F-rack
Systems AB

Z-SERVER 19" SERVER CABINETS

DESCRIPTION

CABINETS FOR USE IN DATA CENTERS

STURDY DESIGN

- Strong bolted frame made of steel closed profiles.
- Acceptable static load: **1500 kg.**

MULTIPURPOSE

- Smooth tool-free adjustment of 19" mounting profiles.
- Mounting profiles are U-marked to simplify installation.
- The width can be changed from 19" to 21" with no need to use additional mounting elemens (in 800 mm wide cabinets).
- Door opening angle up to 270 degrees, adjustable direction of opening.
- Easy installation thanks to split side panels.
- Optional mounting of partitions between cabinets at any time of their operation.
- Tool-free mounting of the top plate of cabinet.
- The frame includes holes for mounting accessories.

SAFETY

- Multi-point cabinet locking system:
  3-point locking system in single-leaf doors,
  3-point locking system in double-leaf doors.
- Locks with access control are available.

PERFORMANCE

- Doors with optimum perforation clearance of 80%.
- Up to 86% of the door area is perforated to provide adequate cooling for the installed devices.
- To optimise the flow of cold air we provide the following components to isolate cold and hot areas at the cabinet and Z-SERVER BOX server room.

Z-SERVER SYSTEM

The new Z-SERVER cabinet system represents innovative quality solutions for data-processing centres.

Scalable functionality and easy adaptation enabled by the available additional equipment:

- **Z-SERVER BOX cold aisle installation,**
- **air flow guiding elements within a single cabinet,**
- **logical cabling arrangement elements,**
- **power supply system mounting elements.**

REFERENCE CHART

Width W [mm]	Depth D [mm]	Reference number		
600	1000	**426010**	**456010**	**476010**
	1200	**426012**	**456012**	**476012**
800	1000	**428010**	**458010**	**478010**
	1200	**428012**	**458012**	**478012**
Usable height HU [U = 44.45 mm]		42 U	45 U	47 U
Frame height H [mm]		2000	2100	2200

SCOPE OF DELIVERY

Standard cabinet configuration:
- bolted frame,
- perforated single-leaf front door,
- perforated single-leaf or double-leaf rear door,
- top plate with ventilation perforation and knock-out blanking plates,
- two pairs of 19" mounting profiles, type PREMIUM,
- earthing cables for, top plate and mounting profiles,
- levelling feet.

Accessories available separately:
- side panels and other Z-SERVER accessories (pages 13-19), plinth (page 50),
- shelves (pages 55-58), lighting kit (page 65), 19" blanking plates (page 68).
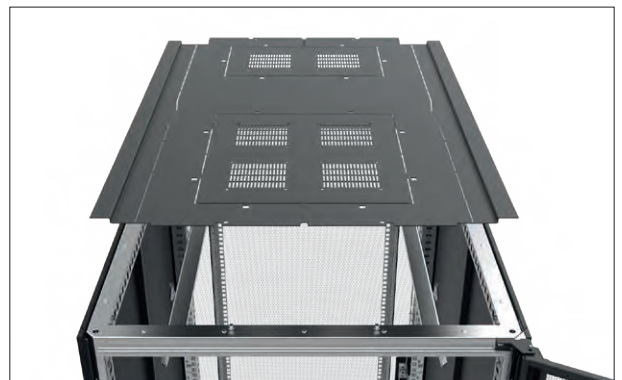
TECHNICAL DATA

Material
Sheet steel.

Protection degree
IP 20 in accordance with EN 60529
(does not apply to brush cable entries).

Surface finishing
Side panels, doors, top plate - powder paint, light grey (RAL 7035) or black (RAL 9005).
Mounting profiles and other metal parts - galvanized.

