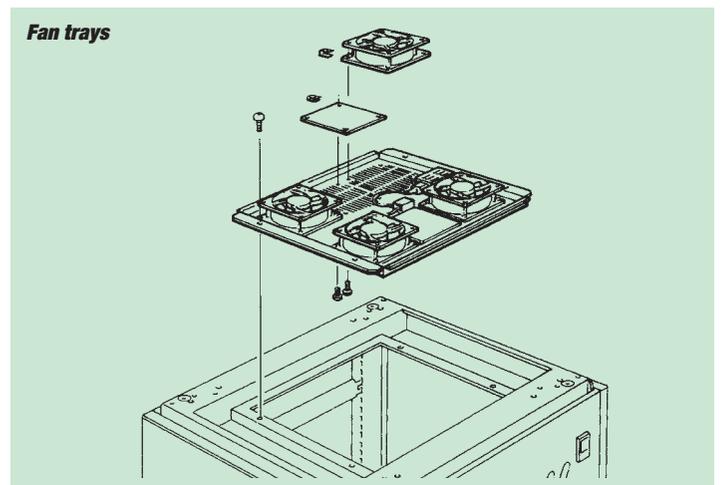
Ordering information

Dimensions (Width x depth)	Fans fitted	Order code
600 x 600mm	4	802-563089H
600 x 800mm	4	802-563090A
800 x 600mm	4	802-563093F
800 x 800mm </td <td>4</td> <td>802-563094D</td>	4	802-563094D

Supplied with 28-243083D fans



Standard fan trays



Fan trays



Standard fan trays

IMRAK 1400 – User configurable

MONITORED FAN TRAYS

IMRAK MFT is a new concept in fan trays. This product applies the IMRAK concept of 'Configured as Required' to temperature control. The IMRAK MFT contains all the basic monitoring and control features for a rack. IMRAK MFT also provides considerable opportunity to expand its sophistication with the addition of accessories.

Features

- Lower average noise level at room temperature
- Extended MTBF (mean time before failure) due to lower average speed
- Fans controlled individually or in groups
- Local or remote monitoring and alarm
- Variable or constant temperature range monitoring
- World wide voltage input
- World wide approvals; CE, UL and CSA

Ordering information

Dimensions (width x depth)	Sensor range	Order code
600 x 600mm	Fixed (25°C – 45°C)	802-48500B
600 x 600mm	Adjustable	802-48505J
600 x 800mm	Fixed (25°C – 45°C)	802-48510J
600 x 800mm	Adjustable	802-48515E
800 x 600mm	Fixed (25°C – 45°C)	802-48520E
800 x 600mm	Adjustable	802-48525A
800 x 800mm	Fixed (25°C – 45°C)	802-48530A
800 x 800mm	Adjustable	802-48540H

