

# Rittal – Data Center Enclosures

Modular and wallmount enclosures, racks and accessories



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES



FRIEDHELM LOH GROUP

# Rittal TS8 Modular and Wallmount Enclosures and Racks

---

Your Data Center Partner

## **Rittal TS8 Modular Enclosures –**

Rittal TS8 modular server and network enclosures provide industry-leading weight load capacities and zero-U mounting to allow more equipment to be installed in smaller footprints—helping data center managers to get the most out of their available space. Durable and scalable, the TS8 is the culmination of Rittal's decades of innovation and leadership in modular enclosure technology.



## **Wallmount Enclosures –**

For small networks or floor distributors, wallmount enclosures from Rittal come in numerous configurations to meet virtually any network equipment need. Available off-the-shelf, completely assembled, wallmount enclosures contain numerous cost-efficient, customer-oriented features like viewing doors, cooling fans and cable collecting rails.



## **Data Racks –**

These torsion-resistant designs serve as mobile or stationary housings for monitors, servers, keyboards, printers and other network components.



# Rittal Enclosures, Racks and Accessories

---

## Enclosure Solutions

<b>Modular TS8 Server Enclosures</b> .....	4
<b>Modular TS8 Network Enclosures</b> .....	6
<b>Modular TS8 LCP Enclosures</b> .....	8
<b>Modular TS8 Co-Location Enclosures</b> .....	9
<b>System Accessories</b>	
Index.....	10
System Accessories.....	11 - 27
<b>Wallmount Enclosures</b>	
EL NEMA 12 3-Part Enclosures .....	28
EL Non-NEMA 3-Part Enclosures.....	29
EL 3-Part Enclosure Accessories.....	30
<b>Data Racks</b> .....	31



## TS8 Server



Designed specifically for the data center, the TS8 is a modern enclosure offering strength and stability for virtually any server environment. While intended for the data center, it is just as well suited as a stand-alone enclosure.

Rittal's patented 16-fold continuously welded frame delivers 30% more dimensional stability, guaranteed to beat the competition on strength alone.

### Attractive and Highly Functional

Rittal's TS8 server enclosure – A modern design that features the utmost in strength for virtually any server environment.

#### Design:

The TS8 server enclosure features modern, attractive aesthetics perfect for a highly functional server application.

#### Applications:

- Universal server enclosures
- Multiple vendor environments
- Storage equipment
- Termination equipment
- Network equipment

#### Environments:

- Data centers
- MDC/IDC
- Wiring closets
- Office environments
- Central offices
- Co-location and application environments

#### Features:

- Contemporary, sleek appearance
- Multiple vendor equipment compatibility
- Full line of accessories
- Family of sizes and styles
- Excellent heat dissipation
- Strong frame structure
- Highly functional and stylish, value packed and competitively priced

### Specifications

#### Frame System – Multi-Fold Frame Design:

- Steel frame – strength and rigidity
- Torsion free structure
- Multiple internal surfaces and points for mounting
- Maximum internal volume for footprint
- External access to all installation points for doors, walls and baying
- Maximum load bearing capacity – 3200 lbs (1451.5 kg)
- Single or split rear doors

#### External Surfaces – Doors and Walls:

- Secure to external surfaces of frame
- Doors can be easily removed or reversed
- Sidewalls can be screwed on, locked in place or hinged to provide side door access
- Internal door hinge and lock points for maximum security
- Door stiffener to stabilize door and provide additional mounting surfaces
- Maximum perforated area meets or exceeds server manufacturer specifications for airflow
- Ground studs on all surfaces
- External surfaces do not affect load bearing capacity – same ratings with or without panels
- Available in RAL 7035 light grey or sand texture black
- Fully perforated front and split-rear door

#### Vertical Mounting Rails:

- Fully depth adjustable and maintain load capacity regardless of where the rails are positioned
- Floating installation system – vertical rails are not secured to frame members or lateral support channels; can be adjusted independently
- “Z” shaped, multi-fold profile – high load bearing capacity and multiple mounting surfaces
- 19" mounting capacity in 24" cabinets, 19" and 23" mounting capacity in 28", 32" cabinets
- U markings on front and rear surfaces of each rail

#### Key Accessories:

- Sidewalls
- Door Mount Server Fan Panel
- Baying Kits
- Toolless Shelves – 19" (482.6 mm) Rackmount
- Casters
- Cable Management Hardware – D Rings, Velcro Straps, Mounting Plates, Manage-IT
- Power Strips – 15, 20, 30 Amp; Vertical or Rackmount
- CMC-TC – Enclosure Monitoring System
- Bolt Down Kits
- Toolless Blanking Panels

#### Full Rear Door, Without Sidewalls

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.
42U	36"	80 x 24 x 36	RAL 7035 light grey	9969.808
		80 x 24 x 36	Sand texture black	9969.809
	40"	80 x 24 x 40	RAL 7035 light grey	9969.810
		80 x 24 x 40	Sand texture black	9969.811
		80 x 28 x 40	RAL 7035 light grey	9969.812
		80 x 28 x 40	Sand texture black	9969.813
	42"	80 x 24 x 42	RAL 7035 light grey	9969.814
		80 x 24 x 42	Sand texture black	9969.815

# Modular Enclosures

## TS8 Server

### Split Rear Doors, Without Sidewalls

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.	
42U	36"	80 x 24 x 36	RAL 7035 light grey	9969.818	
		80 x 24 x 36	Sand texture black	9969.819	
		80 x 28 x 36	RAL 7035 light grey	9969.820	
		80 x 28 x 36	Sand texture black	9969.821	
		80 x 32 x 36	RAL 7035 light grey	9969.822	
		80 x 32 x 36	Sand texture black	9969.823	
	40"	80 x 24 x 40	RAL 7035 light grey	9969.832	
		80 x 24 x 40	Sand texture black	9969.833	
		80 x 28 x 40	RAL 7035 light grey	9969.834	
		80 x 28 x 40	Sand texture black	9969.835	
		80 x 32 x 40	RAL 7035 light grey	9969.836	
		80 x 32 x 40	Sand texture black	9969.837	
	42"	80 x 24 x 42	RAL 7035 light grey	9969.846	
		80 x 24 x 42	Sand texture black	9969.847	
		80 x 28 x 42	RAL 7035 light grey	9969.848	
		80 x 28 x 42	Sand texture black	9969.849	
		80 x 32 x 42	RAL 7035 light grey	9969.850	
		80 x 32 x 42	Sand texture black	9969.851	
	48"	80 x 24 x 48	RAL 7035 light grey	9969.908	
		80 x 24 x 48	Sand texture black	9969.909	
		80 x 32 x 48	RAL 7035 light grey	9969.910	
		80 x 32 x 48	Sand texture black	9969.911	
	47U	36"	88 x 24 x 36	RAL 7035 light grey	9969.824
			88 x 24 x 36	Sand texture black	9969.825
88 x 28 x 36			RAL 7035 light grey	9969.826	
88 x 28 x 36			Sand texture black	9969.827	
88 x 32 x 36			RAL 7035 light grey	9969.828	
88 x 32 x 36			Sand texture black	9969.829	
40"		88 x 24 x 40	RAL 7035 light grey	9969.838	
		88 x 24 x 40	Sand texture black	9969.839	
		88 x 28 x 40	RAL 7035 light grey	9969.840	
		88 x 28 x 40	Sand texture black	9969.841	
		88 x 32 x 40	RAL 7035 light grey	9969.842	
		88 x 32 x 40	Sand texture black	9969.843	
42"		88 x 24 x 42	RAL 7035 light grey	9969.852	
		88 x 24 x 42	Sand texture black	9969.853	
		88 x 28 x 42	RAL 7035 light grey	9969.854	
		88 x 28 x 42	Sand texture black	9969.855	
		88 x 32 x 42	RAL 7035 light grey	9969.856	
		88 x 32 x 42	Sand texture black	9969.857	
48"		88 x 24 x 48	RAL 7035 light grey	9969.912	
		88 x 24 x 48	Sand texture black	9969.913	
		88 x 32 x 48	RAL 7035 light grey	9969.914	
		88 x 32 x 48	Sand texture black	9969.915	

Accessories	Page
Sidewalls	16
Casters	19
Cable Management	11-15
Blanking Panels	17
Shelves	25-27
Baying Kit	23
Bolt Down Kits	18

## TS8 Networking



Networking TS8 Enclosure

### Innovative Design and Enhanced Stability

Rittal's TS8 network enclosure – Ideal for showcase applications, this enclosure features natural ventilation with its perimeter perforated doors.

#### Design:

The TS8 network enclosure features a stylish design in a viewing door concept that is clearly part of the same family as the server enclosure.

