

Rittal TS IT Pro Rack Guide Specifications



1.0 General Description

- A. Modular Free Standing Server / Network Enclosure
- B. Various combinations of standard dimensions:
 - 1. Height: 42RU – 78.8”/2012mm, 48RU - 88”/2280mm
 - 2. Width: 24”/600mm, 30”/750mm
 - 3. Depth: 42”/1070mm, 48”/1200mm

**Note: Height includes casters*
- C. IT Equipment (ITE) enclosure suitable for installation of rackmount IT appliances – server, storage, network, termination, ancillary devices and components. Base enclosure equipped with perforated sheet steel front door and split, perforated sheet steel rear door to support cold aisle/hot aisle front to rear airflow paths. Roof plate for cable entry on both sides, open base frame, front & rear casters.
- D. Two sets 19” (482.6 mm) vertical mounting rails, front and rear. Cage nuts, mounting screws.
- E. Static Load Rating – 3750Lbs. Dynamic Load Rating – 2250Lbs.
- F. Quick release, horizontal split, side panels, two-piece with lock insert.
- G. Baying hardware included.
- H. Accessories include options for air flow, cable management, shelves, power distribution units, etc.

2.0 Frame

- A. ITE Equipment Enclosure 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 potential damaging effects of aggressive contaminants.
- B. All frame members, with integral system holes on a 25 mm DIN pitch pattern, allow convenient interior installation for simple fitting and securing of equipment. All frame sections have chamfered edges. Vertical frame members each have two depth-recessed horizontal mounting levels that can be used for flexible attachment of interior installed components.
 - 1. Enclosures are bayable with side panels installed or removed.

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

3.0 Doors

A. Front Door

1. Sheet steel front door with 85% honeycomb perforation, vented surface area.
2. Four-point locking rod, comfort handle for push button/key lock insert.
3. Three internal security hinges, with quick release function, 145° hinge opening angle. Door opening may be switched to opposite side without dismantling locking rods.

B. Rear Door

1. Perforated sheet steel rear door, vertically divided, for space-saving installation of the enclosures and easy access to installed components.
2. Honeycomb 85% open perforation vented surface area.
3. Main door with four-point locking rod, comfort handle for pushbutton/key lock insert. Main and adjacent door with three quick release hinges, 145° hinge opening angle.

C. Security

1. All doors to be equipped with internal hinges, internal lock rods and 4 point internal lock catches.
2. Multiple key lock inserts to be available – Pushbutton, Security Lock, Security Lock with Key Pushbutton.
3. Unique lock inserts with master key can be provided to support specific site or end user security standards.
4. TS IT Pro to support CMCIII Access Control components including door sensors, electro-magnetic handles, access control devices (i.e. PIN Pad, Magnetic Card Reader).

4.0 Roof

- A. 24"/600mm Wide TS IT Pro: Roof plate with two (2) rear entry cable entry points equipped with brush strips PLUS two (2) 4" Diameter cable entry holes on front of roof.
- B. 30"/750mm Wide TS IT Pro: Roof plate with two (2) full length cable entry slots on either side of roof. Outer brush strips or entire roof can be removed to facilitate cable and component installation without disturbing previously installed components.

5.0 Side Panel

A. Side Panels, when included:

1. Two piece, horizontal split, quick release. Security key lock insert in each panel.
2. Side walls are installed from outside of enclosure. Sidewall installation to be accomplished without disturbing installed components.
3. TS IT Pro enclosures can be bayed together with side panels installed.

6.0 Mounting Rails

- A. With two sets 19" (482.6 mm) vertical mounting rails, front and rear. The static total load capacity of both mounting rails is 3750 lbs.
- B. Universal mounting rails, with square holes for cage nuts, support tool-less installation of industry standard 19" rack mount server, network and electronic components, depth variable.
- C. Mounting rails, front and rear, conforms to standard EIA 310 E.
- D. All height units are labelled and numbered, on front and rear mounting surfaces. RU markings visible from front & rear of enclosure.
- E. 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.
- F. 19" Mounting rails will have additional mounting holes to allow for the installation of various accessories, i.e. vertical cable management, horizontal cable management, power strips, etc.
- G. Pack of 50 x M6 Cage Nuts and 50 x M6 Mounting Screws included.