Note: The 4 or 6 (maximum) fan can be fitted in any location

ADDITIONAL/ALTERNATIVE SENSORS AND ACCESSORIES

Ordering information

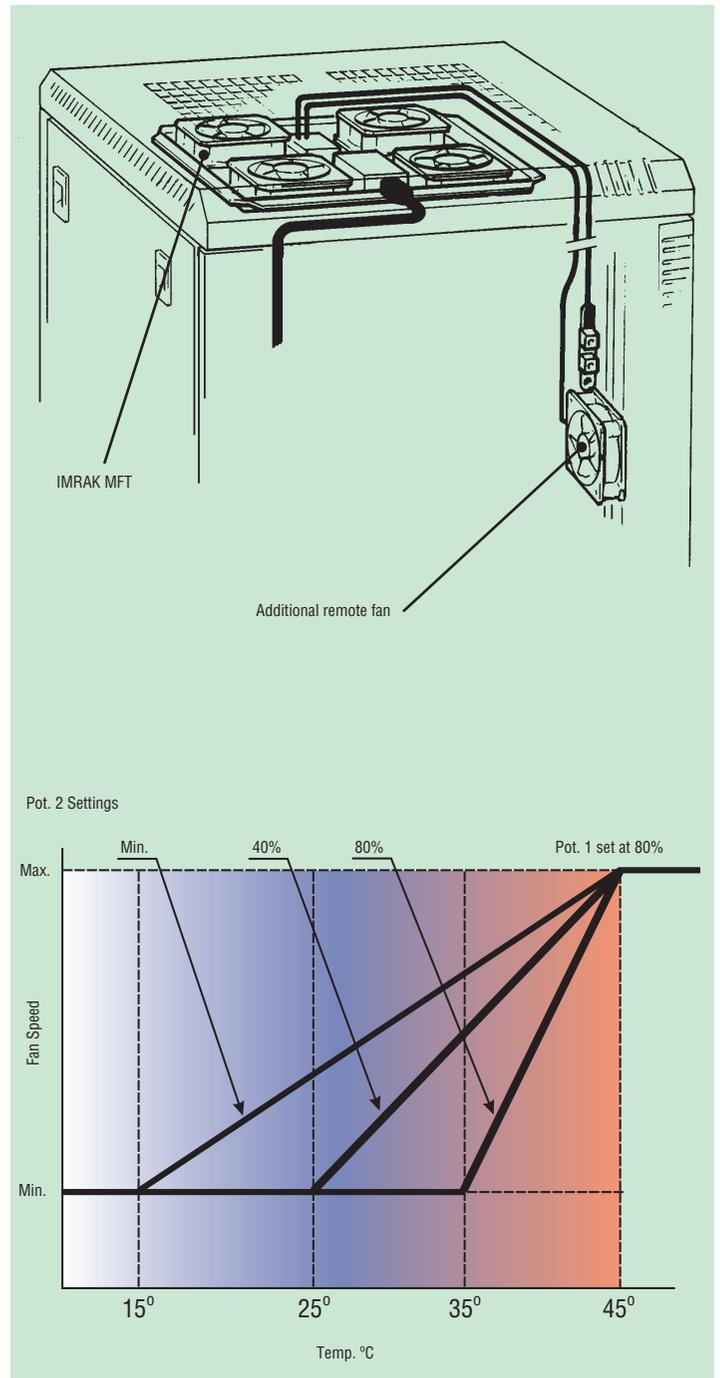
Sensor type and description	Qty	Order code
Buzzer 12VDC	1	294-48580K
Relay module – 1	1	294-48582D

Note: Additional fans of different sizes are available on request.

For full operating details, please refer to the 'MFT Technical Support Document'



Monitored fan trays



IMRAK 1400 – Accessories

SWING HANDLES

Both the metal and glass doors can have a swing handle fitted as an option. When a lock is not required a lock blank fills the hole in the swing handle. It also acts as a spring clip, holding the handle into its housing. Please note, the locks for the swing handle need to be ordered separately.

Keyed alike lock – self locking

All locks supplied with the same key and the door automatically locks when closed.

Keyed alike lock – manual locking

All locks supplied with the same key. To lock the door the key must be turned.

Triangular key drive lock – self locking

The lock is operated by a triangular 'machine cabinet' drive. The door automatically locks when closed.

Ordering information

Description	Qty	Order code
Swing handle – IMRAK 1400	1	802-563494K
Keyed alike lock – self locking	1	§ 802-563532F
Keyed alike lock – manual locking	1	§ 802-563610A
Triangular key drive lock	1	802-563533D

§ To match side panel high security locks with keyed alike swing handle locks see page 12

CHASSIS TRAYS FOR 19"

These steel trays come in four depths so that the correct depth for your installation may be selected without interfering with cabling or power distribution at the rear. The slots in the tray allow for good airflow and, at the same time, offer a selection of fixing positions to allow modems and instruments to be screwed into position. With this style of tray a pair of chassis supports is also required.

Notes: The units for 600mm or 800mm wide may be supported on chassis supports bolted to panel mounting angle supports.

For 600mm wide units fitted on chassis supports, and in turn on panel mountings, four panel mountings must be fitted.

Contents of kit

Description	Qty	Material/Finish
Chassis tray	1	1,6mm steel, painted RAL 7035
Fixings		

Ordering information

Chassis tray depth	600mm rack	800mm rack
256mm	802-561013G	802-561017K
356mm	802-561014E	802-561018H
456mm	802-561015C	802-561019F
556mm	802-561016A	802-561020K

CHASSIS SUPPORTS

These steel supports may be varied along the depth of the rack and offer an ideal method of supporting heavy equipment. When used in conjunction with 19" equipment they position cardframes accurately in line with U heights. The horizontal sections of the supports are pre-punched to allow the chassis trays to be fitted without further drilling. An extra 15mm width is available when chassis supports are fitted directly to panel mounting angle supports as maximum chassis width is then 465mm. Nominal load rating is 50kg. Chassis supports are sold in pairs.