#### Applications:

- Networking facilities
- Termination applications
- Hubs, routers, switches or other components
- Other equipment where high heat loads are not generated

#### Environments:

- Data centers
- MDC/IDC
- Wiring closets
- Office environments
- Central offices
- Co-location and application environments

#### Features:

- Contemporary appearance
- Multiple vendor equipment
- Full line of accessories
- Family of sizes and styles
- Good heat dissipation
- Strong frame structure
- Viewing door version of the server enclosure that is value priced

### Specifications

#### Frame System – Multi-Fold Frame Design:

- Steel frame – strength and rigidity
- Torsion free structure
- Multiple internal surfaces and points for mounting
- Maximum internal volume for footprint
- External access to all installation points for doors, walls and baying
- Maximum load bearing capacity – 3200 lbs (1451.5 kg)

#### External Surfaces – Doors and Walls:

- Secure to external surfaces of frame
- Doors can be easily removed or reversed
- Sidewalls can be screwed on, locked in place or hinged to provide side door access
- Internal door hinge and lock points for maximum security
- Door stiffener to stabilize door and provide additional mounting surfaces
- Ground studs on all surfaces
- External surfaces do not affect load bearing capacity – same ratings with or without panels
- Available in RAL 7035 light grey or RAL 9005 black
- Partially vented front view door, fully perforated split-rear door

#### Vertical Mounting Rails:

- Fully depth adjustable maintains load capacity regardless of where the rails are positioned
- Floating installation system – vertical rails are not secured to frame members or lateral support channels; can be adjusted independently
- “Z” shaped, multi-fold profile – high load bearing capacity and multiple mounting surfaces
- 19" mounting capacity in 24" cabinets, 19" or 23" mounting capacity in 32" cabinets
- U markings on inside and outside surfaces of each rail
- Unique rail design allows for up to 32U in the zero "U" space

#### Key Accessories:

- Sidewalls
- Door Mount Server Fan Panel
- Baying Kits
- Toolless Shelves – 19" (482.6 mm) Rackmount
- Casters
- Cable Management Hardware – D Rings, Velcro Straps, Mounting Plates, Manage-IT
- Power Strips – 15, 20, 30 Amp; Vertical or Rackmount
- CMC-TC – Enclosure Monitoring System
- Bolt Down Kits
- Toolless Blanking Panels



NEMA 12 Networking TS8 Enclosure

# Modular Enclosures

## TS8 Networking

### Vented Viewing Door, Vented Split Rear Doors, Without Sidewalls

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches) with viewing door	Color	Part No.
24U	24"	48 x 24 x 24	RAL 7035 light grey	9969.874
		48 x 24 x 24	Sand texture black	9969.875
	32"	48 x 24 x 32	RAL 7035 light grey	9969.858
		48 x 24 x 32	Sand texture black	9969.859
		48 x 32 x 32	RAL 7035 light grey	9969.860
		48 x 32 x 32	Sand texture black	9969.861
42U	32"	80 x 24 x 32	RAL 7035 light grey	9969.862
		80 x 24 x 32	Sand texture black	9969.863
		80 x 32 x 32	RAL 7035 light grey	9969.864
		80 x 32 x 32	Sand texture black	9969.865
47U	32"	88 x 24 x 32	RAL 7035 light grey	9969.866
		88 x 24 x 32	Sand texture black	9969.867
		88 x 32 x 32	RAL 7035 light grey	9969.868
		88 x 32 x 32	Sand texture black	9969.869

Accessories	Page
Sidewalls	16
Casters	19
Cable Management	11-15
Blanking Panels	17
Shelves	25-27
Baying Kit	23
Bolt Down Kits	18

### NEMA 12, Viewing Door, Solid Rear Door, Without Sidewalls

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches) with viewing door	Color	Part No.
24U	24"	48 x 24 x 24	RAL 7035 light grey	9969.876
		48 x 24 x 24	Sand texture black	9969.877
	32"	48 x 24 x 32	RAL 7035 light grey	9969.884
		48 x 24 x 32	Sand texture black	9969.885
		48 x 32 x 32	RAL 7035 light grey	9969.886
		48 x 32 x 32	Sand texture black	9969.887
42U	24"	80 x 24 x 24	RAL 7035 light grey	9969.880
		80 x 24 x 24	Sand texture black	9969.881
	32"	80 x 24 x 32	RAL 7035 light grey	9969.892
		80 x 24 x 32	Sand texture black	9969.893
		80 x 32 x 32	RAL 7035 light grey	9969.894
		80 x 32 x 32	Sand texture black	9969.895
47U	24"	88 x 24 x 24	RAL 7035 light grey	9969.882
		88 x 24 x 24	Sand texture black	9969.883
	32"	88 x 24 x 32	RAL 7035 light grey	9969.896
		88 x 24 x 32	Sand texture black	9969.897
		88 x 32 x 32	RAL 7035 light grey	9969.898
		88 x 32 x 32	Sand texture black	9969.899



# Modular Enclosures

## TS8 LCP Enclosures



### LCP Ready Cabinet

LCP ready cabinet for use with Liquid Cooling Product line. It is configured with air brush baffles to funnel cooled air over mounted components.

- Gland plates
- Solid viewing front door
- Solid rear door
- Solid roof with cable passes and grommets to cover up
- Air brush baffles
- Made out of TS8 frame

#### Design:

The TS8 server enclosure features a stylish design in a viewing door concept that is clearly part of the same family as the server enclosure.

#### Applications:

- Universal server enclosures
- Multiple vendor environments
- Storage equipment
- Termination equipment
- Network equipment

#### Environments:

- Data centers
- MDC/IDC
- Wiring closets
- Office environments
- Central offices
- Co-location and application environments

#### Features:

- Contemporary appearance
- Multiple vendor equipment
- Full line of accessories
- Family of sizes and styles
- Good heat dissipation
- Strong frame structure
- Viewing door version of the server enclosure that is value priced

- Door stiffener to stabilize door and provide additional mounting surfaces
- Ground studs on all surfaces
- External surfaces do not affect load bearing capacity – same ratings with or without panels
- Available in RAL 7035 light grey

#### Vertical Mounting Rails:

- Fully depth adjustable maintains load capacity regardless of where the rails are positioned
- Floating installation system – vertical rails are not secured to frame members or lateral support channels; can be adjusted independently
- “Z” shaped, multi-fold profile – high load bearing capacity and multiple mounting surfaces
- 19" mounting capacity in 24" cabinets, 19" or 23" mounting capacity in 32" cabinets
- U markings on inside and outside surfaces of each rail
- Unique rail design allows for up to 32U in the zero "U" space

#### Key Accessories:

- Sidewalls
- Baying Kits
- Toolless Shelves – 19" (482.6 mm) Rackmount
- Cable Management Hardware – D Rings, Velcro Straps, Mounting Plates, Manage-IT
- Power Strips – 15, 20, 30 Amp; Vertical or Rackmount
- CMC-TC – Enclosure Monitoring System
- Bolt Down Kits
- Toolless Blanking Panels
- Chillers

## Specifications

### Frame System – Multi-Fold Frame Design:

- Steel frame – strength and rigidity
- Torsion free structure
- Multiple internal surfaces and points for mounting
- Maximum internal volume for footprint
- External access to all installation points for doors, walls and baying
- Maximum load bearing capacity – 3200 lbs (1451.5 kg)

### External Surfaces – Doors and Walls:

- Secure to external surfaces of frame
- Doors can be easily removed or reversed
- Sidewalls can be screwed on, locked in place or hinged to provide side door access
- Internal door hinge and lock points for maximum security

### LCP Ready Cabinet

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.
42U	40"	80 x 24 x 40	RAL 7035 light grey	9971.034
		80 x 24 x 40	Sand Textured Black	9962.166
		80 x 32 x 40	RAL 7035 light grey	9971.035
		80 x 32 x 40	Sand Textured Black	9962.167
	48"	80 x 24 x 48	RAL 7035 light grey	9971.036
		80 x 24 x 48	Sand Textured Black	9962.168
		80 x 32 x 48	RAL 7035 light grey	9971.037
		80 x 32 x 48	Sand Textured Black	9962.169



# Modular Enclosures

## TS8 Co-Location



2 Doors



3 Doors



4 Doors

### TS8 Co-Location Enclosures

Intensive physical security requirements are met with durable construction, doors with 2-point latching, internal hinges, locking handles and secure cable management—all standard features on 1,2,3 and 4-door configurations, and all in a 47U H x 32" W x 42" D footprint.

Rittal's colocation enclosures are optimized to meet the modern power and cooling requirements of higher density installations featuring fully perforated (64% perforation) doors to allow maximum airflow and secure cable management made to accommodate the bigger plugs associated with today's larger loads. They are designed with a premium blend of aesthetically pleasing style and enhanced performance—a combination that delivers more quality and value for the money than competitor offerings and makes them ideal both as showpieces and as highly functional solutions for any colocation environment.

#### Doors:

- 64% perforated for maximum airflow
- Two point latch on each compartment for optimum security
- TS8 comfort handle with lock insert
- Optional individually keyed compartments available
- Can convert a multi-door cabinet into a single door cabinet when requirements change
- Can be either right hand or left hand hinged.
- Internal hinges for optimum security

#### EIA Rails:

- Two per compartment
- Printed U markings on both the front and rear rails simplifies equipment installation
- Each compartment has independently/infinately depth adjustable rails
- Rapid adjust rails available
- Security divider shelves between each compartment prevents unauthorized access to other compartments

Weight capacity of 3,200 lb, greatest in industry

#### Key Accessories:

- Secure cable management troughs – provides a secure cable to each compartment
  - Compartmentalized to separate power and communication cables
  - Toolless installation
  - Large cable capacity
  - Can be installed after cables have been run
  - Allows for either overhead or bottom cable entry
- Coded lock handles
- Rapid adjust rail kits
- Partition walls
- Sidewalls
- Blanking panels
- Door fans
- Button mount pdu brackets
- Power distribution units

Accessories	Page
Sidewalls	16
Casters	19
Cable Management	11-15
Blanking Panels	17
Shelves	25-27
Baying Kit	23
Bolt Down Kits	18

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches) w/o sidewalls	Door(s)	Compartments	Part No.
47U	42"	87 x 24 x 42	1	1 – 47U	9969.853
		87 x 32 x 42	2	2 – 21U each	9963.770
		87 x 32 x 42	3	3 – 14U each	9963.771
		87 x 32 x 42	4	4 – 10U each	9963.772

Accessories	Part No.
Cable security kit for 2-door colocation enclosure	9962.840
Cable security kit for 3-door colocation enclosure	9962.841
Cable security kit for 4-door colocation enclosure	9962.842
Quick-adjust EIA rail kit 2-door colocation enclosure	9962.843
Quick-adjust EIA rail kit 3-door colocation enclosure	9962.844
Quick-adjust EIA rail kit 4-door colocation enclosure	9962.845
Combination lock handle <sup>1)</sup>	9963.601
Security lock insert <sup>1)</sup>	2467.000
Pushbutton lock insert <sup>1)</sup>	2469.000

<sup>1)</sup> Handles and lock inserts sold separately

# Modular Enclosures

## System Accessories

With your applications in mind, Rittal provides a wealth of system accessories for infinite possibilities. We address your requirements with superior expertise.

