Rittal TS IT Rack Guide Specifications

TS IT network server enclosure

1.0 **General Description**

    1.1 Modular Free Standing Equipment Cabinet

    1.2 Various combinations of dimensions:

        1.2.1 Height: 48"/1200mm, 80"/2000mm, 88"/2200mm

        1.2.2 Width: 24"/600mm, 28"/700mm, 32"/800mm

        1.2.3 Depth: 40"/1000mm, 42"/1050mm, 48"/1200mm

    1.3 IT enclosure with perforated aluminum/sheet steel front door. Split, perforated sheet steel rear door, multi-piece roof plate for side cable entry on both sides, open base frame, without side panels.

    1.4 Two 482.6 mm (19") vertical mounting rails, front and rear, on depth stay. 482.6 mm (19") assembly parts and complete grounding kit are supplied loose.

    1.5 Side panels, one-piece screw-fastened or two-piece with quick-release fastener, security lock and optional internal latch, for easy one-man assembly, base mount, gland plates available from the accessories range.

    1.6 Accessories include tool-free "snap-in technology" options for air flow, cable management, shelves, power distribution units, etc.

2.0 Frame

    2.1 Pre-configured IT rack consisting of torsionally stiff, welded symmetrical frame of rolled 16-fold vertical members connected with two horizontal frames of rolled 9-fold members with integral channel for accommodating the adjacent panel seal and protecting it against possible effect of aggressive media.

    2.2 All frame members, with integral system holes on a 25 mm DIN pitch pattern, allow convenient interior installation by simple fitting and securing of equipment. All sections have chamfered edges. The vertical frame members each have two depth-recessed horizontal mounting rails that can be used for flexible attachment of installation components.

    2.3 Enclosures are bayable on all sides: on the left, right, front and rear and at the top or round corners.

        2.3.1 Baying of cabinets shall be accomplished without disturbing any installed cables or rack mounted equipment

        2.3.2 Baying of cabinets shall be easily accomplished with simple tools

2.3.3 Baying cabinets will not add any additional overall width to a contiguous row.

3.0 Doors

3.1 Front Doors
3.1.1 Aluminum/sheet steel front door with a specific honeycomb perforation, vented surface area 85% perforated.
3.1.2 Framed of aluminum sections with foamed-in low smoke zero halogen gasket, four-point locking rod, comfort handle for semi-cylinder, with security lock 3524.
3.1.3 Four hinges, with captive hinge pins, hinge opening angle with stand-alone siting 180°, door hinge may be swapped to opposite side without dismantling locking rods.

3.2 Rear Doors
3.2.1 Sheet steel rear door, vented, vertically divided, for space-saving installation of the enclosures and easy access to the components.
3.2.2 Specific honeycomb perforation, vented surface area 85% perforated. Doors with foamed-in seal.
3.2.3 Main door with four-point locking rod, comfort handle for semi cylinder with security lock 3524 E. Adjacent door with additional internal swing lever handle and two-point locking rod. Main and adjacent door with four hinges, hinges with captive hinge pins, hinge opening angle with stand-alone siting on both sides 180°.

4.0 Roof

4.1 Multi-piece roof plate for side cable entry via brush strips across the entire enclosure depth. Roof plate for retrofitting, removable despite already made cable routing.

4.2 Cable entry outside the mounting rails is possible

4.3 Cut-out for accommodating a fan module already integrated and closed by a cover. For supporting the passive ventilation it is possible to raise the cover by means of spacers.

4.4 Optional chimney roof available

5.0 Sidewalls
5.1 Side panels are not included with the supply. Two variants available:
5.1.1 One-piece screw-fastened or

5.2.2 Two-piece with quick-release fastener including security lock and optional internal latch available from the accessories range.

6.0 Base Plate

6.1 Open base frame, gland plates, function units may be retrofitted from the range of accessories. All screw-fastened panels have automatic potential equalization and are prepared to accept grounding straps.

7.0 Mounting Rails

7.1 With two 482.6 mm (19") vertical mounting rails, front and rear. The static total load capacity of both mounting rails is 15,000 N (3372 lbs.).

7.2 universal mounting rails support installation of industry standard 19" rack mount server, network and electronic components, infinitely depth variable attached to depth stays.

7.3 The attachment of the mounting rails is flexible and tool-less using quick release fasteners or screw-fasteners as an alternative.

7.4 Mounting rails, front and rear, including additional pitch pattern of holes according to standard EIA 310 E.

7.5 All height units are labelled and numbered in the opposite direction. U labelling of both mounting rails can be read from the front for easy one-man assembly.

7.6 Each U space shall be marked on the middle hole of each U. Each U consists of three holes and measures 1.75" or 44.45 mm high. Each U space marking will be printed, not adhesive backed.

7.7
Rack mount capacity is as follows:
Height RU
80"/2000mm 42RU
88"/2200mm 47RU
48"/1200mm 24RU

7.8 All depth stays with integral pitch pattern for fast determination of the mounting distance and the remaining front free space (clearance).

7.9 19" mounting rails will have two additional sets of mounting holes, shall match hole pattern of the frame and allow for the installation of various

accessories, i.e. vertical cable management, horizontal cable management, power strips, etc.

7.10 Front mounting rails, prepared for tool-less accommodation of cable routing aids and organization of a structured cabling in maximum packaging density or for equipment with a sensor strip for automatic identification of the installed components by means of Radio Frequency Identification (RFID).

7.11 Rear mounting rails prepared for two-sided accommodation of a Power Distribution Unit (PDU) in 1 U form factor for enclosure electrification, without waste of installation volume thanks to space-saving side mounting between mounting rail and side panel in the Zero-U space.

7.12 Enclosures widths equal to or greater than 28"/700 mm allow for 19", 21", and 23" rack mounting of components and/or allow for the offsetting of 19" rails, left or right, to allow for additional cable management and air plenum space.

8.0 Grounding

8.1 All enclosure components such as doors, sidewalls, roof, etc.

8.2 should be bonded directly to the frame Grounding points from the frame to the external building ground should be completed

8.3 The TS IT enclosure provides potential equalization as per EN 60950 as a standard feature

8.4 Conductors of 4 mm_2 diameter and a central ground point for connection to the building service connection are included in the accessories

8.5 The mounting rails are connected to the TS8 frame by 4 mm conductors.

8.6 Comply with ANSI-J-STD-607-A

9.0 Paint

9.1 Panels, doors, spray-finished in RAL 7035 or RAL 9500
    9.1.1 Electrophoresis fully immersed primer cost
    9.1.2 Polyester powder topcoat
        9.1.2.1 RAL 7035 - light grey
        9.1.2.2 RAL 9005 fine texture - black

9.2 Interior installation, primer, RAL 9005
        9.2.1 Electrophoresis fully immersed primer coat

10.0 Environmental and Safety Requirements

10.1 UL, cUL

10.1.1 UL 60950-1 Information Technology Equipment
10.1.2 CSA C22.2 NO. 60950-1-07-CAN/CSA Information Technology

10.2 RoHS compliant

10.3 Plastic components for enclosures and related accessories are UL 94 HB, UL 94 V0, or UL 94 V2 compliant.

11.0 Packaging

11.1 Enclosures will be shipped on a wooden pallet

11.2 Bolt down brackets will be used to secure the enclosure to the pallet for stability during transport

11.3 Corrugated packaging will be used to protect the corners/sides and secured with banded metal straps

11.4 All products will include a label, part number and bar code.

12.0 Manufacturing

12.1 Rittal Corporation located in Urbana, Ohio USA

12.2 Available globally