Contents of kit

Description	Qty	Material/Finish
Chassis support	2	1,6mm steel, painted RAL 7035
Fixings		

Ordering information

Chassis support depth	Rack min. depth	Order code
270mm	400mm	802-561009J
370mm	500mm	802-561561J
470mm	600mm	802-561010B
570mm	700mm	802-561562G
670mm	800mm	802-561011L



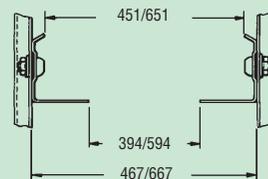
Swing handle with key lock option



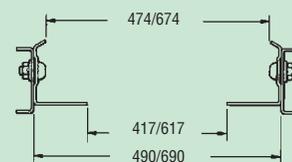
Chassis support



Cross member mount



Panel mount



Note: There are no 400mm, 500mm or 700mm deep racks, but the chassis supports are intended for use when panel mount angles are inset by, say, 120 – 150mm etc.

IMRAK 1400 – Accessories

HEAVY DUTY SHELF

For applications where heavy loads are required, this shelf offers a load capacity of 100 kg. Slotted holes offer limited air passage and also provide simple fixing positions.

Note: Two pairs of chassis supports must be used.

Contents of kit

Description	Qty	Material/Finish
Heavy duty shelf	1	1,6mm steel, painted RAL 7035

Ordering information

Shelf depth	600mm wide racks	800mm wide racks
472mm	802-552914C	802-552917H
627mm	802-552915A	802-552918F
754mm	802-552916K	802-552919D



Heavy duty shelf

19" CANTILEVER SHELVES

Cantilever shelves fix directly onto the standard 19" panel mounts. The shelves occupy 2U of panel mount height. Cantilever shelves have a nominal load rating of 20kg, mounted in the middle of the shelf.

Applications

Ideal for networking applications and modem mounting

Contents of kit

Description	Qty	Material/Finish
Cantilever shelf	1	1,6mm steel, painted RAL 7035
Fixings		

Ordering information

Description	Order code
255mm deep shelf	802-562284D
400mm deep shelf	802-562285B



255mm deep cantilever shelf



400mm deep cantilever shelf

IMRAK 1400 – Accessories

CHASSIS TRAYS TO FIX DIRECTLY TO VERTICAL MEMBERS

These trays are designed for applications where equipment wider than 19" is to be mounted or used in conjunction with fixed panel mounts. As they are fitted directly to the vertical corner members, no chassis supports or panel mounting members are required, thereby reducing cost and complexity.

Note: These can be used with fixed panel mounts when fitted to the vertical (NOT on panel mount supports) but not when standard panel mounts are used.

Contents of kit

Description	Qty	Material/Finish
Chassis tray	1	1,6mm steel, painted RAL 7035
Fixings		

Ordering information

Description	Order code
Tray for 600 x 600mm rack	802-563558K
Tray for 600 x 800 rack	802-563559H
Tray for 800 x 600mm rack	802-563562H
Tray for 800 x 800mm rack	802-563563F

Note: Nominal load per shelf 600mm wide 50kg, 800mm wide 20kg.

SLIDING SHELVES

A range of sliding shelves are available which, when used with the slides and special 'bobbins', allow the same shelf to be used with both single and double extension slides. Short shelves may be used on larger slides e.g. the 400mm shelf on slides to suit 600mm deep racks. Maximum load capacity is 35kg.

