

## SCHÄFER IT-Systems – The specialists for IT infrastructure







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SCHÄFER IT-Systems develops, designs and produces both standardised and customised data centre and watercooled server rack solutions, based on our company's extensive and futureorientated expertise. In addition, SCHÄFER also supplies an extensive range of rack solutions for network applications. A comprehensive, practice-based range of components and accessories rounds off our product portfolio.

#### SCHÄFER IT-Systems – Flexible in the extreme

Extreme flexibility, top-level service and advice, fast reaction times and permanent, close contact to our customers enable us to accomplish projects on time and at short notice. We have a large number of standard IT rack types permanently in stock that can be delivered ex works within 48 hours. Accessories and replacement parts can usually be delivered within 24 hours. We can even supply individually configured IT racks reliably and punctually within 5 to 10 working days. And we don't simply forget about you after your order has been fulfilled. We remain in contact with you and are of course available to you at all times in case you have any questions or suggestions.

#### SCHÄFER IT-Systems – part of a strong community

SCHÄFER IT-Systems is part of the internationally successful company SCHÄFER WERKE. The family-led group has its headquarters in Neunkirchen in Germany's Siegerland region. The work of all the SCHÄFER WERKE business divisions – SCHÄFER IT-Systems, SCHÄFER Industrial Solutions, SCHÄFER Interior Systems,



SCHÄFER Container Systems, SCHÄFER Perforated Metal, EMW Steel Service Centre – is based on high-quality fine steel sheet. The processing of this material is one of the core competencies of this enterprise.

The big PLUS for SCHÄFER IT-Systems

- + Products "Made in Germany"
- + All products with this label in Light Grey RAL 7035 belong to our Express range







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# SCHÄFER IT rack solutions – all the benefits at a glance

- Frame profile load-bearing capacity of up to 1000 kg
- Flexible extension and baying
- All types (SP20/SP54/PX) compatible for baying with each other

Protection classes up to IP54



IP54 protected

- Highest levels of locking security
- All-round accessibility

- Can be totally dismantled
- Server rack centre profiles and 3 mounting plane depth levels ensure variability
- Impact-proof powder coating in light grey or black
- Complete product range from high-end to economy solutions
- Cold / Warm aisle solutions
- Water-cooled server rack solutions







## SCHÄFER IT Racks – System comparison





SCHÄFER IT Rack solutions are as different as your needs and requirements! Two systems with a different focus in terms of security, internal design and air-conditioning, together provide the basis for a series of racks that, with the available equipment, meet your demands exactly.

#### SP20 Smart Profile

With two depth-adjustable 482,6 mm (19") planes, this practical rack is ideal for server rooms.

- Optimal accessibility
- Swinghandle with 2-point locking system
- Demountable
- Frame profiles with high load-bearing capacity of up to 1000 kg
- In RAL 7035 smooth finish or RAL 9005 fine structure



IP54 protected

#### SP54 Smart Profile Air-conditioning without limits

SP54 racks provide the best conditions for blending all relevant technologies into complete IT infrastructures. Each rack makes an important contribution to the physical security of your IT infrastructure and operates as the interface for ground-breaking air-conditioning concepts.

- IP54 protection rating
- Optimal accessibility
- Swinghandle with 4-point locking system
- Demountable
- Frame profiles with high load-bearing capacity of up to 1000 kg
- In RAL 7035 smooth finish or RAL 9005 fine structure

#### PX – The Excellence Range

The rack with the individual touch. Specially developed for price-conscious customers, these network racks are an interesting addition to SP20 racks, thanks to their new frame design.

- Optimal accessibility
- Swinghandle with 1-point locking system
- Demountable
- Frame profiles with high load-bearing capacity of up to 700 kg
- In RAL 7035 smooth finish
- Doors possible on all four sides

(I.



## Creating space and clarity for data networks and data centres – with rack solutions from SCHÄFER









The ergonomic, modern design of SCHÄFER's steel SP Racks (Smart Profile) is what makes them really outstanding. They are functional, easy to maintain, strong, easy to operate and offer long services lives. Available with protection ratings up to IP54 and as network or server racks, these models offer you great potential for achieving optimal protection for your IT facilities.