Z-SERVER cabinets

DATA COMMUNICATION SOLUTIONS

FLOOR-STANDING CABINETS AND OPEN RACKS

CATALOGUE NUMBER OF Z-SERVER CABINET

WZ-ZSERVER-XXXXXX-1X00-2-XXX

Reference number
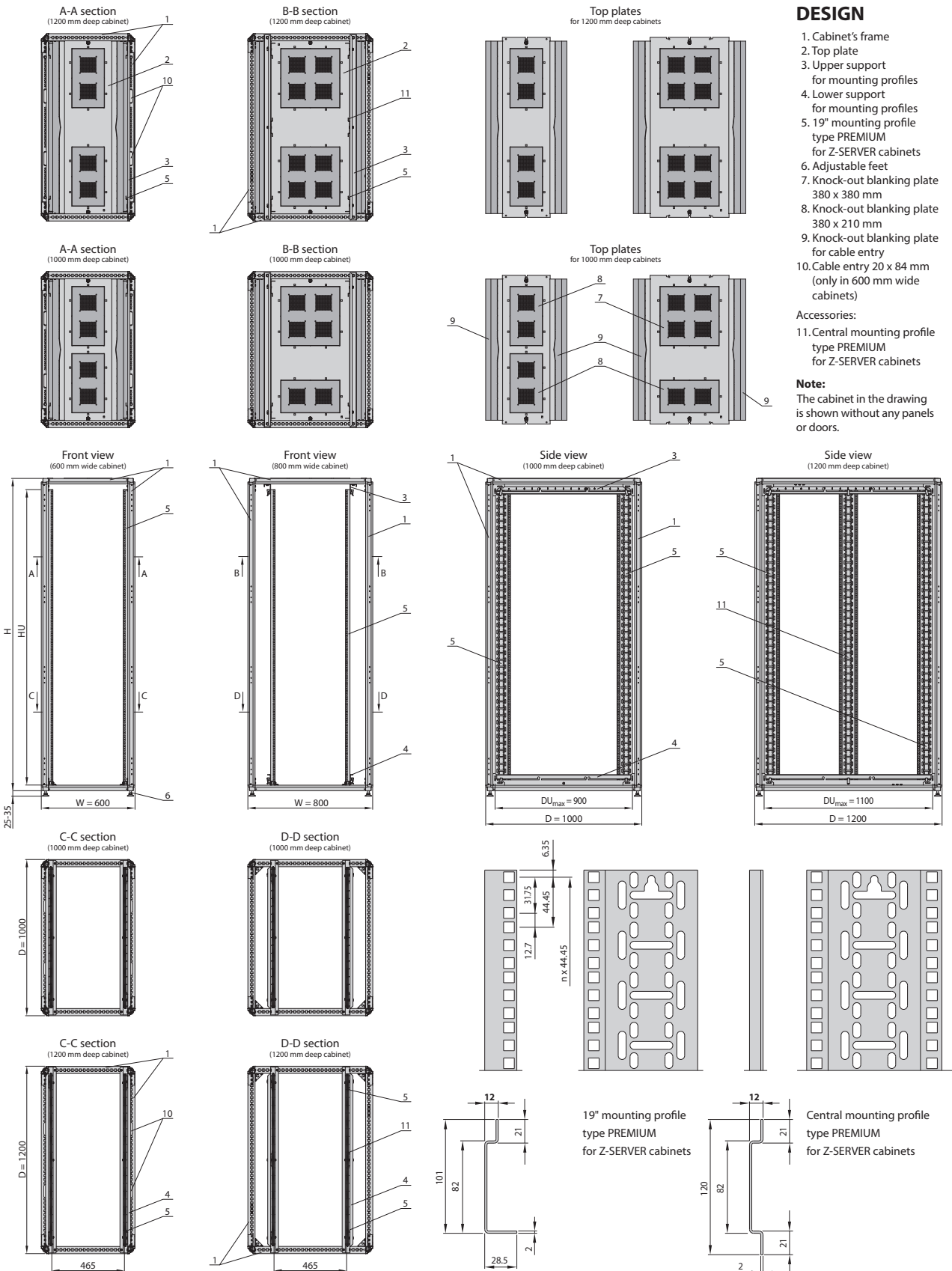specifies the cabinet's overall dimensions (see reference chart).