Contents of kit

Description	Qty	Materials/Finish
Shelf	1	1,6mm steel, painted RAL 7035
Mounting bobbins	4 for 400mm deep shelves 6 for 600mm deep shelves 8 for 800mm deep shelves	

Note: 400mm and 600mm shelves will fit both 600mm and 800mm slides

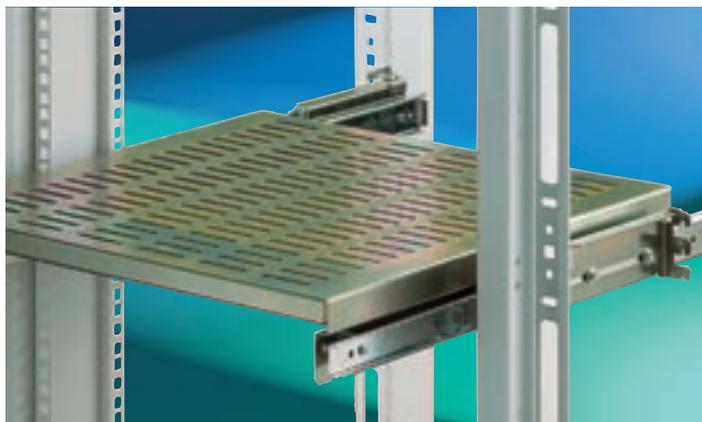
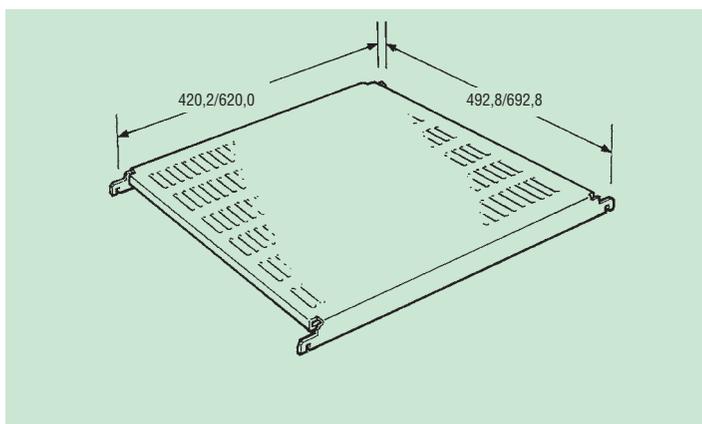
Ordering information

Type	Actual length	Order code	
		600mm wide rack	800mm wide rack
400mm shelf §	240mm	802-563082L	802-563085E
600mm shelf	440mm	802-563083J	802-563086C
800mm shelf	640mm	802-563084G	802-563087A

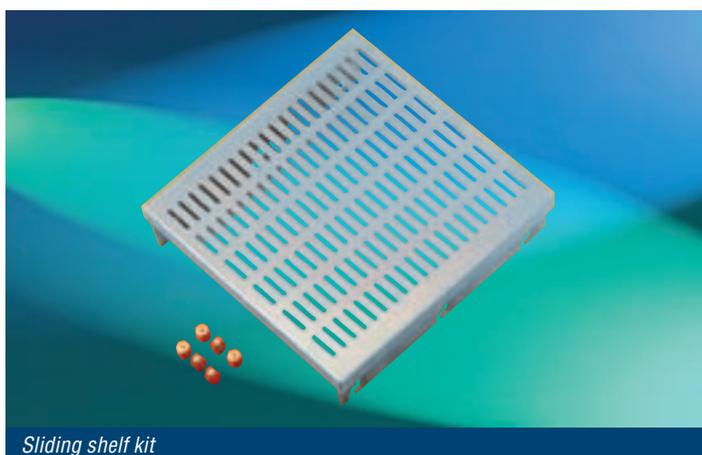
§ This shelf is for use in deeper racks where only a short shelf is required.



Chassis tray to fix directly to vertical members



Sliding shelves, complete and fitted



Sliding shelf kit

IMRAK 1400 – Accessories

SLIDES

Single and double extension slides come complete with brackets for use with the sliding shelves above. The brackets can be used either fitted to the 19" mountings or fitted directly to the rack verticals, and hence can be used with a ready rack which has only one pair of panel mounts. Slides can be fitted to either 600mm or 800mm wide racks. The slides come fitted with threaded inserts to accommodate the "bobbins".

Slides are supplied in pairs, complete with brackets

Caution: Heavy loads mounted on slides can cause a rack to become unstable. Please ensure that the rack is bolted down or has an extension plinth fitted.

Ordering information

Description	Rack depth	Qty	Order code
Single extension slide	600mm	1 pair	802-552926G
	800mm	1 pair	802-562462F
Double extension slide	600mm	1 pair	802-552927E
	800mm	1 pair	802-552928C



Slides

HEAVY DUTY SLIDING SHELF

Load rating 100kg

Caution: Heavy loads mounted on slides can cause a rack to become unstable. Please ensure that the rack is bolted down or has an extension plinth fitted.