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#### SP Rack

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# Complete rack security with IP54 protected for reliable dismantling, extending and baying!



**Door opening:** stand alone 180°, baying 135°

The development of the SCHÄFER SP Rack System is the practiceoriented response to the permanently increasing demands placed on data, server and network technology.

Tailor-made standard, modular solutions are also an effective way of saving your time and money. In keeping with this principle, SCHÄFER IT-Systems has a wide product range on offer which also provides great scope for individual solutions:

- Pre-assembled complete racks in two standard colours as especially economic solutions, available at short notice
- Individually configured customised versions in all usual dimensions, delivered in the shortest possible time

Besides their modular design and flexibility, all SP Racks offer cutting edge advantages for users and comply with the latest international standards, IEC 297-1/2 (19") and IEC 917-2-1 (metric), as well as DIN EN 60721-3-3 and DIN 60068-1 (IEC 68-1). The multi-profiled basic frame is very strong and yet lightweight. Integrated 25 mm pitch patterns on all sides allow system accessories

Integrated 25 mm pitch patterns on all sides allow system accessories to be installed easily and economically.

## Baying solutions combining SP Racks with PX Racks are possible

Doors and side panels can be removed and replaced very quickly to guarantee all-round access. The rack's excellent one-colour design in either RAL 7035 (light grey) or RAL 9005 (black) blends harmoniously into any environment.



Useable internal dimensions between frame sections:

- 491 mm on racks with widths of 600 mm
- 591 mm on racks with widths of 700 mm
- 691 mm on racks with widths of 800 mm

External dimensions (without SW)

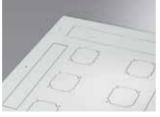
- 593 mm on racks with widths of 600 mm
- 693 mm on racks with widths of 700 mm
- 793 mm on racks with widths of 800 mm

The SP Rack consists of steel frame sections joined together by means of corner connectors. Dismantling can be carried out in a few simple moves, allowing the rack to be erected in any room without any difficulty

#### Flexible modules: fully assembled, variable and exchangeable, easy to extend.



Top cover panel with brush strip for easy cable entry



Brush strip and fans can be retrofitted optionally



Passively vented top cover panel provides mechanical protection combined with passive rack ventilation



Top cover panel with active fans and brush strip provide optimum rack ventilation while minimising noise emissions

#### Load bearing capacity of 19" mounting planes

With 2 depth stays	(per side)	max.	500 kg
With 3 depth stays	(per side)	max.	700 kg
With 4 depth stays	(per side)	max.	1000 kg
With 4 cross supports		max.	400 kg
With 1 additional depth stay	(per side)	max.	700 kg
With additional rectangular tube	(per plane)	max.	1000 kg
With 4 corner brackets	(per side)	max.	700 kg
With 2 bridges	(front/back)	max.	1000 kg

#### **Complete accessories:**

#### Clearly allocated and packaged ready to be installed

- Especially for upgrading or extension of the SP Rack
- General accessories for interior fitting, power supply etc.

#### Professional reliability and attractive design



The removable side panels are slotted into place, screwed fastened (quickfastening system) and secured by a lock. They can also be left in place to serve as partitioning walls in baying solutions



Front and back doors are equipped with pivoted handles and security lock, or can be exchanged for a profile half-cylinder or any other standard locking system on request

## SP20 Rack – Equipped for convenience and maximum security





- High-grade steel racks (light grey RAL 7035).
   Profile technology guarantees maximum stability
- Fully assembled with basic accessories
- Flexible interior designed to accommodate all currently available IT components
- Simple to assemble and disassemble all racks are "demountable"
- Accessible from all sides (removable doors and panels)
- Can be used as stationary or mobile units
- 100 % modular system, can be extended at any time
- Extremely strong frame with load bearing capacity of up to 1000 kg; higher load bearing capacities available on request

#### Material:

- Basic frame: 2.00 mm steel sheet, multi-profiled
- Doors: 1.25 mm steel sheet with multifolded edges and 3 mm single pane safety glass panel (front door only)
- Side panels: 1.00 mm steel sheet
- Plinth: 1.25 mm steel sheet
- Top/bottom cover panels:
   1.25 mm steel sheet
- 482.6 mm (19") mounting angles:
   2.00 mm steel sheet