Take a closer look.

This is your opportunity to become faster and to offer a better solution.

### Get Connected!



### Cable Management

Manage-IT	11-12
Overhead Cable Management	13
Cable Ties	13
Nylon Loop Fasteners	13
Cable Guide Rings	13
Cable Routing Across 19" (482.6 mm) Mounting Level	14
19" (482.6 mm) Cable Troughs	14
19" (482.6 mm) Cable Entry Panels	14
Cable Entry Panels with Brush Insert	14
Cable Management Rail	15

### System Lights

Enclosure Lights	15
Door Operating Switch	15

### Roof/Base/Sidewall Configuration

Stabilizers for Server Enclosures	16
Sidewalls	16
Partition Wall	17
Toolless Blanking Panels	17
Air Brush Baffles	18
Side Breathing Air Baffle System	18
Bolt Down Kits	18
Twin Casters	19
Base/Plinth Adaptor	19
Caster Kit	19
Leveling Feet	19

### Interior Installation

Heavy Duty Support Rails	20
Combination Cable Collecting Rails	20
TS System Chassis with Mounting Flange	20
TS System Chassis with Mounting Flange, Depth-Variable	21
Adapter Rail for PS Compatibility	21
PS Punched Rails	21
Mounting Bracket PS	21
U Nuts	22
Mounting Kit	22
Mounting Plates, Brackets	22-23

### Baying Components

Baying Connectors, External	23
Baying Bracket	23

### Grounding

Complete Grounding Kits	24
Assembly Screws	24
Torx Screws, Self-Tapping Screws, Drilling Screws	24
Captive Nuts	24

### Shelves

Toolless Shelves	25
Heavy-Duty Toolless Shelves	25
Component Shelves, 1/2U, Depth-Variable	25
Component Shelves, 2U Static Installation	25
Component Shelf, 2U Static Installation or Fully Extendable	26
Component Shelves, 19" (482.6 mm) Configuration	26
Telescopic Slides for Component Shelves	26
Handle for Component Shelves	27
Hinged Cable Carriers	27
Keyboard Drawer	27

# Modular Enclosures

## System Accessories Cable Management

### Manage-IT

#### Cable Management System for Rittal TS8 Enclosures

Networking enclosures house more equipment now than ever before. The ever-increasing demand for reliable and efficient data transmission requires the highest level of uninterrupted system performance possible. Poor cable management may lead to damaged cables, performance degradation and costly downtime.

Proper cable management ensures optimum data transmission, cost savings, and cable protection. Rittal's Manage-IT cable manager is a simple, flexible and cost-effective way to organize your cables and patch cords.

- Integral cable retention keeps cable bundles in place
- Accommodates a variety of toolless cable management accessories to further separate, organize and protect cables
- Toolless cable managers mount anywhere within the vertical trough or enclosure frame for unsurpassed cable management options

#### Product Features:

- Bend Radii compliant per ANSI/TIA/EIA, round edges prevent performance degradation and damaged cables
- Front and rear cable management capabilities allow separation of distribution cables and patch cords
- Easy assembly reduces installation time
- Modular 9U sections allow for custom configurations
- 1U cable guides align to enclosures RU spacing for ease of installation and maintenance
- Cover and retainers hinge left or right and can be removed for easy access
- Pass through ports for front/rear cable routing

#### Configuration:

- 19" x 2U and 1U horizontal enclosure mount manager with pivoting/removable cover
- 9U x 6" deep vertical manager kit. Available in three widths (3.5, 7.5 and 10"). Includes cable retainers
- Large pathways for greater capacity and flexibility when managing high-density patch cables
- Manager fingers align with RMU spacing of enclosures EIA rail
- Bend radius on all cable pathways provides added support for copper and fiber data cables
- Accommodates a variety of cable manager accessories for additional options and ultimate flexibility



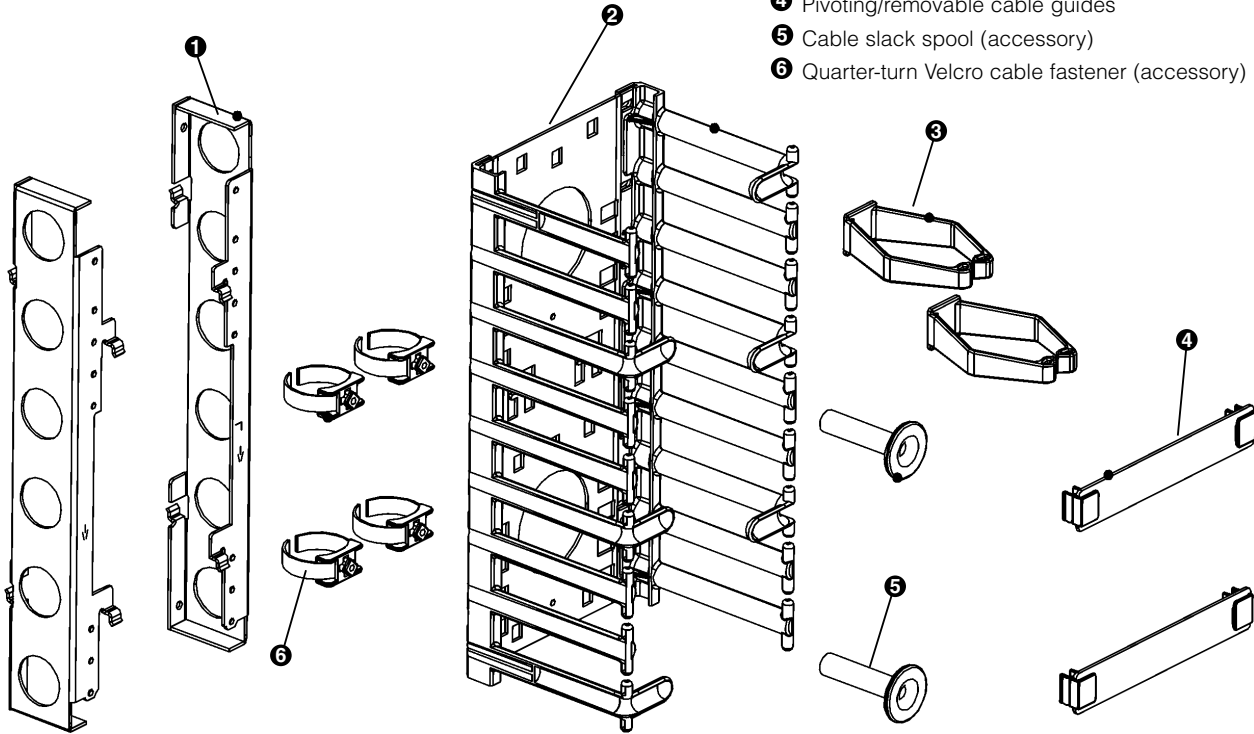
# Modular Enclosures

## System Accessories Cable Management

### Manage-IT

#### Configuration:

- ❶ Mounting bracket securely latches onto vertical EIA rail
- ❷ Baseplate
- ❸ Quarter-turn cable collection claw (accessory)
- ❹ Pivoting/removable cable guides
- ❺ Cable slack spool (accessory)
- ❻ Quarter-turn Velcro cable fastener (accessory)



Description	Part No.
3.5" Wide x 9U Vertical Manager Kit for 23.62" (600 mm) Suited Enclosures and 27.56-31.50" (700-800 mm) Stand Alone Enclosures	9969.593
3.5" Wide x 9U Manager Cover	9969.594
7.5" Wide x 9U Vertical Manager Kit for 27.56" (700 mm) Wide Suited Enclosures	9969.595
7.5" Wide x 9U Manager Cover	9969.596
7.5" Wide x 18U Manager Cover	9963.600
10" Wide x 9U Vertical Manager Kit for 31.50" (800 mm) Wide Suited Enclosures	9969.598
2U Enclosure Mount Manager with Hingeable/Removable Cover	9969.597
Quarter-turn Velcro Cable Fastener (Accessory)	9969.599
Quarter-turn Cable Collection Claw (Accessory)	9969.600
Quarter-turn Large D-Ring (Accessory)	9961.780
Quarter-turn Small D-Ring (Accessory)	9961.779
Cable Slack Spool with M5.5 Mounting Screw (Accessory)	9969.601
Cable Trough, Front to Back	9969.929
Quarter-turn Cable Manager for 23.62" (600 mm) Suited Enclosures*	9969.928
Quarter-turn Cable Manager for 23.62" (600 mm) Stand Alone Cabinets*	9969.927

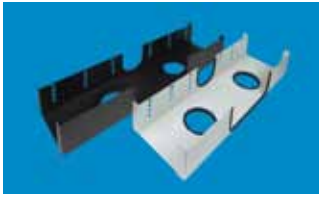
#### Manage-IT Cable Capacity

Description	Cable Diameter (sq. in.)							Part No.
	0.15	0.17	0.19	0.21	0.23	0.25	0.27	
15.75" (400 mm) x 3.5" (89 mm) Vertical Cable Manager	466	363	290	238	198	168	144	9969.593
15.75" (400 mm) x 7.5" (190 mm) Vertical Cable Manager	1166	908	727	595	496	420	360	9969.595
15.75" (400 mm) x 10" (254 mm) Vertical Cable Manager	1166	908	727	595	496	420	360	9969.598
Horizontal 2U Rackmount Manager with Cover	260	202	162	132	110	93	80	9969.597
Horizontal 1U Rackmount Manager with Cover	127	98	79	64	54	45	39	9969.736



# Modular Enclosures

## System Accessories Cable Management



### Overhead Cable Management

Provides cable management outside the cabinet easy. Fastens to existing roof tool-lessly through use of 2 snap rings and pre-existing cable passes on cabinet roof.

Sizes available to fit all size cabinets.

Square hole pattern allows use of cable management claws and rings.

Different varieties are available: 600 Wide, 700 Wide, 800 Wide, LCP Wide, RAL 7035, Sand Textured Black, Ladder rack capable, end plates.