Ordering information

Description	Rack size	Order code
Vertical member mounting shelf	600mm x 600mm	802-553680B
	600mm x 800mm	802-563681L
19" mounting shelf	600mm x 600mm	802-563684E
	600mm x 800mm	802-563685



Heavy duty sliding shelf

IMRAK 1400 – Accessories

KEYBOARD SHELF

There are two types of keyboard shelf; a standard keyboard shelf with a maximum width of 480mm and a compact, 19" vertical member mounted keyboard shelf. Both shelves fit 600mm x 800mm racks and are load rated at 20kg.

Ordering information

Description	Qty	Order code
Standard keyboard shelf – vertical member mounting	1	802-563688H
Compact keyboard shelf – 19" mounting	1	802-563690K

Note: Normal panel mounting angles cannot be used in the same area as the standard keyboard shelf.



Keyboard shelf

2U KEYBOARD HOUSING

This high quality keyboard housing occupies 2U of usable height and comes complete with a lockable, drop-down front panel. It is suitable for Marquardt type 7064 and Cherry type G80-1800 keyboards, which can be screwed in position. Alternatively the Cherry type keyboard can be located with a velcro strip. The keyboard is mounted on high quality slides which offer a positive stop, both in and out. In addition, the front part of the tray is usable as a handle or pencil holder. The usable aperture is 50mm x 426mm.

Ordering information

Description	Qty.	Order code
Keyboard housing	1	802-556070J
Velcro mounting kit	1	802-562178C



2U Keyboard housing

IMRAK 1400 – Accessories

CABLE MANAGEMENT PRODUCTS

1 PLASTIC CABLE TRUNKING

A plastic trough measuring 80mm wide by 40mm deep externally with a snap-on cover. Supplied in 2m lengths and easily cut for other sizes.

2 STEEL CABLE TRAYS

Four alternative lengths, all 152mm wide by 12,7mm deep and multi-punched for accepting cable ties etc.

3 PLASTIC CABLE TRAYS

1500mm x 135mm by 13mm deep, multi-punched for accepting cable ties etc. Easy to cut and will not damage or cut into cables.

4 5 6 7 CABLE MANAGEMENT PANELS

19" mounting cable entry, brush strip and cable hoop panels

8 9 SINGLE AND DOUBLE CABLE HOOPS

Single cable hoops can be fixed to the inside face of the vertical corner members. Single sized hoops are available for racks with side panels. Double sized hoops can be fitted to the inside faces of the vertical corner members when the racks are bayed together. The hoops may also be fitted on cross members at the rear of the rack or from panel mount supports on the side of the rack.