#### Finish:

- Basic frame, doors, side panels, plinth, top/bottom covers: high-quality powder coating in light grey RAL 7035
- Installation kit for 482.6 mm (19") mounting angles: galvanised

#### Locking:

- Doors: standard pivoted handle with security lock, prepared for installation of a profile half cylinder or other standard lock, 2-point locking system
- Side panels: sash fastener with security lock, slot-in, quick-fastening system

#### International standards:

- IEC 297-1/2 (19")
- IEC 917-2-1 (metric)

#### SP20 Rack: complete racks for networks

#### 600 mm wide and 600 mm deep or 800 mm wide and 800 mm deep

Order no. Baying rack, no side panels, with baying kit folour code folour Vidth (mm) leight (mm) (inc. rollers or plinth) Pepth (mm) leight units (U) ype XPRESS Range cope of delivery asic frame	RAL 7035 light grey 600 1300 600 24 passive venting	RAL 7035 light grey 600 1300 600 24 active venting	6612850 RAL 7035 light grey 800 1300 800 24	6820880 RAL 7035 light grey 800 2100 800 42	6820890 RAL 7035 light grey 800 2100 800	6822890 RAL 7035 light grey 800 2200 800
olour Vidth (mm) leight (mm) (inc. rollers or plinth) Depth (mm) leight units (U) ype XPRESS Range cope of delivery	light grey 600 1300 600 24 passive venting	light grey 600 1300 600 24 active venting	light grey 800 1300 800	light grey 800 2100 800	light grey 800 2100 800	light grey 800 2200
Vidth (mm) leight (mm) (inc. rollers or plinth) Vepth (mm) leight units (U) ype XPRESS Range cope of delivery	600 1300 600 24 passive venting	600 1300 600 24 active venting	800 1300 800	800 2100 800	800 2100 800	800 2200
leight (mm) (inc. rollers or plinth) Depth (mm) leight units (U) ype XPRESS Range cope of delivery	1300 600 24 passive venting	1300 600 24 active venting	1300 800	2100 800	2100 800	2200
leight (mm) leight units (U) ype XPRESS Range cope of delivery	600 24 passive venting	600 24 active venting	800	800	800	
leight units (U) ype XPRESS Range cope of delivery	24 passive venting	24 active venting				800
ype XPRESS Range cope of delivery	passive venting	active venting	24	42		
XPRESS Range cope of delivery	1 3				42	46
cope of delivery		>e>		active venting	passive venting	
				>e>	>e>	
acia frama						
asic iranie	1	1	1	1	1	1
ront door (with safety glass panel)	1	1	1	1	1	1
teel rear door, solid			1	1	1	1
teel rear door, with passive ventilation	1	1				
noneycombe perforation, 81 % open area)	1	1				
ide panels, removable, with lock	2	2		2	2	
82.6 mm (19") mounting angles, front	2	2	2	2	2	2
82.6 mm (19") mounting angles, back			2	2	2	2
Pepth stay			4	4	4	6
op cover, single piece, solid	1					
op cover, single piece with brush strip, prepared for fans			1		1	1
pacers supplied)			1		1	1
op cover, single-piece, with brush strip,		1		1		
fans and connector cable		1		1		
ottom cover, single piece, with brush strip	1	1				
pen base section			1	1	1	1
linth, with passive ventilation and levelling feet, height: 100 mm			1	1	1	1
astors, 2 with arrestors	4	4				
profile rails (side panel installation)	1	1		2	2	
profile rails (rear panel installation)				2	2	
lso supplied						
arthing kit	1	1	1	1	1	1
16 cage nuts, 16 M6 screws, washers	50	50	50	50	50	50

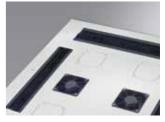
\*2 active fans (162m<sup>3</sup>/h, 45 dB(A))

#### **Recommended** accessories

- 482.6 mm (19") shelf
- Order no. 6550500
- 482.6 mm (19") 9-outlet Schuko PDU Order no. 7771000
- 482.6 mm (19") routing panel with 5 steel clamps
   Order no. 7979000