Width in (mm)	Description	Color	Part No.
23.62 (600)	Roofmount Cable Manager	RAL 7035 light grey	<b>9970.253</b>
23.62 (600)	Roofmount Cable Manager	Sand texture black	<b>9970.254</b>
27.56 (700)	Roofmount Cable Manager	RAL 7035 light grey	<b>9970.255</b>
27.56 (700)	Roofmount Cable Manager	Sand texture black	<b>9970.256</b>
31.50 (800)	Roofmount Cable Manager	RAL 7035 light grey	<b>9970.257</b>
31.50 (800)	Roofmount Cable Manager	Sand texture black	<b>9970.258</b>
23.62 (600)	Roofmount Ladder Rack	RAL 7035 light grey	<b>9970.263</b>
23.62 (600)	Roofmount Ladder Rack	Sand texture black	<b>9970.264</b>
27.56 (700)	Roofmount Ladder Rack	RAL 7035 light grey	<b>9970.265</b>
27.56 (700)	Roofmount Ladder Rack	Sand texture black	<b>9970.266</b>
31.50 (800)	Roofmount Ladder Rack	RAL 7035 light grey	<b>9970.267</b>
31.50 (800)	Roofmount Ladder Rack	Sand texture black	<b>9970.268</b>

Roofmount Manager End Covers	RAL 7035 light grey	<b>9970.259</b>
Roofmount Manager End Covers	Sand texture black	<b>9970.260</b>
Roofmount Manager LCP Kit	RAL 7035 light grey	<b>9970.261</b>
Roofmount Manager LCP Kit	Sand texture black	<b>9970.262</b>
Roofmount Manager Ladder Rack	RAL 7035 light grey	<b>9970.269</b>
Roofmount Manager Ladder Rack	Sand texture black	<b>9970.270</b>
12" W X 10" L Ladder Rack	Sand texture black	<b>9970.271</b>



### Cable Ties

Cable ties, for quick assembly.

The super-fast solution for attaching cables to the enclosure profile or to the rear of the 19" (482.6 mm) mounting frame. Simply clip into the round system punchings.

Length inches (mm)	Packs of	Part No.
5.90 (150)	100	<b>2597.000</b>



### Nylon Loop Fasteners

With the nylon loop fastener, secured sections of cable are easily released, allowing individual cables to be added or removed. Ideal for sensitive data cables (fiber-optic/Cu), as it avoids indentations on the cable sheathing. In addition, the nylon loop fastener may be screw-fastened to the round system punchings.

#### Color:

Black

Width inches (mm)	Length inches (mm)	Max. cable diameter inches (mm)	Packs of	Part No.
0.63 (16)	5.11 (130)	1.18 (30)	10	<b>7072.220</b>
0.63 (16)	7.87 (200)	1.96 (50)	10	<b>7072.230</b>
0.63 (16)	11.81 (300)	3.54 (90)	10	<b>7072.240</b>

#### Also Required:

Screw 2486.500 for screw-fastening to the round system punchings



### Cable Guide Rings

For flexible, system-compatible cable routing at the side of the 19" (482.6 mm) mounting frame.

#### Material:

Sheet steel, zinc-plated, passivated

#### Includes:

10 cable guide rings, assembly parts

German Patent no. 3813002

Dimensions inches (mm)	Packs of	Part No.
4.72 x 3.14 (120 x 80)	10	<b>7111.900</b>
4.72 x 2.36 (120 x 60)	10	<b>7111.000</b>
3.14 x 1.45 (80 x 37)	10	<b>7112.000</b>

# Modular Enclosures

## System Accessories Cable Management



### Cable Routing Across the 19" (482.6 mm) Mounting Level

Different cable collecting rails available to provide orderly cable management in 19" systems:

**C-Rails** can be installed between all 19" mounting surfaces.

**Cable Clamp Rails** to which cables are fastened with cable ties, and can be installed between all 19" mounting surfaces.

#### Cable Clamp Straps for TS Mounting Angles

Cables are fastened with cable ties and have hooks on side that hang in 19" rails.

C-rails	Depth	Part No.
19" mounting surface	-	<b>7016.100</b>
Cable clamp rails	Depth	Part No.
19" mounting surface	-	<b>7016.110</b>
Cable clamp strap	Depth	Part No.
TS mounting angles	4" (100 mm)	<b>7016.130</b>



### 19" (482.6 mm) Cable Troughs

For cable collection

**Depth:**  
3.37" (85 mm)

**Material:**  
Sheet steel

**Color:**  
RAL 7035 light grey

U	Part No.
1	<b>7149.135</b>
3	<b>7149.035</b>



### 19" (482.6 mm) Cable Entry Panels

Available in 2U (with a 15.35 x 1.58" [390 x 40 mm] opening) or 1U (with a 15.35 x 0.79" [390 x 20 mm] opening). Has edge protector and brush insert to protect against dust.

**Material:**  
Sheet steel

**Color:**  
RAL 7035 light grey

U	Part No.
1	<b>7140.535</b>
2	<b>7150.535</b>



### Cable Entry Panel with Brush Insert

Multi-folded and welded, with foamed-on gasket and plastic brush insert for easy cable entry.

#### Cable Entry Panel with Brush Insert

Color	Part No.
RAL 7035 light grey	<b>7705.035</b>

# Modular Enclosures

## System Accessories Cable Management/System Lights



### Cable Management Rail

Provides spacious possibilities for cable ties, Velcro strips and cable rings.

Easy installation – simply secure with screws to system chassis or enclosure frame.

**Material:**  
Sheet steel

Packs of	Part No.
2	<b>9968.219</b>

**Color:**  
Black

**Size:**  
70.47 x 1.97" (1790 x 50 mm)



### Enclosure Lights

Rittal's new fluorescent lights are designed for quick and easy installation. The external terminal block means no need to disassemble the light to make electrical connections. Available in 15 or 18 watt rating, they can be used with or without the Rittal door switch (see below). Equipped with interference suppression capacitor or a RFI filter, they also come with or without a lamp shade or 115 V U.S. style receptacle.

**Rating:**  
120 V, 60 Hz

**Light Medium:**  
Cool white

Description	Installation length inches (mm)	Technical data (120 V 60 Hz)	Part No.
With interference suppression capacitor and no receptacle	18.39 (467)	15 W	<b>9968.108</b>
	24.41 (620)	18 W	<b>9968.109</b>
With RFI filter, and no receptacle U.S. receptacle and lamp shade	18.39 (467)	15 W	<b>9968.111</b>
	24.41 (620)	18 W	<b>9968.112</b>

**Includes:**  
Installation hardware

**Connection Terminals:**  
L1, N, GND  
On/off rocker switch  
UL recognized for Canadian and U.S. requirements



### Door Operating Switch

Switches the enclosure light on when the door is opened, and switches the air conditioner off to prevent condensation.

	PU	Part No.
Door operating switch without power cord	1	<b>4127.000</b>



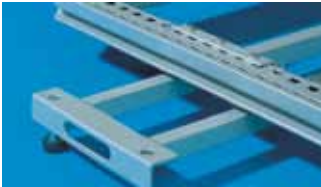
# Modular Enclosures

## System Accessories Roof/Base/Sidewall Configuration



### Stabilizers for Server Enclosures

The pullout stabilizer is quickly and easily retrofitted to the base frame of a TS8 server enclosure and only extended when necessary. It may be used in combination with leveling feet and/or casters. The stabilizer cannot be used with gland plates or base/plinths.



#### Load Capacity:

Up to a maximum of 330 lbs (150 kg) static load

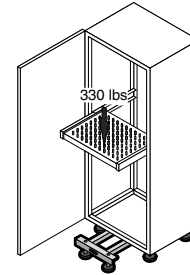
#### Material:

Sheet steel, zinc-plated, passivated

#### Includes:

1 stabilizer including assembly parts

Enclosure depth	Part No.
36" (900 mm)	<b>7825.200</b>
40" (1000 mm)	<b>7825.250</b>
48" (1200 mm)	<b>7825.260</b>



### Sidewalls

#### Material:

Sheet steel, electrophoretic dipcoat-primed, powder-coated

#### Color:

RAL 7035 light grey, Sand texture black

#### Includes:

2 side panels

#### Protection Category:

IP 55

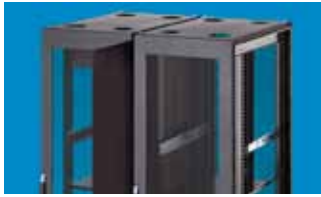
To complete individual or bayed enclosures at the sides.