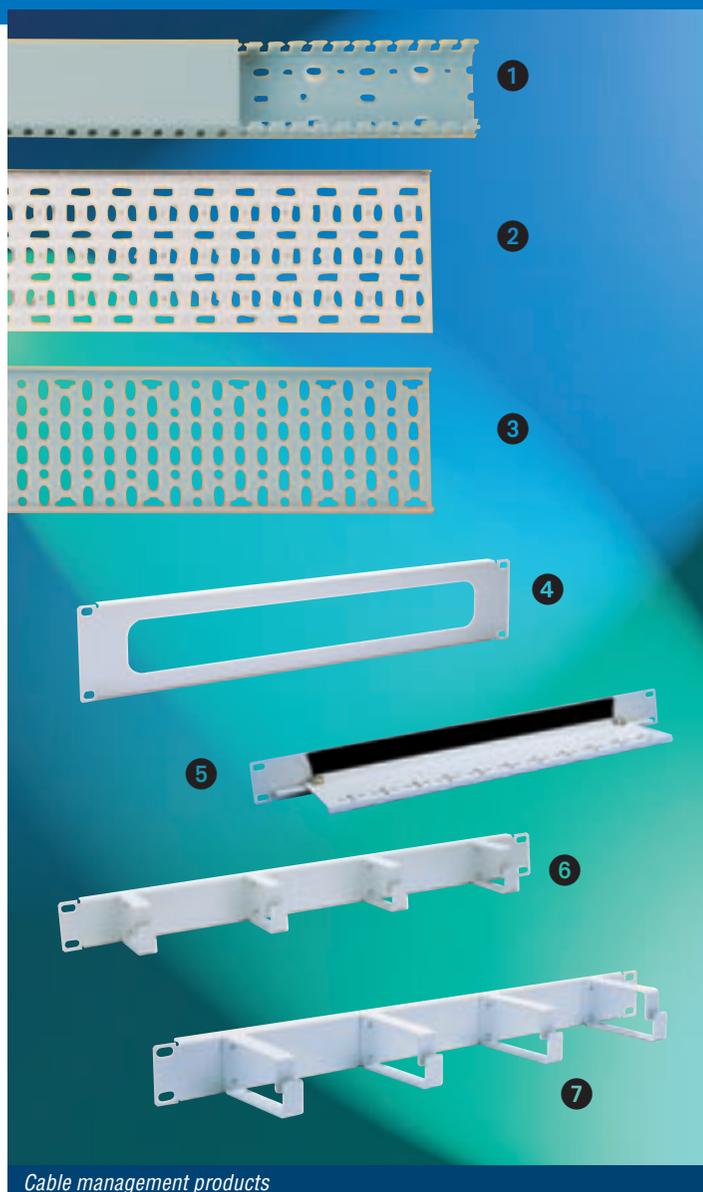
10 CABLE BAR

For 19" mounting and support cable at the rear of panel mounts

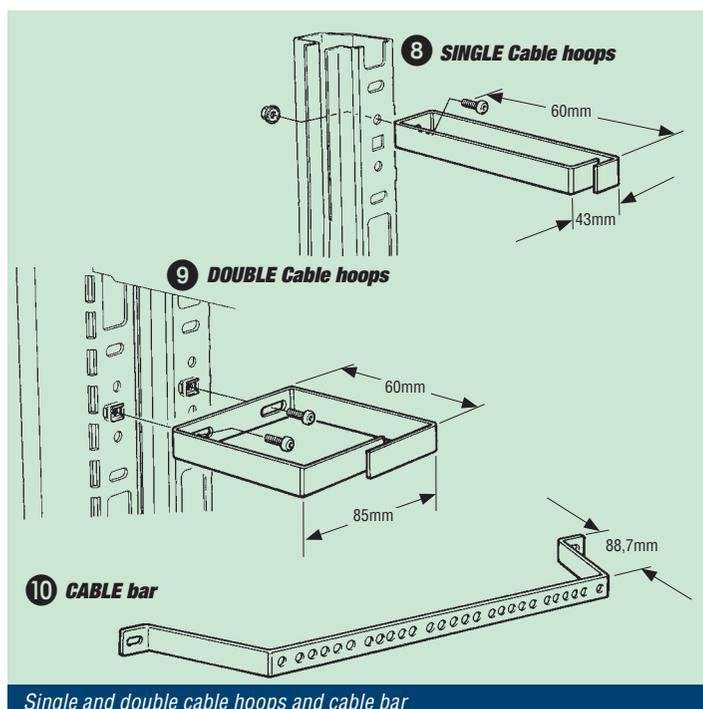
Ordering information

Description	Size	Order code
1 Plastic trunking	2m long (45U)	643-10000F
2 Steel cable trays	1259mm (28U)	802-560871K
2 Steel cable trays	1481mm (33U)	802-560876L
2 Steel cable trays	1703mm (38U)	802-560881G
2 Steel cable trays	1925mm (43U)	802-560886H
3 Plastic cable tray	1500mm (34U)	802-562414F
4 Cable entry panel	2U	960-236702E
5 Brush strip panel	1U	802-563107K
6 Cable management panel	1U	802-563522J
7 Cable management panel, deep hoops	1U	802-563536J
6 Black cable management panel	1U	802-563575K
7 Black cable management panel, deep hoops	1U	802-563576H
6 Cable management panel	2U	802-563523G
6 Black cable management panel	2U	802-563577F
8 Single cable hoops (configured racks only)		802-563545H
8 Single cable hoops (pk. 10)		802-563612H
9 Double cable hoops (configured racks only)		802-563546F
9 Double cable hoops (pk. 10)		802-563613F
10 Cable bar 19"		961-553948B

Note: All panels supplied with fixings. All panels are painted RAL 7035 light grey unless otherwise stated.