Rear door type:
1 - perforated single-leaf door
2 - perforated double-leaf door

Cabinet's colour:
011 - RAL 7035 (light grey)   161 - RAL 9005 (black)

F-rack Systems AB

Z-SERVER 19" SERVER CABINETS

DESIGN

A-A section
(1200 mm deep cabinet)

B-B section
(1200 mm deep cabinet)

Top plates
for 1200 mm deep cabinets

A-A section
(1000 mm deep cabinet)

B-B section
(1000 mm deep cabinet)

Top plates
for 1000 mm deep cabinets

Front view
(600 mm wide cabinet)

Front view
(800 mm wide cabinet)

Side view
(1000 mm deep cabinet)

$DU_{max} = 900$

$D = 1000$

Side view
(1200 mm deep cabinet)

$DU_{max} = 1100$

$D = 1200$

C-C section
(1000 mm deep cabinet)

$D = 1000$

D-D section
(1000 mm deep cabinet)

C-C section
(1200 mm deep cabinet)

$D = 1200$

D-D section
(1200 mm deep cabinet)

19" mounting profile
type PREMIUM
for Z-SERVER cabinets

Central mounting profile
type PREMIUM
for Z-SERVER cabinets

DESIGN

1. Cabinet's frame
2. Top plate
3. Upper support
   for mounting profiles
4. Lower support
   for mounting profiles
5. 19" mounting profile
   type PREMIUM
   for Z-SERVER cabinets
6. Adjustable feet
7. Knock-out blanking plate
   380 x 380 mm
8. Knock-out blanking plate
   380 x 210 mm
9. Knock-out blanking plate
   for cable entry
10. Cable entry 20 x 84 mm
    (only in 600 mm wide
    cabinets)

Accessories:
11. Central mounting profile
    type PREMIUM
    for Z-SERVER cabinets

Note:
The cabinet in the drawing
is shown without any panels
or doors.

Z-SERVER cabinets

FLOOR-STANDING CABINETS AND OPEN RACKS

DATA COMMUNICATION SOLUTIONS

Split side panels

Available in two types differing in depth.

Side panels type **A (shallow)**:
- allow to open the door up to 270 degrees;
- increase the cabinet width by 3 mm on each side.

Side panels type **B (deep)**:
- provides sufficient mounting space in 600 mm wide cabinets; enables the installation of a power strip between the side panel and the 19" mounting profile;
- increase the cabinet width by 11 mm on each side.

For cabinet		Side panels type	Catalogue number	
height	depth		RAL 7035	RAL 9005
42 U	1000	A	WZ-8477-08-01-011	WZ-8477-08-01-161
		B	WZ-8477-09-01-011	WZ-8477-09-01-161
	1200	A	WZ-8477-08-02-011	WZ-8477-08-02-161
		B	WZ-8477-09-02-011	WZ-8477-09-02-161
45 U	1000	A	WZ-8477-08-03-011	WZ-8477-08-03-161
		B	WZ-8477-09-03-011	WZ-8477-09-03-161
	1200	A	WZ-8477-08-04-011	WZ-8477-08-04-161
		B	WZ-8477-09-04-011	WZ-8477-09-04-161
47 U	1000	A	WZ-8477-08-05-011	WZ-8477-08-05-161
		B	WZ-8477-09-05-011	WZ-8477-09-05-161
	1200	A	WZ-8477-08-06-011	WZ-8477-08-06-161
		B	WZ-8477-09-06-011	WZ-8477-09-06-161

Package: 1 set (1 split side panel)

Material
Sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Side panel split horizontally, consisting of upper and lower part, together with fixing accessories. The lower part is equipped with two sliding locks.

Partition panel

Designed for mounting between bayed cabinets.

It contains four 150 x 45 mm cable entries closed with knock-out blanking plates and four cut-outs for cabinet frame connectors. The front and bottom edges of the partition panel, bent at an angle of 90 degrees, facilitate its installation between the frames of adjacent cabinets. The distance between the cabinets needed to install the partition panel is only 2 mm.

The partition panel is available in two types differing in height:
- partition panel type **A for cabinets with feet**;
- partition panel type **B for cabinets without feet**.