#### Sidewalls

H x D inches (mm)	Color	Part No.
48 x 24 (1200 x 600)	RAL 7035 light grey	<b>8170.235</b>
48 x 24 (1200 x 600)	Sand texture black	<b>9969.948</b>
48 x 32 (1200 x 800)	RAL 7035 light grey	<b>8175.235</b>
48 x 32 (1200 x 800)	Sand texture black	<b>9969.949</b>
80 x 24 (2000 x 600)	RAL 7035 light grey	<b>8106.235</b>
80 x 24 (2000 x 600)	Sand texture black	<b>9969.920</b>
80 x 32 (2000 x 800)	RAL 7035 light grey	<b>8108.235</b>
80 x 32 (2000 x 800)	Sand texture black	<b>9969.916</b>
80 x 36 (2000 x 900)	RAL 7035 light grey	<b>8109.235</b>
80 x 36 (2000 x 900)	Sand texture black	<b>9968.597</b>
80 x 40 (2000 x 1000)	RAL 7035 light grey	<b>8100.235</b>
80 x 40 (2000 x 1000)	Sand texture black	<b>9968.596</b>
80 x 42 (2000 x 1050)	RAL 7035 light grey	<b>9969.309</b>
80 x 42 (2000 x 1050)	Sand texture black	<b>9969.351</b>
80 x 48 (2000 x 1200)	RAL 7035 light grey	<b>9969.955</b>
80 x 48 (2000 x 1200)	Sand texture black	<b>9969.956</b>
88 x 24 (2200 x 600)	RAL 7035 light grey	<b>8126.235</b>
88 x 24 (2200 x 600)	Sand texture black	<b>9969.917</b>
88 x 32 (2200 x 800)	RAL 7035 light grey	<b>8128.235</b>
88 x 32 (2200 x 800)	Sand texture black	<b>9969.352</b>
88 x 36 (2200 x 900)	RAL 7035 light grey	<b>9969.311</b>
88 x 36 (2200 x 900)	Sand texture black	<b>9968.595</b>
88 x 40 (2200 x 1000)	RAL 7035 light grey	<b>9968.593</b>
88 x 40 (2200 x 1000)	Sand texture black	<b>9968.594</b>
88 x 42 (2200 x 1050)	RAL 7035 light grey	<b>9969.312</b>
88 x 42 (2200 x 1050)	Sand texture black	<b>9969.355</b>
88 x 48 (2200 x 1200)	RAL 7035 light grey	<b>9969.957</b>
88 x 48 (2200 x 1200)	Sand texture black	<b>9969.958</b>

# Modular Enclosures

## System Accessories Roof/Base/Sidewall Configuration



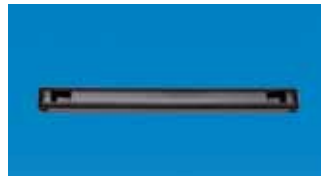
### Partition Wall

For side partitioning of bayed TS server enclosures. Installs without the need for additional hardware or tools. Has 4 4.41 in (112 mm) cable passthrough holes, grommet covers included.

**Color:**  
Sand Textured black

**Note:**  
Use baying connector TS 8800.490. Not for use in conjunction with a baying seal. Any existing seals must be removed prior to installation.

Height in (mm)	Depth in (mm)	Part No.
80 (2000)	36 (900)	<b>9971.041</b>
80 (2000)	40 (1000)	<b>9971.042</b>
80 (2000)	42 (1050)	<b>9971.043</b>
80 (2000)	48 (1200)	<b>9971.044</b>
88 (2200)	36 (900)	<b>9971.045</b>
88 (2200)	40 (1000)	<b>9971.046</b>
88 (2200)	42 (1050)	<b>9971.047</b>
88 (2200)	48 (1200)	<b>9971.048</b>



### Toolless Blanking Panels

To place in unused or vacant space, to block off airflow. Installs without the need for additional hardware or tools.

U	Packs of	Color	Part No.
1	12	Sand texture black (plastic)	<b>9960.676</b>
1	10	Sand texture black (steel)	<b>9970.016</b>
3	5	Sand texture black (steel)	<b>9970.017</b>
1	10	RAL 7035 light grey (steel)	<b>9970.240</b>
3	5	RAL 7035 light grey (steel)	<b>9970.241</b>



# Modular Enclosures

## System Accessories Roof/Base/Sidewall Configuration



### Air Brush Baffles

Designed to block air and redirect it where needed. Designed to mount to the z-rail on the top, bottom, and both sides.

- Easy installation
- Available for 80" and 88" server cabinets
- Standard in LCP ready cabinet

Height x Width	Part No.
80 (2000) x 24 (600)	<b>9961.328</b>
80 (2000) x 28 (700)	<b>9961.329</b>
80 (2000) x 32 (800)	<b>9961.330</b>
88 (2200) x 24 (600)	<b>9961.331</b>
88 (2200) x 28 (700)	<b>9961.332</b>
88 (2200) x 32 (800)	<b>9961.333</b>



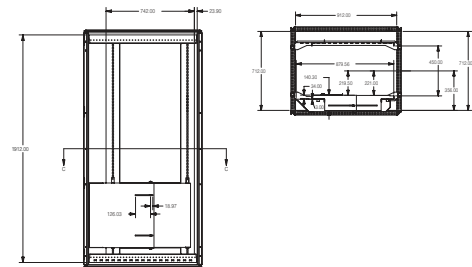
Brush ring 4.41" (112 mm)	<b>9961.334</b>
Snap ring grommet	<b>9961.326</b>



### Side Breathing Air Baffle System

- It is designed to redirect hot exhaust from side breathing equipment out the back of the cabinet
- Designed for hot aisle/cold aisle installations
- Toolless Installation
- Depth adjustable
- Designed for up to 12U side breathing equipment
- Mounts in 0U space
- Designed for use with 32" (800 mm) wide cabinets

Packs of	Part No.
1	<b>9960.552</b>



### Bolt Down Kits

For anchoring the enclosure even if it is on casters, at any position of the base frame. Has a vertical slot to account for different vertical positions.

**Material:**  
Sheet steel, E-coated

PU	Part No.
4	<b>9970.989</b>

**Note:**  
Additional holes in the base are required for mounting



For use in addition to clamping straps for stabilization when populated enclosures are screw-fastened through the base tray to the base/plinth or pallet for transportation purposes.

**Material:**  
Sheet steel, zinc-plated, passivated

PU	Part No.
4	<b>8800.830</b>

**Configuration:**  
Assembly hardware

# Modular Enclosures

## System Accessories Roof/Base/Sidewall Configuration



### Twin Casters

For TS8 Data Rack

**Mounting Thread:**  
M12 x 20

**Supply Includes:**

1 set = 4 transport casters, assembly parts

**Also Required:**

For mounting on the TS base/plinth:  
Base/plinth adaptor for twin caster 8800.290,  
(see below).



	Maximum Load Capacity per Caster (lbs)	Ground Clearance inches (mm)	Lock	Packs of	Color	Part No.
①	88	1.95 (50)	4 w/out	1 set	black	4611.000
②	165	3.35 (85)	2 with 2 w/out	1 set	black w/ grey surface	6148.000
③	264	4.92 (125)	2 with 2 w/out	1 set	black	7495.000



### Base/plinth adaptor

For TS8 Data Rack  
Connection component for mounting twin castors to the TS base/plinth.

**Material:**

Sheet steel, zinc-plated, passivated

Packs of	Part No.
4	8800.290



### Caster Kit

Castors help simple movement on even floors. Easy to install. Kit includes hardware, left and right rigid casters and two swivel casters.

**Load Capacity:**  
825 lbs (374 kg) each

Kit includes	Part No.
4 casters /1 wrench	9968.751



### Leveling Feet

Compensate for uneven floors and can be mounted on enclosure or on base.

**Length of Thread:**  
2" (51 mm)

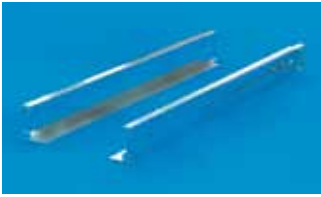
**Load Capacity:**  
800 lbs (363 kg) each

For	Packs of	Part No.
TS	4	9961.504

**Type of Thread:**  
M12

# Modular Enclosures

## System Accessories Interior Installation

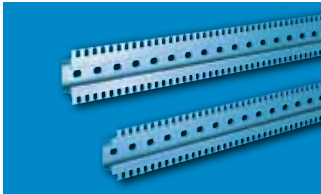


### Heavy-Duty Support Rails (Telescopic Slides)

These telescopic support rails are designed to support components from underneath, and can support up to 200 lbs (91 kg). Rails extend from 22.07" (560.5 mm), totally retracted, to 30" (762 mm), totally extended.

Packs of	Part No.
2	<b>9963.499</b>

**Includes:**  
2 support rails



### Combination Cable Collecting Rails

These rails make it possible to fasten cables with cable clamps or cable ties and allow bonding between the cable shield and ground bus.

**Material:**  
Aluminum, zinc-coated, chromated

**Includes:**  
Combination rail, installation hardware

For enclosure width	Length	Packs of	Part No.
23.60" (600 mm)	15.70" (400 mm)	2	<b>7502.304</b>



### TS System Chassis with Mounting Flange 0.66 x 2.87" (17 x 73 mm)

For designing a flexible interior installation, or for accommodating additional components. The punched sections with mounting flanges may be attached directly onto a 19" (482.6 mm) mounting frame horizontally at the rear or in the enclosure depth between two mounting frames. An additional screw fastening secures the unit.

Variable, with 5 rows of holes for universal skeleton structure or partial assembly.

**Material:**  
Sheet steel, zinc-plated, passivated

**Includes:**  
Assembly parts  
German Patent no. 196 47 802



**Note:**  
When selecting a distance between levels outside of the mounting attachment points, it is advisable to use the depth-variable punched section with mounting flange, see below.

#### For inner mounting level

Enclosure width/depth inches (mm)	Packs of	Part No.
24 (600)	4	<b>8612.060</b>
32 (800)	4	<b>8612.080</b>
36 (900)	4	<b>8612.090</b>
40 (1000)	4	<b>8612.000</b>
48 (1200)	4	<b>8612.020</b>

#### For outer mounting level<sup>1</sup>

Enclosure width/depth inches (mm)	Packs of	Part No.
24 (600)	4	<b>8612.160</b>
32 (800)	4	<b>8612.180</b>
40 (1000)	4	<b>8612.100</b>
48 (1200)	4	<b>8612.120</b>

NOTE:  
1) In conjunction with plug-in side panels, notched punched sections are required

# Modular Enclosures

## System Accessories Interior Installation



### TS System Chassis with Mounting Flange 0.66 x 2.87" (17 x 73 mm)

#### Depth-Variable for Mounting Frames

For designing flexible interior installation, and/or to accommodate additional built-in components. The punched sections with mounting flanges may be located in the enclosure depth between two mounting frames. An additional screw fastening secures the unit.

The depth variability of the rails allows for flexible adaptation of their length to the existing attachment distance between the two 19" (482.6 mm) mounting frames. An additional punched section center piece may be slid flexibly along the rail in the depth and secured to slots. This facilitates flexible attachment at any point between the mounting frames in the enclosure depth.