Top cover with brush strip for easy cable entry



Top cover with active fans and brush strip for optimal ventilation and minimal noise emission optional accessories

## SP54 Rack – Network Racks with IP54 protected







 High-grade steel rack (light grey RAL 7035, black RAL 9005).
 Profile technology guarantees maximum stability

- Fully assembled with basic accessories
- Flexible interior designed to accommodate all currently available IT components
- Simple to assemble and disassemble all racks are "demountable"
- Accessible from all sides (removable doors and panels)
- Can be used as stationary or mobile units
- 100 % modular system, can be extended at any time
- Extremely strong frame with load bearing capacity of up to 1000 kg; higher loadbearing capacities available on request
- Protection rating: IP54, circumferential seal

#### Material:

- Basic frame: 2.00 mm steel sheet, multi-profiled
- Doors: 1.25 mm steel sheet with multifolded edges and 3 mm single pane safety glass panel (front door only)
- Side panels: 1.00 mm steel sheet
- Plinth: 1.25 mm steel sheet
- Top/bottom cover panels:
   1.25 mm steel sheet
- 482.6 mm (19") mounting angles:
   2.00 mm steel sheet

#### Finish:

- Basic frame, doors, side panels, plinth, top/bottom covers: high-quality powder coating in light grey RAL 7035
- Installation kit for 482.6 mm (19") mounting angles: galvanised

#### Locking:

- Doors: swinghandle with security lock, prepared for installation of a profile half cylinder or other standard lock, 4-point locking system
- Side panels: screw-fastened

#### International standards:

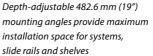
- IEC 297-1/2 486.2 mm, (19")
- IEC 917-2-1 (metric)

#### SP54 Rack: complete racks for networks

#### 800 mm wide and 800 mm deep

Order no. light grey, RAL 7035	6412170	6420190
Width (mm)	800	800
Height (mm) inc. plinth	1300	2100
Depth (mm)	800	800
Height units (U)	24	42
Scope of delivery		
Basic frame	1	1
Front door (with safety glass panel)	1	1
Steel rear door, solid	1	1
Side panels, screw-fastened, IP54	2	2
482.6 mm (19") mounting angles, front	2	2
482.6 mm (19") mounting angles, back		2
Depth stay	4	4
Top cover, single piece, solid	1	1
Bottom cover, single piece, with brush strip	1	1
Plinth, solid, with levelling feet, height: 100 mm	1	1
Also supplied		
Earthing kit	1	1
M6 cage nuts, 16 M6 screws, washers	50	50







Installation set for depth-adjustable installation of 482.6 mm (19") mounting angles

#### **Recommended** accessories

482.6 mm (19") shelf

Order no. 6550500

- 482.6 mm (19") 9-outlet Schuko PDU Order no. 7771000
- 482.6 mm (19") routing panel with 5 steel clamps Order no. 7979000

#### SP Complete Server Racks

# SP20 Rack – The server rack solution for depths of 900 mm



State-of-the-art rack solutions for all standard server and network components – even for combinations of components from different manufacturers

- Maximum assembly range: 900 mm deep, 600 mm wide
- Maximum security: slot-in side panels with lock, doors with swinghandle and lock
- Optimum ventilation (active or passive)
- Simple to assemble and disassemble all racks are "demountable"
- Mobile on rollers or with plinth
- 100 % modular system, can be extended at any time
- In light grey RAL 7035 or black RAL 9005, inc. accessories in black
- Extremely strong frame with load bearing capacity of up to 1000 kg; higher load bearing capacities available on request

#### Dimensions:

- Width: 600 mm
- Height without rollers: 1200 mm and 2000 mm
- Height with rack rollers: 1240 mm and 2040 mm
- Height with plinth: 1300 mm and 2100 mm
- Depth: 900 mm

#### Material:

- Basic frame: 2.00 mm steel sheet, multi-profiled
- Doors: 1.25 mm steel sheet with multi-folded edges and 3 mm single pane safety glass panel (front door only)
- Side panels: 1.00 mm steel sheet
- Plinth: 1.25 mm steel sheet
- Top/bottom cover panels:
  - 1.25 mm steel sheet
- 482.6 mm (19") mounting angles:2.00 mm steel sheet