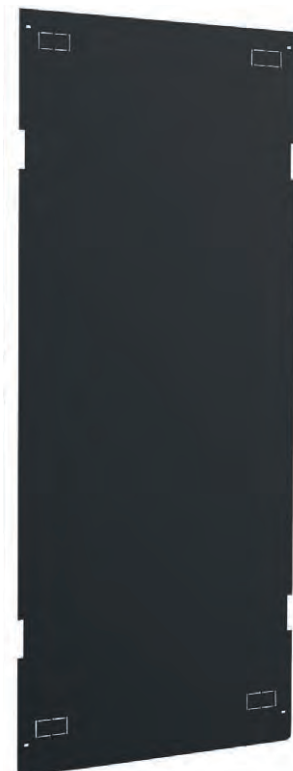| For cabinet		Partition panel type	Catalogue number	
height	depth		RAL 7035	RAL 9005
42 U	1000	A	WZ-8477-35-01-011	WZ-8477-35-01-161
		B	WZ-8477-35-07-011	WZ-8477-35-07-161
	1200	A	WZ-8477-35-02-011	WZ-8477-35-02-161
		B	WZ-8477-35-08-011	WZ-8477-35-08-161
45 U	1000	A	WZ-8477-35-03-011	WZ-8477-35-03-161
		B	WZ-8477-35-09-011	WZ-8477-35-09-161
	1200	A	WZ-8477-35-04-011	WZ-8477-35-04-161
		B	WZ-8477-35-10-011	WZ-8477-35-10-161
47 U	1000	A	WZ-8477-35-05-011	WZ-8477-35-05-161
		B	WZ-8477-35-11-011	WZ-8477-35-11-161
	1200	A	WZ-8477-35-06-011	WZ-8477-35-06-161
		B	WZ-8477-35-12-011	WZ-8477-35-12-161

Package: 1 pc.

Material
Sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).
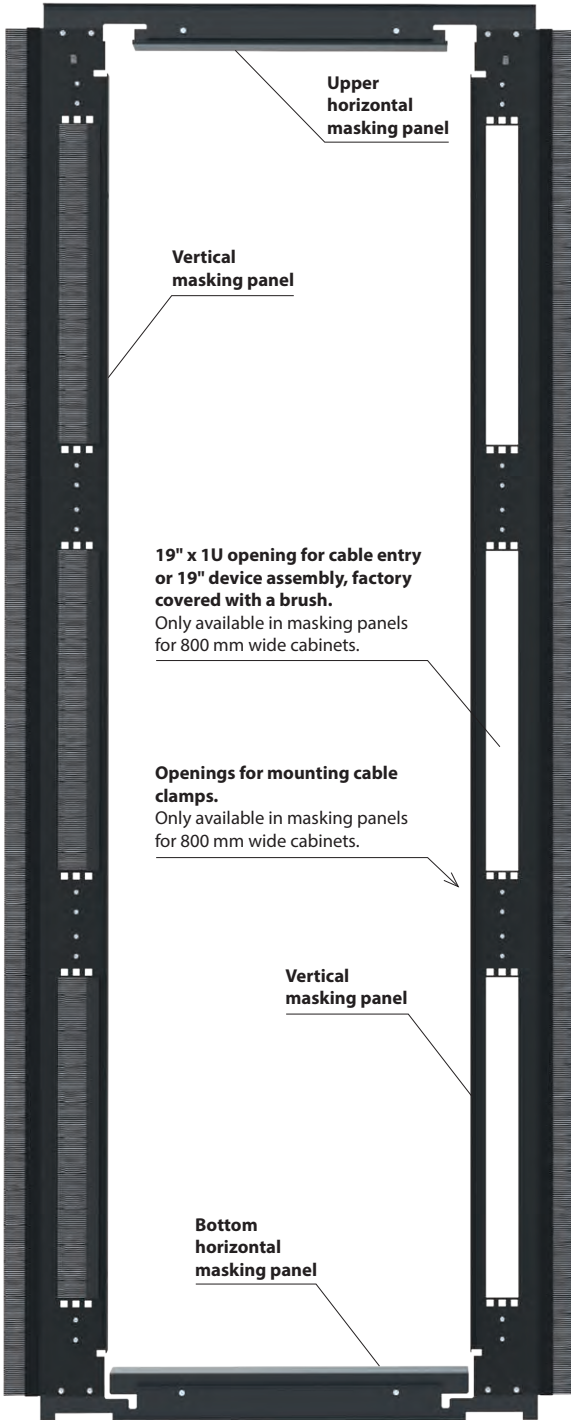
Scope of delivery
Partition panel with fixing accessories.