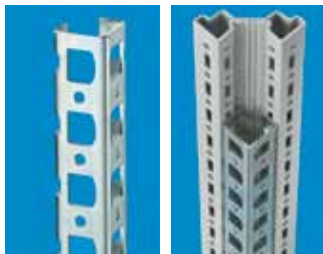
19" (482.6 mm) distance between levels inches (mm)	Packs of	Part No.
16.54 – 23.23 (420 – 590)	2	<b>7000.676</b>
25.59 – 32.28 (650 – 820)	2	<b>7000.678</b>

#### Material:

Sheet steel, zinc-plated, passivated

#### Supply Includes:

2 variable punched sections with mounting flanges, including one movable center part in each case, including assembly parts



### Adapter Rail

#### for PS compatibility

Installation in the vertical TS enclosure sections (across the entire enclosure height or in subsections) to create compatibility with:

- PS punched rail, 0.91 x 0.91" (23 x 23 mm)
- PS punched section without mounting flange, 0.91 x 2.87" (23 x 73 mm)
- PS punched section with mounting flange, 0.91 x 0.91" (23 x 23 mm)

For enclosure height	Packs of	Part No.
72" (1800 mm)	4	<b>8800.380</b>
80" (2000 mm)	4	<b>8800.300</b>
88" (2200 mm)	4	<b>8800.320</b>

#### Material:

Sheet steel, zinc-plated, passivated

#### Supply Includes:

Assembly screws



### PS Punched Rails 0.91 x 0.91" (23 x 23 mm)

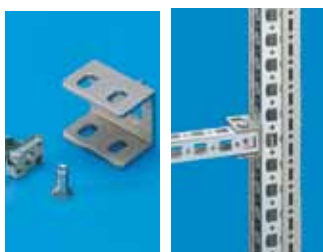
#### Installation Options:

- On the vertical enclosure section
  - Directly via support brackets TS
  - Via adapter rail for PS compatibility in conjunction with angle brackets, mounting brackets or support brackets PS
- On the horizontal enclosure section
  - Directly via angle brackets, mounting brackets or support brackets PS

Length in (mm)	For WHD in (mm)	Packs of	Part No.
74.61 (1895)	78.74 (2000)	6	<b>4177.000</b>
81.52 (2095)	85.60 (2200)	6	<b>4178.000</b>

#### Material:

Sheet steel, zinc-plated, passivated



### Mounting Bracket PS

For variable attachment of punched rails 0.91 x 0.91" (23 x 23 mm).

#### Installation Options:

- Optionally flush with:
  - Outer enclosure edge or
  - Enclosure clearance width
- On the vertical TS enclosure section via
  - Adapter rail for PS compatibility
- On the horizontal TS enclosure section
- On enclosures and rails with square system punchings 0.49 x 0.41" (12.5 x 10.5 mm).

Packs of	Part No.
24 sets	<b>4182.000</b>

#### Material:

Die-cast zinc

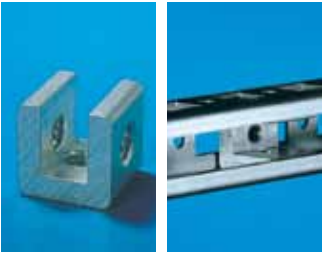
#### Supply Includes:

1 set = 1 mounting bracket, 1 screw M6 x 0.47" (12 mm), 1 cage nut M6.



# Modular Enclosures

## System Accessories Interior Installation



### U Nuts

for:

- Punched rail 0.91 x 0.91" (23 x 23 mm)
- Punched section without mounting flange, 0.91 x 2.87" (23 x 73 mm)
- Punched section without mounting flange, 1.77 x 3.46" (45 x 88 mm)
- Punched section with mounting flange, 0.91 x 2.87" (23 x 73 mm)

For mounting punched rails and punched sections without mounting flanges on angle brackets, mounting brackets and support brackets, we recommend U nuts with M6 thread (4179.000).

Thread	Packs of	Part No.
M4	20	4119.000
M5	20	4157.000
M6	20	4179.000
M8	20	4180.000



### Mounting Kit

For 19" (482.6 mm) equipment

Facilitates fast, simple integration of additional mounting space within an enclosure by attaching to the enclosure frame or to the existing mounting angles at the sides. The flexible slot fastening of the brackets means that the distance between the two installation brackets may be freely selected, so that other 19" (482.6 mm) attachment dimensions may be implemented.

The second row of holes is used for the optional configuration of additional mounting surfaces.

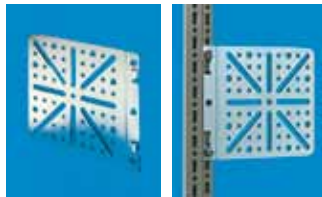
U	Color	Packs	Part No.
1	Black	2	9970.986
2	Sheet steel	2	7246.420

**Material:**

Sheet steel, zinc-plated, passivated

**Supply Includes:**

Assembly parts



### Mounting Plate

Locatable

On the vertical TS enclosure section or TS punched section with mounting flange 0.66 x 2.87" (17 x 73 mm) on the inner and outer mounting level.

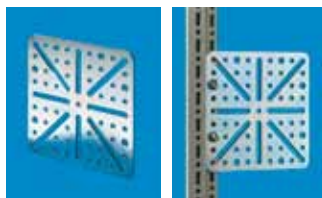
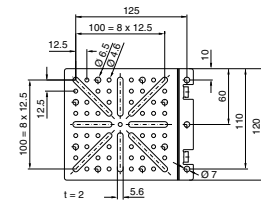
**Material:**

Sheet steel, zinc-plated, passivated

**Supply Includes:**

Assembly screws

Packs of	Part No.
4	8612.400



### Mounting Plate

Screw-Fastened, Large

On all enclosures and mounting parts with system punchings on a 0.98" (25 mm) pitch pattern.

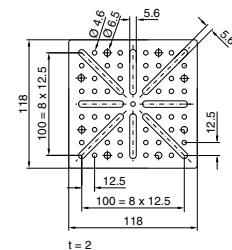
**Material:**

Sheet steel, zinc-plated, passivated

**Supply Includes:**

Assembly screws

Packs of	Part No.
4	8612.410





# Modular Enclosures

## System Accessories Interior Installation/Baying Components



### Mounting Plate

**Screw-Fastened, Small**

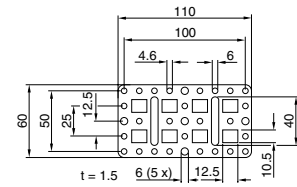
**Material:**

Sheet steel, zinc-plated, passivated

**Supply Includes:**

Assembly screws

Packs of	Part No.
4	<b>4532.000</b>



### Button Mount Brackets

- Enables toolless installation of PDUs
- Allow 0U mounting of PDUs
- Black, E-coated

Description	Part No.
0U, z-rail button mount bracket, quantity 2 per package	<b>9971.066</b>
0U, dual button mount bracket, quantity 2 per package	<b>9971.067</b>



### Mounting Bracket

Screw-fastened on all enclosures and mounting parts with system punchings on a 0.98" (25 mm) pitch pattern.

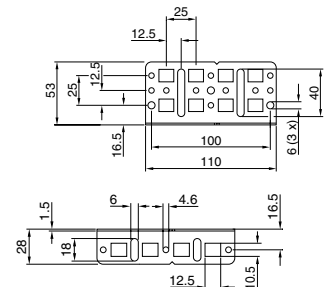
**Material:**

Sheet steel, zinc-plated, passivated

**Supply Includes:**

Assembly screws

Packs of	Part No.
4	<b>4597.000</b>



### Baying Connectors, External

For mounting on the vertical enclosure sections. Simply position on the outside and screw. Fasten either from the inside or outside.

**Material:**

Sheet steel, zinc-plated, passivated or stainless steel 1.4301

**Includes:**

Assembly parts

Version	Packs of	Part No.
Sheet steel	6	<b>8800.490</b>
Stainless steel	6	<b>8700.000</b>

German Patent No. 197 37 668



### Baying Bracket

For additional stabilization or in cases where:

- mounting brackets
  - swing frames
  - busbar supports
- prevent the installation of angular baying brackets.

**Material:**

Sheet steel, zinc-plated, passivated

**Includes:**

Assembly parts

Packs of	Part No.
4	<b>4582.500</b>

**Accessories:**

For mounting on vertical TS enclosure: Snap-on nut M8, 8800.808, see Handbook 31

# Modular Enclosures

## System Accessories Grounding



### Complete Grounding Kits

For system-compatible grounding of all enclosure parts on the enclosure frame according to VDE. The ground conductors are pre-assembled, ready for connection with connectors and cut to the correct length.

**Includes:**  
Assembly parts

Packs of	Part No.
1 kit	<b>7829.150</b>



### Assembly Screws M6 x 16 mm, M5 x 16 mm

For captive nuts, 19" (482.6 mm) enclosure mount components and blanking panels. Plastic washers included.

Type	Packs of	Part No.
Slotted screw M6	100	<b>2093.200</b>
Phillips screw M6	100	<b>2089.000</b>
Phillips screw M5	100	<b>2099.500</b>



### Torx Screws

For the round holes in the TS profile, installation rails and system chassis without mounting flanges.

### Self-Tapping Screws

For the round holes in the TS profile, installation rails and punched sections without mounting flanges.

### Drilling Screws

Mark, drill and tighten in a single move using electric or pneumatic tools.

For metal thickness: 0.32 – .12" (8 – 3 mm)  
Length: 0.63" (16 mm)  
Usable length: 0.37" (9.50 mm)  
Width across flats: 0.32" (8 mm)

Torx drive for optimum transmission of torques, an extended tool life and increased safety and reliability when tightening and loosening screw connections.

Type of screw	Dimensions	Packs of	Part No.
Torx screws	M6 x 12 mm	300	<b>2504.500</b>
Torx screws	BZ 5.5 x 13 mm	300	<b>2486.500</b>

### Self-Tapping Screws

Hex screws	M5 x 10 mm	500	<b>2504.000</b>
Posidrive raised countersunk screws	M5 x 12 mm	500	<b>2488.000</b>
Pan head screws, posidrive	M5 x 12 mm	500	<b>2489.000</b>
Self-tapping screws	–	300	<b>2487.000</b>



### Captive Nuts M5/M6

For the attachment of electronic equipment, 19" (482.6 mm) installed equipment and blanking plates to mounting angles, 19" (482.6 mm).