#### Finish:

- Basic frame, doors, side panels, modules: high-quality powder coating in light grey RAL 7035 or black RAL 9005
- 482.6 mm (19") mounting angles: galvanised

#### Locking:

- Doors: standard swinghandle with security lock or other standard lock, 2-point locking system
- Side panels: sash fastener with safety lock, additionally screw fastened

#### International standards:

- IEC 297-1/2 482.6 mm (19")
- IEC 917-2-1 (metric)

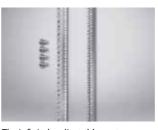
#### SP20 Rack: complete racks for servers

#### 600 mm wide and 900 mm deep or 800 mm wide and 900 mm deep

Order no. light grey, RAL 7035	6612920	6612940	6620930	6620960	6520960
Order no. black, RAL 9005 – fine structure	6612930		6620940	6620970	6520970
Width (mm)	600	600	600	600	800
Height (mm) inc. plinth or rollers	1240	1300	2040	2100	2100
Depth (mm)	900	900	900	900	900
Height units (U)	24	24	42	42	42
EXPRESS Range	>e>		>e>		>e>
Scope of delivery					
Basic frame	1	1	1	1	1
Front door (with safety glass panel)					1
Front door with passive ventilation	1	1	1	1	
Steel rear door, solid					1
Steel rear door with passive ventilation (honeycombe perforation, 81 % open area)		1	1	1	1
Side panels with lock, slot-in	2	2	2	2	2
482.6 mm (19") mounting angles, front	4	4	4	4	4
Depth stays	2	2	2	2	2
Top cover, single piece, with brush strip, two fans* and connector cable					1
Top cover, single piece, prepared for brush strip, 6 fan knock-outs	1	1	1	1	
Open base	1	1	1	1	1
Plinth, passive ventilation, height: 100 mm		1		1	1
Rollers and levelling feet	4		4		
Also supplied					
Earthing kit	1	1	1	1	1
M6 cage nuts, 16 M6 screws, washers	50	50	50	50	50
*2 active fans (162 m³/h ( .45 dB(A) ner fan )					

\*2 active fans (162 m<sup>3</sup>/h (, 45 dB(A) per fan )

only in light grey RAL 7035



The infinitely adjustable centre upright provides the central basis for the installation of all systems of differing depths optional accessories



Recommended accessories 482.6 mm (19") shelf

Order no. 6550500

- 482.6 mm (19") TFT console 17"
   Order no. 7545500
- Switchable 24-outlet C13 PDU Order no. 7771600

The door with complete passive ventilation ensures optimal air flow (honeycombe perforation, 81 % open area)

#### SP20 Rack system accessories (from page 70) and general system accessories (from page 88)

#### SP Rack Complete Server Racks

# SP20 Rack – The server rack solution for depths of 1000 mm





State-of-the-art rack solutions for all standard server and network components – even for combinations of components from different manufacturers

- Maximum assembly range: 1000 mm deep, 600 mm wide
- Maximum security: slot-in side panels with lock, doors with swinghandle and lock
- Mounting planes for installing components of various depths
- Optimum ventilation (active or passive)
- Simple to assemble and disassemble all racks are "demountable"
- Completely assembled with basic accessories
- Extremely strong frame with load bearing capacity of up to 1000 kg, higher load bearing capacities available on request

#### Dimensions:

- Width: 600 mm and 800 mm
- Height without rollers: 1200 mm and 2000 mm
- Height with rack rollers: 1240 mm and 2040 mm
- Height with plinth: 1300 mm and 2100 mm
- Depth: 1000 mm

#### Material:

- Basic frame: 2.00 mm steel sheet, multi-profiled
- Doors: 1.25 mm steel sheet with multi-folded edges and 3 mm single pane safety glass panel (front door only)
- Side panels: 1.00 mm steel sheet
- Plinth: 1.25 mm steel sheet
- Top/bottom cover panels: 1.25 mm steel sheet
- 482.6 mm (19") mounting angles:
   2.00 mm steel sheet