Note: Cabinet frame connectors are ordered separately - see page 17.

Z-SERVER 19" SERVER CABINETS

ACCESSORIES

Vertical and horizontal masking panels for 800 mm wide cabinets

Vertical masking panels

For sealing the area between the 19" space and the cabinet side panel. The panels prevent the recirculation of hot air to the front area of the cabinet, and increase the efficiency of air conditioning systems.

In case of 800 mm wide cabinets the panels include openings for cable clamps mounting and 19" x 1U brush cable entries, to which, if necessary, 19" equipment can be installed instead of brush.

Vertical masking panels are mounted on 19" mounting profiles without the use of tool.

Material
Sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Set of two vertical masking panels with fixing accessories.

For cabinet		Catalogue number	
height	width	RAL 7035	RAL 9005
42 U	600	WZ-8477-36-01-011	WZ-8477-36-01-161
	800	WZ-8477-36-04-011	WZ-8477-36-04-161
45 U	600	WZ-8477-36-02-011	WZ-8477-36-02-161
	800	WZ-8477-36-05-011	WZ-8477-36-05-161
47 U	600	WZ-8477-36-03-011	WZ-8477-36-03-161
	800	WZ-8477-36-06-011	WZ-8477-36-06-161

Package: 1 set (right and left masking panels)

Horizontal masking panels

For sealing the area between the 19" space and the top and bottom plate of the cabine. The panels prevent the recirculation of hot air to the front area of the cabinet, and increase the efficiency of air conditioning systems.

Horizontal masking panels are attached to the vertical masking panels.

Material
Sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Set of two horizontal masking panels with fixing accessories.

For cabinet		Catalogue number	
height	width	RAL 7035	RAL 9005
42 U	600	WZ-8477-37-01-011	WZ-8477-37-01-161
	800	WZ-8477-37-04-011	WZ-8477-37-04-161
45 U	600	WZ-8477-37-02-011	WZ-8477-37-02-161
	800	WZ-8477-37-05-011	WZ-8477-37-05-161
47 U	600	WZ-8477-37-03-011	WZ-8477-37-03-161
	800	WZ-8477-37-06-011	WZ-8477-37-06-161

Package: 1 set (upper and lower masking panels)
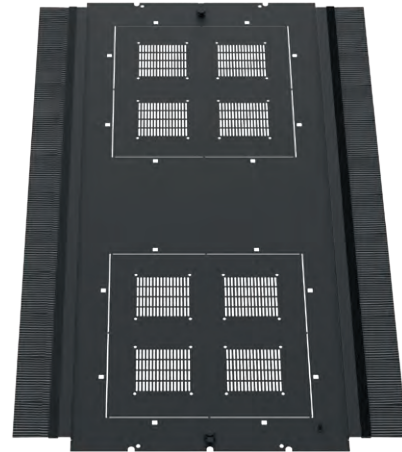
Brush strip for the top plate

Brush strip for attachment to a lateral edge of the upper plate after removing the knock-out blanking plate (see drawings of the upper plates on page 12).

Material
Black plastic.

Scope of delivery
Brush strip.

For cabinet depth	Catalogue number
1000	WZ-8477-57-01-000
1200	WZ-8477-57-02-000

Package: 1 pc.

