

Rittal – The System.

Faster – better – everywhere.



DK 5509.181

Network/server enclosure TS IT

State: 31/07/2025 (Source: rittal.com/sg-en)

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES

FRIEDHELM LOH GROUP



DK 5509.181 - Network/server enclosure TS IT with vented door, with 482.6 mm (19") mounting frame

TS IT, vented, for room climate control 482.6 mm (19") interior installation with 482.6 mm (19") mounting frame for a load capacity of up to 1,500 kg, available in a range of size variants.

Features

Model No.	DK 5509.181
Material	Sheet steel Aluminium
Surface finish	Enclosure frame: Dipcoat-primed Interior installation: Dipcoat-primed Doors and roof: Dipcoat-primed, powder-coated
General colour	RAL 7035
Colour	Enclosure frame and panels: RAL 7035 Interior installation, vent grille at the front: RAL 9005
Supply includes	TS 8 enclosure frame with doors and roof plate Aluminium/sheet steel door at the front, vented (vented surface area approx. 85% perforated), 180° hinges Lock front and rear: Comfort handle for profile half-cylinders and security lock 3524 E Two 482.6 mm (19") mounting frames, front and rear, depth-variable Spacers, height 50 mm, to raise a cover plate above the fan cut-out in the roof plate, for passive cooling (supplied loose). Not required for variants without a cut-out. Connection accessories for potential equalisation with earthing point (supplied loose) 12 x 482.6 mm (19") fastener, 1 U, conductive (supplied loose) 50 multi-tooth screws, conductive (supplied loose) IPPC pallet Roof plate, multi-piece, removable, with side cable entry in the depth and covered cut-out for fan mounting plate Sheet steel rear door, vented (vented surface area approx. 85% perforated), vertically divided, 180° hinges

Features

Dimensions	Width: 800 mm Height: 2,000 mm Depth: 1,000 mm
Units	42 U
Units	42 U
Free mounting space to the 482.6 mm (19") level, front/rear	87 mm / 165 mm
Distance between levels as delivered	745 mm
Design doors	Vented
482.6 mm (19") level(s) version	Mounting frame, 482.6 mm (19")
Load capacity	15,000 N
Note	Depending on how and where it is sited, the door opening angle may vary for selected applications
Basic material	Aluminium
Packs of	1 pc(s).
Net weight	95.6
Gross weight	100.6
EAN	4028177706088
E-Number Sweden	E7239924
ETIM 9	EC002499
ECLASS 8.0	27180207

Approvals

Approvals	UL + C-UL (listed)
Certificates	Surface finish
Explanations	Declaration of conformity

Tender text

TS IT 5509.181

TS IT network server rack for room climate control
IT rack for room climate control. Installation height
42 U, vented aluminium/sheet steel front door, divided
vented sheet steel door at the rear, multi-piece roof
plate for side cable entry on both sides, open base
frame, without side panels. Pre-configured with two
482.6 mm (19") mounting frames, front and rear.
482.6 mm (19") assembly parts and complete earthing
kit supplied loose.

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.

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

All frame sections, with integral system punchings 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 sections have two depth/width -
recessed mounting levels each, which can individually
be used for flexible attachment of the installation
components.

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

Aluminium/sheet steel front door with a specific
honeycomb perforation, vented surface area 85%
perforated,

in a frame of aluminium sections, with foamed-in seal,
four-point locking rod, comfort handle for
semi-cylinder (30/10) mm, with security lock 3524.

Four hinges, with captive hinge pins, door opening
angle with stand-alone siting 180°, door hinge may be

swapped to opposite side without dismantling locking rods.

Sheet steel rear door, vented, vertically divided, for space-saving installation of the enclosures and easy access to the components. Specific honeycomb perforation, vented surface area 85% perforated. Doors with foamed-in seal. Main door with four-point locking rod, comfort handle for semi-cylinder (30/10) mm, 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, door opening angle with stand-alone sitting on both sides 180°.

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

Side panels are not included with the supply.

One-piece screw-fastened or two-piece variant, with quick-release fastener including security lock and optional internal latch available from the accessories range.

Open base frame, gland plates, function units may be retrofitted from the range of accessories. All screw-fastened panels have automatic potential equalisation and are prepared for attachment of earthing straps.

Pre-configured with two 482.6 mm (19") mounting frames, front and rear.

The static total load capacity of both mounting levels is 15,000 N.

Mounting frame consisting of universal mounting angles for server, network and electronic applications welded to a torsionally stiff all-round frame using horizontal connection sections. Depth-variable, screw-fastened via the slot attachment with the horizontal frame of the enclosure rack.

Mounting frames, front and rear, including additional

pitch pattern of holes (U centre attachment) according to standard EIA 310 E. All height units are labelled and numbered in the opposite direction on the front and rear mounting level. U labelling of mounting levels can be read from the outside for easy assembly. Mounting angles of front mounting frame, prepared for toolless accommodation of cable routing aids and organisation of 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).

Mounting angles of rear mounting frame, prepared for accommodation of a Power Distribution Unit (PDU) in 1 U form factor on both sides for enclosure electrical power distribution, without waste of installation volume thanks to space-saving side mounting between mounting level and side panel in the Zero-U space.

Material: Sheet steel, aluminium

Surface finish: Panels, doors, interior installation, RAL 7035/9005

Approvals: UL, cUL

Dimensions (WxHxD): 800x2000x1000 mm

Model No.: TS IT 5509.181

Manufacturer: Rittal GmbH & Co. KG