For use with metal thickness from .03 – .08" (0.8 – 2.0 mm). In areas of narrow tolerance, captive nuts for metal thicknesses of .05 – .06" (1.2 – 1.5 mm) should be used. Optionally with or without contact of the installed equipment to the 19" (482.6 mm) section/enclosure.



### Captive Nut M5

Design	For metal thicknesses inches (mm)	Packs of	Part No.
With contact	.03 – .08 (0.8 – 2.0)	50	<b>2094.500</b>
Without contact	.03 – .08 (0.8 – 2.0)	50	<b>2092.500</b>

### Captive Nut M6

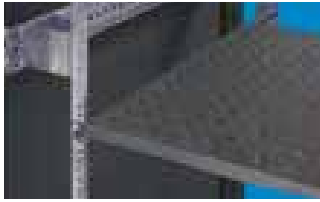
Design	For metal thicknesses inches (mm)	Packs of	Part No.
With contact	.03 – .08 (0.8 – 2.0)	50	<b>2094.200</b>
Without contact	.03 – .08 (0.8 – 2.0)	50	<b>2092.200</b>
With contact	.05 – .06 (1.2 – 1.5)	50	<b>2094.300</b>
Without contact	.05 – .06 (1.2 – 1.5)	50	<b>2092.300</b>

### Captive Nut 10/32

Without contact	.03 – .08 (.8 – 2.0)	50	<b>9957.324</b>
-----------------	----------------------	----	-----------------

# Modular Enclosures

## System Accessories Shelves



### Toolless Shelves For 19" (482.6 mm) Rackmounting

These 19" (482.6 mm) enclosure mount shelves are designed for your ease – the toolless advantage allows quick and simple assembly.

**Load Capacity:**  
150 lbs (68 kg)

Mounting	Color	Part No.
Fixed	RAL 7035 light grey	<b>9968.421</b>
Fixed	Cool black	<b>9968.422</b>



### Heavy-Duty Toolless Shelves For 19" (482.6 mm) Rackmounting

These 19" (482.6 mm) heavy-duty enclosure mount shelves are designed for your ease. The toolless advantage allows quick and simple assembly.

**Load Capacity:**  
250 lbs (113 kg)

Mounting	Color	Part No.
Fixed	RAL 7035 light grey	<b>9968.556</b>
Fixed	Cool black	<b>9968.557</b>
Telescopic	RAL 7035 light grey	<b>9968.586</b>
Telescopic	Cool black	<b>9968.587</b>
Fixed	RAL 7035 light grey	<b>9967.920</b>



### Component Shelves, 1/2U, Depth-Variable

These space-saving component shelves are screw-fastened to the front and rear 19" (482.6 mm) attachment level. They are infinitely depth-adjustable and may be fitted independently from the enclosure. Combination with telescopic slides is not possible.

**Load Capacity:**  
110 lbs surface load, static

**Material:**  
Sheet steel

Distance between levels inches (mm)	Part No.
15.74 – 23.62 (400 – 600)	<b>7063.710</b>
23.62 – 35.43 (600 – 900)	<b>7063.720</b>

**Surface Finish:**  
Spray-finished, RAL 7035 light grey

**Includes:**  
Component shelf, including assembly parts



### Component Shelves, 2U

#### Static Installation

If only one pair of 19" (482.6 mm) mounting angles is available for mounting a component shelf, this variant offers a particularly cost-effective solution. Installation of telescopic slides is not possible.

**Load Capacity:**  
55 lbs (25 kg) surface load, static

**Material:**  
Sheet steel, spray-finished

**Color:**  
RAL 7035 light grey

**Also Required:**  
Screws, captive nuts

Component shelf depth inches (mm)	Part No.
10 (250)	<b>7119.250</b>
16 (400)	<b>7119.400</b>

#### Vented Component Shelves with 19" (482.6 mm) Railmounting

inches		mm		Part No.
W	D	W	D	
16	12	400	300	<b>7143.035</b>
16	16	400	400	<b>7144.035</b>
16	20	400	500	<b>7145.035</b>

# Modular Enclosures

## System Accessories Shelves



### Component Shelf, 2U

#### Static Installation or Fully Extendable

Suitable for installation in all enclosures with only one 19" (482.6 mm) location point via flange mounting.

#### Load Capacity:

55 lbs (25 kg) surface load, static

#### Material:

Sheet steel, spray-finished

#### Color:

RAL 7035 light grey

#### Static Installation or Fully Extendable<sup>1)</sup>

Width x depth inches (mm)	Part No.
15.35 x 12 (390 x 300)	<b>7148.035</b>

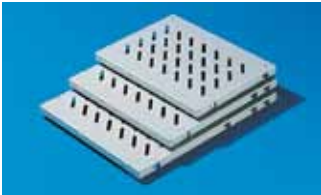
<sup>1)</sup> For fully extendable version, telescopic slides 7051.000 should be ordered additionally.

#### Includes:

1 set = 1 component shelf, 2 installation brackets, assembly parts

#### Accessories:

Telescopic slides



### Component Shelves, 19" (482.6 mm) Configuration

The component shelves may be inserted in network enclosures with two pairs of 19" (482.6 mm) mounting angles.

The component shelves offer a number of location points depending on their depth, so that the distance between levels is completely variable in conjunction with the depth-variable installation kit. Each component shelf secured in this way can be retrospectively upgraded to full withdrawal using telescopic slides. For this purpose, the telescopic slides are screw-fastened in place of the spacers.

#### Load Capacity:

110 lbs (50 kg) or 220 lbs (100 kg) surface load, static

#### Material:

Sheet steel

#### Color:

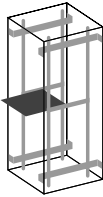
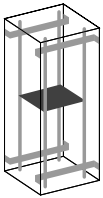
RAL 7035 light grey

#### Includes:

Component shelf including spacers for static installation

#### Also Required:

Depth-variable installation kit, see next page



Component shelf width inches (mm)	16.10 (409)				
Component shelf depth (T) inches (mm)	11.81 (300)	15.74 (400)	19.68 (500)	23.62 (600)	27.55 (700)
<b>Part No. 110 lbs Shelf</b>	<b>7143.035</b>	<b>7144.035</b>	<b>7145.035</b>	<b>7145.635</b>	<b>7145.735</b>
<b>Part No. 220 lbs Shelf</b>	-	-	<b>7063.895</b>	-	<b>7063.897</b>
Handle for component shelf	3636.010	3636.010	3636.010	3636.010	3636.010
Telescopic slides 50 kg (110 lbs)	7051.000	7061.000	7081.000	7161.000	7161.700
Telescopic slides 100 kg (220 lbs)	-	-	7065.000	-	7066.700



### Telescopic Slides for Component Shelves

Sides are fully extendable, and can also be easily retrofitted to convert fixed shelf into sliding shelf.

Available in two versions:

max. load capacity: 110 lbs (50 kg)  
max. load capacity: 220 lbs (100 kg)

#### Technical Description:

- Installation adjustable in 0.98" (25 mm) increments
- 2-stage extension

For shelf depth	Packs of	Part No. max. load capacity	
		110 lbs (50 kg)	220 lbs (100 kg)
12" (300 mm)	1 set	<b>7051.000</b>	-
16" (400 mm)	1 set	<b>7061.000</b>	<b>7064.000</b>
20" (500 mm)	1 set	<b>7081.000</b>	<b>7065.000</b>
24" (600 mm)	1 set	<b>7161.000</b>	<b>7066.000</b>

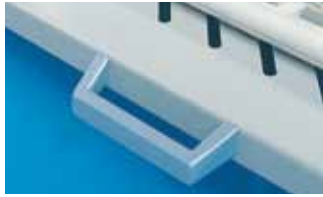
#### Material:

Sheet steel, zinc-coated, chromated



# Modular Enclosures

## System Accessories Shelves



### Handle for Component Shelves

**Material:**  
Die-cast zinc

**Includes:**  
Installation hardware. All component shelves have mounting holes for handles.

Packs of	Part No.
2	<b>3636.010</b>

**Surface Finish:**  
Spray finished, silver grey



### Hinged Cable Carriers

For component shelves on telescopic slides and for printer carriages. Prevents cables from sagging and kinking.

**Includes:**  
Installation hardware

**Material:**  
Sheet steel, zinc-coated, passivated

For enclosure inches (mm)	Part No.
24 (<600)	<b>7163.500</b>
24 (>600)	<b>7163.550</b>



### Keyboard Drawer, 2U

for a 19" (482.6 mm) attachment level  
For keyboards up to 16.93" (430 mm) wide and 9.84" (250 mm) deep with the front panel folded over.

**Material:**  
Sheet steel with aluminium front, spray-finished in RAL 7035 light grey.

Height	Part No.
2U	<b>7281.035</b>

**Supply Includes:**  
Lockable drawer with handles, folding front, pull-out mouse pad, mouse support, practical cable entry and strain relief.

# Wallmount Enclosures

## EL NEMA 12 3-Part Enclosures



An ideal solution for simple wallmount installations while assuring only authorized entry.

Rittal's wallmount network enclosures offer stability, accessibility and security to the networking specialist. All standard models feature usable panel heights from 6U to 21U, ensure safe packaging for sensitive components as well as protection from the environment and from unauthorized access. Double security is assured through separate locks on the center swing frame section and the front viewing door. Rittal's 3-part wallmount enclosures – a perfect combination of protection and versatility.

### Specifications:

- Rear housing with removable top and bottom covers
- Two vertical system bars
- Cable collecting rail
- Center swing frame with lock and two adjustable 19" (482.6 mm) rails
- Front viewing door with locking mini comfort handle
- RAL 7035 light grey and 7015 slate grey
- NEMA 12 protection

### Design:

Wallmountable design with built-in swing frame for access to rear equipment. Secure and sturdy with NEMA 12 protection available. Roll-formed construction provides high stability and component protection.