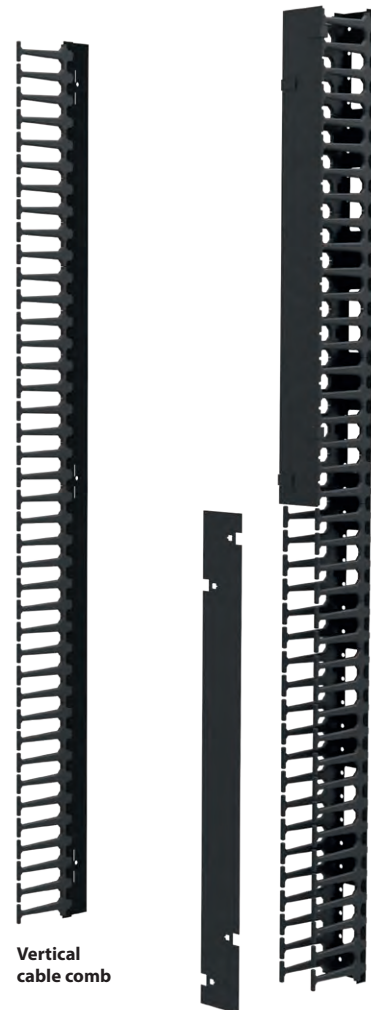**Z-SERVER cabinet top plate 800 x 1200 mm with brush strips**

Vertical cable comb

For 600 mm and 800 mm wide cabinets. To arrange cabling in the vertical direction. Mounted on a 19" mounting profile without the use of tool.

Material
Black plastic; sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Vertical cable comb with fixing accessories.

For cabinet height	Catalogue number	
	RAL 7035	RAL 9005
42 U	WZ-8477-39-01-011	WZ-8477-39-01-161
45 U	WZ-8477-39-02-011	WZ-8477-39-02-161
47 U	WZ-8477-39-03-011	WZ-8477-39-03-161

Package: 1 pc.

Vertical cable tray with cover

For 800 mm wide cabinets. For arranging high-density cabling in the vertical direction. Mounted on a 19" mounting profile without the use of tools.

Material
Black plastic; sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Vertical cable tray with cover and fixing accessories.

For cabinet height	Catalogue number	
	RAL 7035	RAL 9005
42 U	WZ-8477-38-01-011	WZ-8477-38-01-161
45 U	WZ-8477-38-02-011	WZ-8477-38-02-161
47 U	WZ-8477-38-03-011	WZ-8477-38-03-161

Package: 1 pc.

Vertical cable comb

Vertical cable tray with cover

F-rack
Systems AB

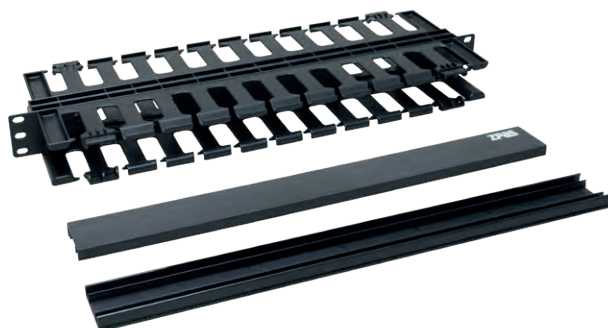# Z-SERVER 19" SERVER CABINETS

ACCESSORIES

T-SO-900-614

T-SO-900-615

T-SO-900-618

19" cable trays

Mounted between 19" mounting profiles.
Available in 1U and 2U heighs.
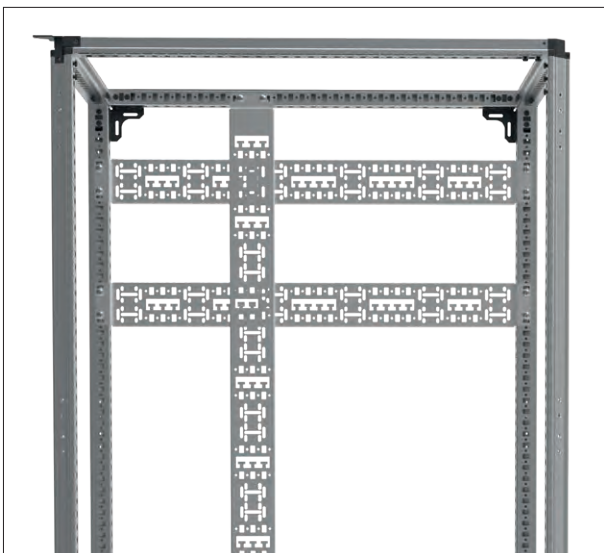For a detailed description see page 72.

Material
Black plastic.

Scope of delivery
Cable tray without fixing accessories.