Cable management products



Single and double cable hoops and cable bar

IMRAK 1400 – Accessories

ELECTRICAL COMPONENTS

LIGHTS

This magnetically attached light is ideal for use in any environment with steel racks. Using a high output, lower power consumption (11 watts) U-shaped fluorescent tube gives long life. This unit is not supplied with a plug and lead, which should be ordered separately.

Ordering information

Description	Qty	Order code
Light, Schuko version, 230V, 351 x 65 x 62mm	1	802-562179A
Light, UK version, 230V, 351 x 65 x 62mm§	1	802-563580F
1,8m lead, Schuko plug	1	802-562180E
2,0m lead, 13A plug	1	802-561559G

§ Commercial product only lights and leads

EARTH CONTINUITY KIT

Two styles of earth continuity are available. Each contains ten leads to earth all panels and doors, and leaving extra leads to earth parts of the electronic equipment.

Type 1 has ring terminals at both ends to mount directly onto the earth studs on the panels.

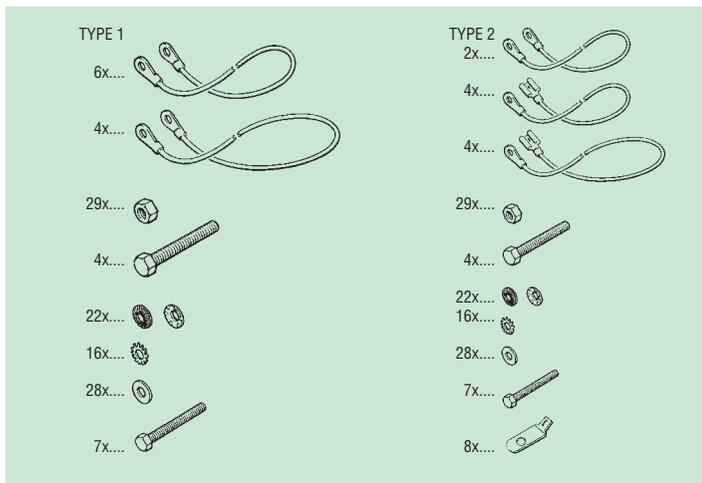
Type 2 has a ring terminal on one end and a spade (faston) at the other. Adaptor rings are provided for bolting on to the earth studs to allow quick removal and assembly.

Ordering information

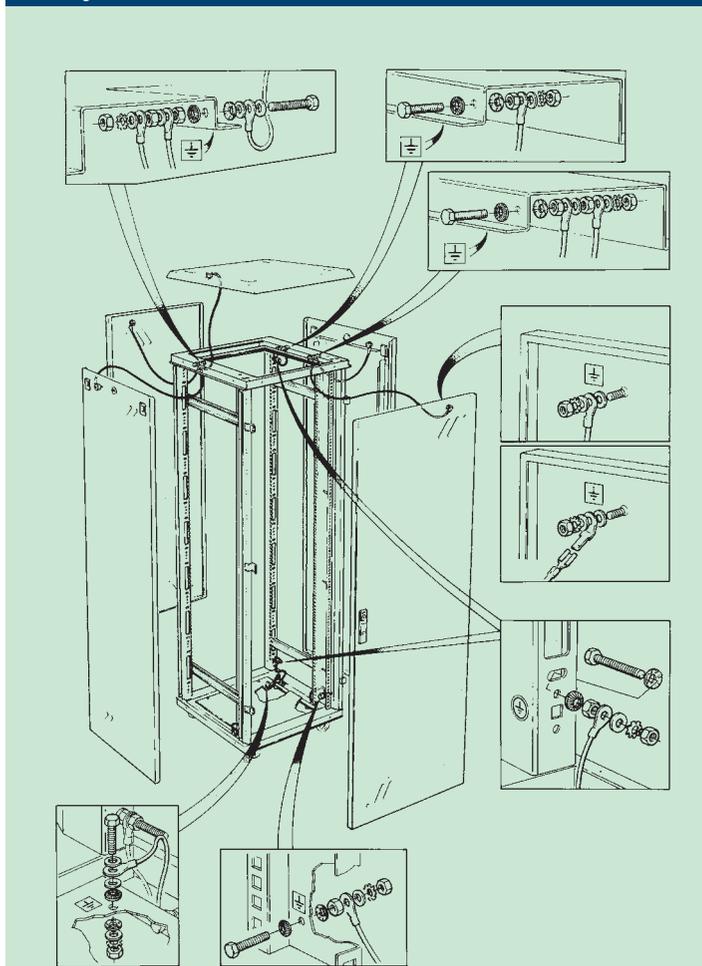
Description	Type	Qty	Order code
Earth continuity kit	Type 1	1	802-560005L
	Type 2	1	802-561563E