### Customers:

- Educational applications
- Office buildings and hospitals
- Small clusters of workstations

### Applications:

Ideal for small networks or floor distribution in environments that require a high degree of security and a high industrial protection rating.

- Active components
- Networking and monitoring equipment
- Termination equipment

### Environments:

- NEMA 12 environments
- Smaller networks
- Remote models
- Climate consideration
- Offices or factory environments

### Features:

- Wallmountable design
- NEMA 12 protection
- Wide range of accessories
- Built-in swing frame
- Secure and sturdy
- Safety glass

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.
6U	19"	14 x 24 x 19	RAL 7035 light grey/ 7015 slate grey	7706.135
9U		19 x 24 x 19		7709.135
12U		24 x 24 x 19		7712.135
15U		29 x 24 x 19		7715.135
18U		35 x 24 x 19		7718.135
21U		40 x 24 x 19		7721.135
Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.
12U	24"	24 x 24 x 24	RAL 7035 light grey/ 7015 slate grey	9969.580
15U		29 x 24 x 24		9969.581
21U		40 x 24 x 24		9969.582

# Wallmount Enclosures

## EL Non-NEMA 12 3-Part Enclosures



Rittal's wallmount network enclosures offer stability, accessibility and security to the networking specialist. All standard models feature usable panel heights from 9U to 21U, ensure safe packaging for sensitive components as well as protection from the environment and from unauthorized access. Double security is assured through separate locks on the center swing frame section and the front viewing door.

### Specifications:

- Rear housing with removable top and bottom covers
- Two vertical system bars
- Cable collecting rail
- Center swing frame with lock and two adjustable 19" (482.6 mm) rails
- Front viewing door with locking mini comfort handle
- Two filters
- Ground bus
- RAL 7035 light grey and RAL 7015 slate grey

### Design:

Wallmount section with cable entry gland panels. Hinged swing-out center section for easy access to components and wiring. Depth-variable 19" (482.6 mm) mounting surface.

### Material:

Wall and hinged part:  
Sheet steel, .06" (1.5 mm)  
Viewing window:  
0.12" (3 mm) safety glass

### Features:

- Separate, swing-out center section for front and rear component access
- Wide range of accessories
- Sturdy design provides solid support for equipment

### Protection Category:

Max. IP 43 to EN 60 529/10.91 when using solid gland plates.

### Applications:

This wallmount is ideal for small networks or floor distribution in environments that require a high degree of security.

- Active components
- Networking and monitoring equipment
- Termination equipment

### Environments:

- Offices, schools, and hospitals
- Factory floor applications

### Customers:

- Educational applications
- Office buildings and hospitals
- Small clusters of workstations

### Supply Includes:

#### Wall section:

With vertical punched rails and C rail mounted horizontally for cable clamping, top cable gland plate solid, bottom cable gland plate with brush strips, earthing rail with star earthing, wall mounting bracket 10 mm.

#### Hinged part:

With 0.98" (25 mm) pitch pattern of holes in the front and rear frame, two 19" (482.6 mm) mounting angles mounted on C rails, infinitely depth-variable, one outlet filter each on the left and right side.

#### Designer glazed door:

With 3 mm single-pane safety glass window, 9 + 15 U with mini comfort handle for lock inserts, 21 U with comfort handle and 2-point locking, including lock 3524 E.

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Load Capacity (lbs)	Part No.
9U	23"	24 x 24 x 23	RAL 7035/ Slate grey 7015	99	<b>7709.735</b>
15U		29 x 24 x 23		165	<b>7715.735</b>
21U		40 x 24 x 23		165	<b>7721.735</b>
9U	27"	24 x 19 x 27		99	<b>7709.535</b>
15U		24 x 30 x 27		165	<b>7715.535</b>
21U		24 x 40 x 27		165	<b>7721.535</b>



# Wallmount Enclosures

## EL 3-Part Enclosure Accessories



### Fan Expansion Kits

For retrofitting various fan units or to supplement the fan mounting plate and modular fan roof.

#### Technical Specifications:

Rated voltage: 115 or 230 V  
 Rated current: 19/18 W for 50/60 Hz  
 Air displacement (unimpeded airflow):  
 85/100 cfm/ for 50/60 Hz  
 Temperature range:  
 14°F to 131°F (-10°C to +55°C)

#### Fan Expansion Kit

Voltage	Packs of	Part No.
230 V fan	1 set	<b>7980.000</b>
115 V fan	1 set	<b>7980.110</b>

#### Replacement Exhaust Filters

Packs of	Part No.
5 filters	<b>3322.700</b>

#### Replacement Exhaust Filters:

These filters replace standard equipment mounted on the right and left sidewalls of center section.



### Wallmounting Brackets

Utilize pre-drilled holes in rear wall. Version with 1.58" (40 mm) stand-off allows cable routing behind the enclosure.

#### Material:

Steel, chromated

#### Wallmounting Brackets

Stand-off dimension A	Packs of	Part No.
1.58" (40 mm)	4	<b>2503.200</b>
0.39" (10 mm)	4	<b>2508.200</b>



### Cable Entry Panel with Brush Insert

Multi-folded and welded, with foamed-on gasket and plastic brush insert for easy cable entry.

#### Cable Entry Panel with Brush Insert

Color	Part No.
RAL 7035 light grey	<b>7705.035</b>



### C Rails

To accommodate large tensile forces, larger cables or cable sections via cable clamps, and for tidy cable routing inside the enclosure.

The cable clamp rails may be located directly on a 19" (482.6 mm) mounting frame, horizontally at the rear or in the enclosure depth between two mounting frames. An additional screw fastening secures the unit.

If the rail is to be secured between two mounting frames, it is necessary to secure the two 19" (482.6 mm) mounting frames at the corresponding distance from one another beforehand.

For center part depth	Packs of	Part No.
8.50" (216 mm)	4	<b>2238.000</b>
12.44" (316 mm)	4	<b>2239.000</b>
16.38" (416 mm)	4	<b>2237.000</b>

#### Material:

Sheet steel, zinc-plated, passivated

#### Supply Includes:

4 C rails, including assembly parts

#### Accessories:

Cable clamps



### Slide Rails

For mounting between a front and a rear pair of mounting angles. The slide rail can be used to support heavy slide-in equipment.  
 H x W: 3.15 x 3.35" (80 x 85 mm)

#### Load Capacity:

176 lbs (80 kg)

#### Material:

Sheet Steel, zinc-plated, passivated

For center part depth	Packs of	Part No.
8.50" (216 mm)	10	<b>2240.000</b>
12.44" (316 mm)	10	<b>2250.000</b>
16.38" (416 mm)	10	<b>2260.000</b>

#### Supply Includes:

2 slide rails, assembly parts

#### Possible Alternatives:

Depth-adjustable slide rails



## Safe Housing – Where You Need It Most

Mobile or stationary, your monitors, servers, keyboards, printers and other network components can find safe housing in these Rittal Data Racks. A second 19" (482.6 mm) mounting frame facilitates installation of component shelves, slide rails, or cable management solutions. Together the Rittal Data Rack, optional second mounting frame and our comprehensive accessory program offer smart solutions for a multitude of network applications.

### Specifications:

- 19" (482.6 mm) vertical frame
- Base with integrated feet
- Captive nuts and screws ordered separately
- RAL 7035 light grey frame highlighted with RAL 5018 teal trim
- Additional 19" (482.6 mm) mounting frame includes installation hardware

### Design:

Its torsion resistant frame of 14 ga/2 mm is welded together and has a high load capacity of 300 lbs (136 kg) frame. The 6-fold, roll formed, vertical frames are punched in front and back for mounting 19" (482.6 mm) components and have additional installation holes on the sides.

### Applications:

Open rack system for installation in distribution rooms, for flexible networks and for laboratory systems. Components installed on either one or two mounting surfaces are accessible from all sides.

- Network components
- Active components
- Passive equipment
- MIS applications
- Other 19" (482.6 mm) rackmount applications

### Environments:

- IDFs
- Data rooms
- Offices

### Features:

- Installation holes on base, sides and rear
- Easy portability and access
- Stand alone or bayed together
- Base can be bolted to floor or mounted on twin wheel casters
- Second mounting frame available
- Torsion free frame



Stand alone or bayed together

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.
31U	30"	59 x 22 x 30	RAL 7035 light grey with RAL 5018 teal trim	7391.000
36U		66 x 22 x 30		7396.000
40U		75 x 22 x 20		7400.000
45U		84 x 22 x 30		7445.000

Accessories	Page
Casters	41
Cable Management	33-36
Blanking Panels	40
Shelves	48-51
Baying Kit	46

## Additional Frame

Rack Units	Quick Reference (Depth)	Dimensions H x W x D (inches)	Color	Part No.
31U	30"	59 x 22 x 30	RAL 7035 light grey w/ RAL 5018 teal trim	7296.000
36U		68 x 22 x 30		7297.000
40U		75 x 22 x 30		7298.000
45U		84 x 22 x 30		7299.000

# Rittal – The System.

**Faster – better – worldwide.**

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

*The Rittal Corporation is the U.S. subsidiary of Rittal GmbH & Co. KG and manufactures the world's leading industrial and IT enclosures, racks and accessories, including climate control and power management systems for industrial, data center, outdoor and hybrid applications. For more information about Rittal and its products, please visit [www.rittal-corp.com](http://www.rittal-corp.com) or call 1-800-477-4000.*

## **Rittal Corporation**

1 Rittal Place • Urbana Ohio 43078 • USA  
Phone: 937-399-0500 • Fax: 800-477-4003 • Toll-free: 800-477-4000  
Email: [rittal@rittal-corp.com](mailto:rittal@rittal-corp.com) • Online: [www.rittal-corp.com](http://www.rittal-corp.com)

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES



FRIEDHELM LOH GROUP