Height	Catalogue number
1 U	T-SO-900-614
2 U	T-SO-900-615
1 U double	T-SO-900-618

Package: 1 pc.

Vertical and horizontal organizers

Intended for:
- arrangement of logical cabling,
- arrangement of power supply cables,
- mounting of power distribution strip and other accessories.
The organizers are mounted on the cabinet frame.
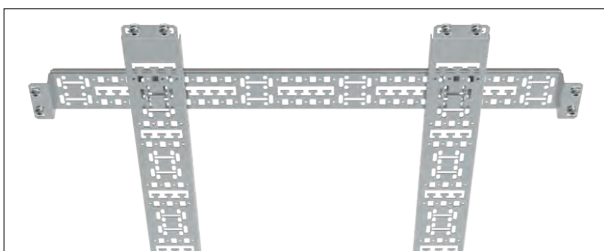
Material
Al-Zn coated sheet steel.

Scope of delivery
Vertical or horizontal organizer with fixing accessories.

Vertical organizer

For cabinet		Catalogue number
width	height	
800	42 U	WZ-8477-40-01-000
	45 U	WZ-8477-40-02-000
	47 U	WZ-8477-40-03-000

Package: 1 pc.

Horizontal organizer

For cabinet		Catalogue number
width	depth	
600 or 800	1000	WZ-8477-41-01-000
	1200	WZ-8477-41-02-000

Package: 1 pc.

Z-SERVER cabinets

DATA COMMUNICATION SOLUTIONS

FLOOR-STANDING CABINETS AND OPEN RACKS

Central mounting profile type PREMIUM for Z-SERVER cabinets

Mounted to the upper and lower of mounting profiles without the use of tool (see drawing on page 12).
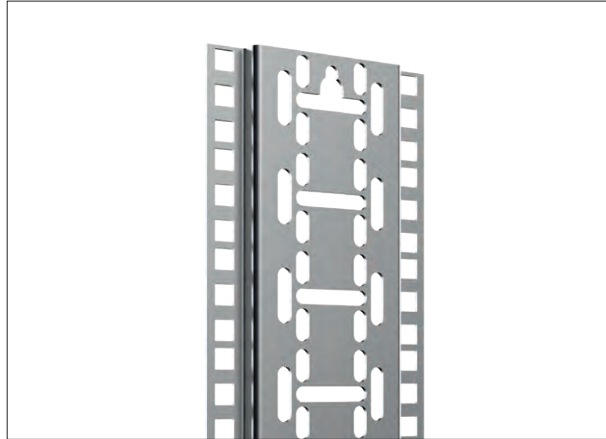
Material
Al-Zn coated sheet steel.

Scope of delivery
Central mounting profile with fixing accessories.

Height	Catalogue number
42 U	WZ-8477-49-01-000
45 U	WZ-8477-49-02-000
47 U	WZ-8477-49-03-000

Package: 1 pc.

Power strip brackets

Intended for vertical mounting ZPAS power strips (see page 90) onto mounting profiles or vertical arrangement pieces.
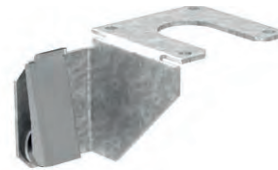
Tool-free mounting.

Material
Al-Zn coated sheet steel.

Scope of delivery
Bottom and top bracket with fixing accessories.

Package	Catalogue number
1 set	WZ-8477-48-00-000

Cabinet connection set

For baying Z-SERVER cabinets in row.
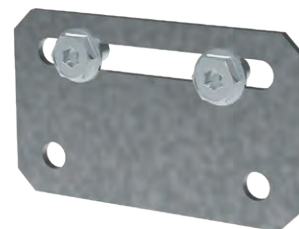One set is intended for baying two cabinets.

Material
Al-Zn coated sheet steel.

Scope of delivery
4 cabinet frame connectors with fixing accessories.

Package	Catalogue number
1 set	WZ-8477-51-01-000

F-rack
Systems AB

Z-SERVER 19" SERVER CABINETS

ACCESSORIES

Cold aisle installation

The **Z-SERVER BOX** solution physically separates the air distributed by air conditioners and the hot air generated by operating equipmen.