Lights and leads



Earthing kits



IMRAK 1400 – Accessories

EARTHING COMPONENTS

EARTHING BARS

These earthing bars offer the option of bonded earth or isolated earth condition by using insulated spacer strips. They have male spade fixing positions at ½U intervals and can be mounted on any flat surface.

Mounting holes allow mounting without further drilling on the inside faces of IMRAK as illustrated.

Made from nickel plated copper, the earth busbars have a rating of 40 Amps and can be cut to length. Main earth is provided by M6 studs at both ends.

Ordering information

Description	Height	Qty	Order code
	13U	1	802-552929A
Earthing bar	27U	1	802-552930E
	39U	1	802-552931C

BUSBAR SYSTEM – EARTHING

This is a copper common earth/neutral busbar which is normally fitted to the rear vertical of the rack.

It is rated at 140 Amps and supported by polyamide insulating blocks which will accept 4mm, 5/32", or 6BA fixing screws. There are three sizes of terminals for conductor sizes 1,5mm to 35mm.

Note: The busbar is simply fitted to the blocks using 'snap-on' clips.

Contents of kit

Description	Qty	Material/Finish
Earthing bar: 10mm x 3mm x 1000mm	1	Copper
Insulated mounting blocks	3	
Large terminal: 16 – 35mm ² conductor	1	
Small terminals: 1,5mm – 4mm ² conductor	10	

Ordering information

Description	Qty	Order code
Busbar kit	1	802-556088A

Accessories

Copper bar: 10mm x 3mm x 1000mm	1	613-10475C
Insulated mounting block	20	613-10476L
Large terminal: 16 – 35mm conductor	20	613-10479B
Small terminal: 1,5 – 4mm conductor	50	613-10477H
Medium terminal: 4 – 14mm conductor	50	613-10473J

ELECTROSTATIC POINT (E.S.P.) AND ELECTROSTATIC WRIST STRAP AND LEAD

The E.S.P. is designed to protect against electrostatic discharge with its consequential damage to electronic equipment. This self-tapping screw stud will be fitted on the midpoint of the front left-hand vertical, unless otherwise stated.

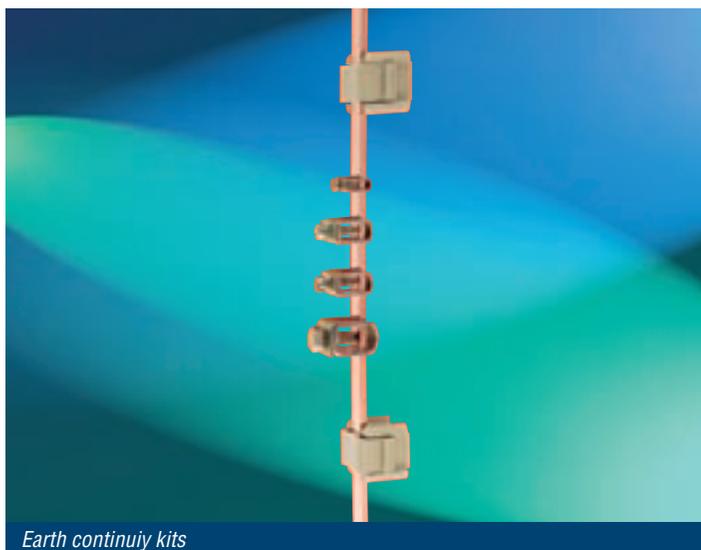
The electrostatic wrist strap and lead are to be used with the E.S.P.

Ordering information

Description	Qty	Order code
Electrostatic point (E.S.P.)	1	802-563039A
Electrostatic wrist strap and lead	1	802-563040E



Earthing bars



Earth continuity kits



Electrostatic point (E.S.P.)