7.0 Cable Management

- A. Integrated vertical cable management panel installed in rear. Two (2) full height panels provided – left and right.
- B. Cable management panel pre-configured with multiple mounting points to support vertical power strip (PDU) installation ('Button Mount'). Additional punch outs provided for installation of ¼ Turn cable management accessories. Separate mounting points can be used with nylon loop straps or cable ties.

8.0 Base

- A. Front and Rear Caster Plates included.
- B. Rear Caster plates installed forward of rear frame to permit installation and routing of cables and allow pass through of large power plugs (i.e. 50/60 Amp NEMA or IEC).
- C. Levelling feet installed. Levelling feet shall be adjustable from inside frame or below frame and repositioned without disruption to installed components.
- D. Front caster plate equipped with additional mounting points to support bolt down brackets.
- E. Front and Rear caster plates provided with additional holes to support installation of bolt down hardware to secure enclosure to floor (Slab, raised floor tiles, under floor slab).

9.0 Grounding

- A. All enclosure components such as doors, sidewalls, roof, etc. should be bonded directly to the frame. Grounding points from the frame to the external building ground should be completed.
- B. The TSIT Pro enclosure provides potential equalization as per EN 60950 as a standard feature.
- C. Comply with ANSI-J-STD-607-A.

10.0 Paint

- A. Panels, doors, spray-finished in RAL 9005
 - 1. Electrophoresis fully immersed primer coat
 - 2. Polyester powder topcoat
 - A. RAL 9005 fine texture – black
 - 3. Interior Installation, primer, RAL 9005
 - A. Electrophoresis fully immersed primer coat

11.0 Accessories

Provide a complete range of accessories, including but not limited to:

- A. Cable Management – 19” Rackmount cable management panels to support horizontal cable routing. Frame and 19” Rail components to support vertical internal cable routing pathways.
- B. Equipment Shelves – 19” Fixed or Telescopic Shelves. 110Lb or 220Lb capacity. Variable depth adjustability.
- C. Airflow Management – 19” Rail mount vertical air baffles. 19” Rackmount blanking panels.
- D. Power Management – Vertical and 19” Rackmount power strips (PDUs). PDUs to be provided with standard NEMA and/or IEC receptacles, basic to enhanced monitoring and control of receptacles, multiple input power specifications and power supply cords.
- E. UPS Systems – Multiple rackmount or standalone UPS systems to support site specific installation requirements and installed appliance loads.
- F. Climate Control – Multiple ventilation fan options (capacity, roof or wallmount), Enclosure mount air conditioners to be used in conjunction with NEMA12/IP55 environmental protection. Chill water and refrigerant row based units to support high density (>15kW) individual footprint thermal loads.

- G. CMCIII Comprehensive monitoring and access control – to include sensors to monitor: Temperature, humidity, vibration/vandalism, smoke, leak detection, airflow, door status, electronic access control. Video camera to provide real-time monitoring and archive images.
- H. Fire Suppression – In-rack fire suppression, rackmount capable, multi-unit system (Primary and secondary units) to be daisy chained in a contiguous row. To be used with NEMA12/IP55 rated sealed enclosures.

12.0 Environmental and Safety Requirements

- A. UL, cUL
 1. UL 60950-1 Information Technology Equipment.
 2. CSA C22.2 NO. 60950-1-07-CAN/CSA Information Technology.
 3. UL2416 Outline of investigation for audio/video, information and communication technology equipment cabinet, enclosure and rack systems.
- B. ROHS Compliant

13.0 Packaging

- A. Enclosures will be shipped on a wooden pallet.
- B. Corrugated packaging will be used to protect the corners/sides and secured with banding straps.
- C. All products will include a label, part number and bar code.
- D. Ship Loadable configurations available.

14.0 Manufacturing

- A. Rittal North America, LLC located in Urbana, Ohio USA.
- B. Available globally.

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