Z-SERVER BOX optimises the usability of the data centre infrastructure.

Z-SERVER cabinets

DATA COMMUNICATION SOLUTIONS

FLOOR-STANDING CABINETS AND OPEN RACKS

F-rack
Systems AB

SERVER CABINETS Z-SERVER 19"

Cold aisle sliding door

Manual sliding glass doors without a lock. Opened along the entire width of the aisle. Supplied with a roof masking panel and cabinet side panels.
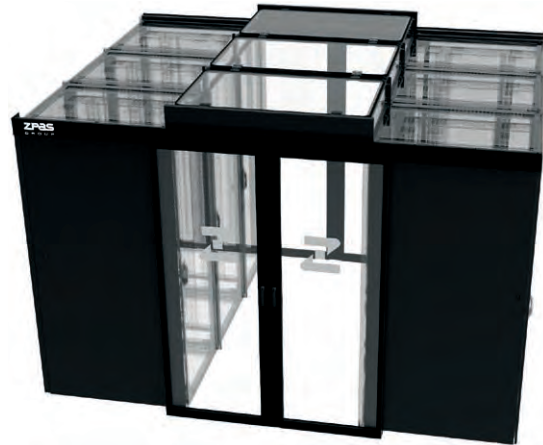
Material
Aluminium profiles; safety glass; sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Two sliding door leaves, two cabinet side panels, aisle roof masking panel, fixing accessories.

Automatic doors are also available.

For Data Box with cabinets		Catalogue number			
		Sliding door without self-closing device for 1200 mm wide aisle		Sliding door with self-closing device for 1200 mm wide aisle	
height	depth	RAL 7035	RAL 9005	RAL 7035	RAL 9005
42 U without feet	1000	WZ-8477-42-01-011	WZ-8477-42-01-161	WZ-8477-42-02-011	WZ-8477-42-02-161
	1200	WZ-8477-42-05-011	WZ-8477-42-05-161	WZ-8477-42-06-011	WZ-8477-42-06-161
45 U without feet	1000	WZ-8477-42-09-011	WZ-8477-42-09-161	WZ-8477-42-10-011	WZ-8477-42-10-161
	1200	WZ-8477-42-13-011	WZ-8477-42-13-161	WZ-8477-42-14-011	WZ-8477-42-14-161
47 U without feet	1000	WZ-8477-42-17-011	WZ-8477-42-17-161	WZ-8477-42-18-011	WZ-8477-42-18-161
	1200	WZ-8477-42-21-011	WZ-8477-42-21-161	WZ-8477-42-22-011	WZ-8477-42-22-161
42 U with feet	1000	WZ-8477-42-03-011	WZ-8477-42-03-161	WZ-8477-42-04-011	WZ-8477-42-04-161
	1200	WZ-8477-42-07-011	WZ-8477-42-07-161	WZ-8477-42-08-011	WZ-8477-42-08-161
45 U with feet	1000	WZ-8477-42-11-011	WZ-8477-42-11-161	WZ-8477-42-12-011	WZ-8477-42-12-161
	1200	WZ-8477-42-15-011	WZ-8477-42-15-161	WZ-8477-42-16-011	WZ-8477-42-16-161
47 U with feet	1000	WZ-8477-42-19-011	WZ-8477-42-19-161	WZ-8477-42-20-011	WZ-8477-42-20-161
	1200	WZ-8477-42-23-011	WZ-8477-42-23-161	WZ-8477-42-24-011	WZ-8477-42-24-161

Package: 1 set.

Cold aisle raised roof

Roof module with a height of 150 mm. The top transparent element of the module is tilt-mounted and can be installed without the use of tool.

Modular design simplifies expansion.

Material
Transparent plastic (polycarbonate); sheet steel powder paint, light grey (RAL 7035) or black (RAL 9005).

Scope of delivery
Roof module with fixing accessories.

For cabinet width	Catalogue number	
	RAL 7035	RAL 9005
600	WZ-8477-45-01-011	WZ-8477-45-01-161
800	WZ-8477-45-02-011	WZ-8477-45-02-161

Package: 1 pc.