#### Finish:

- Basic frame, doors, side panels, modules: high-quality powder coating in light grey RAL 7035 or black RAL 9005
- 482.6 mm (19") mounting angles: galvanised

#### Locking:

- Doors: standard pivoted handle with security lock or other standard lock,
   2-point locking system
- Side panels: sash fastener with safety lock

#### International standards:

- IEC 297-1/2 482.6 mm (19")
- IEC 917-2-1 (metric)

#### SP20 Rack: complete racks for servers

#### 600 mm wide and 1000 mm deep, 800 mm wide and 1000 mm deep

······································							
Order no. light grey, RAL 7035	6612150	6612170	6620120	6620160	6820130	6820150	6820190
Order no. black, RAL 9005 – fine structure	6612160	6612180	6620140	6620180	6820140	6820160	
Width (mm)	600	600	600	600	800	800	800
Height (mm) inc. plinth or rollers	1240	1300	2100	2040	2100	2100	2000
Depth (mm)	1000	1000	1000	1000	1000	1000	1000
Height units (U)	24	24	42	42	42	42	42
EXPRESS Range	>e>				>e>		
Scope of delivery							
Basic frame	1	1	1	1	1	1	1
Front door with safety glass panel					1		
Steel rear door, solid					1		
Steel front door with passive ventilation	1	1	1	1		1	1
(honeycombe perforation, 81 % open area)	I	I	I	I		I	I
Steel rear door with passive ventilation	1	1	1	1		1	1
(honeycombe perforation, 81 % open area)	I	I	I	I		I	I
Side panels, with lock, slot-in	2	2	2	2	2	2	2
482.6 mm (19") mounting angles, front/rear	4	4	4	4	4	4	4
Depth stays	2	2	2	2	4	4	4
Top cover, single piece, with brush strip, two fans* and connector cable						1	
Top cover, single piece, with brush strip, prepared for fans	1	1	1	1		1	1
Open base	1	1	1	1	1	1	1
Plinth, with passive ventilation, levelling feet, height: 100 mm		1	1		1	1	
Rollers and levelling feet	4			4			
Also supplie							
Earthing kit	1	1	1	1	1	1	
M6 cage nuts, 16 M6 screws, washers	50	50	50	50	50	50	
*2 active fanc (162 m2/b ( 4E dP (A) nor fan )							

\*2 active fans (162 m3/h (, 45 dB (A) per fan )

Only in light grey RAL 7035



The infinitely adjustable centre upright provides the central basis for the installation of all systems of differing depths optional accessories



The door with complete passive ventilation ensures optimal air flow (honeycombe perforation, 81 % open area)

#### **Recommended** accessories

482.6 mm (19") pull-out shelf Order no. 6758500

- 482.6 mm (19") TFT console 17" Order no. 7545500
- 482.6 mm (19") routing panel with 5 steel clamps Order no. 7979000

SP20 Rack system accessories (from page 70) and general system accessories (from page 88)

Light grey RAL 7035











IP54 protected

State-of-the-art rack solutions for all standard server and network components – even for combinations of components from different manufacturers

- Maximum assembly range: 900 1000 mm deep, 600 – 800 mm wide
- Maximum security: side panels screw-fastened, doors with swinghandle and lock
- Circumferential seals
- Simple to assemble and disassemble all racks are "demountable"
- With plinth
- In light grey RAL 7035
- Extremely strong frame with load bearing capacity of up to 1000 kg; higher load bearing capacities available on request
- IP54 protected

#### Dimensions:

- Width: 600 mm, 800 mm
- Height without plinth: 1200 mm and 2000 mm
- Depth: 900 mm and 1000 mm

#### Material:

- Basic frame: 2.00 mm steel sheet, multiprofiled
- Doors: 1.25 mm steel sheet with multifolded edges and 3 mm single pane safety glass panel (front door only)
- Side panels: 1.00 mm steel sheet
- Plinth: 1.25 mm steel sheet
- Top/bottom cover panels:
   1.25 mm steel sheet
- 482.6 mm (19") mounting angles:
   2.00 mm steel sheet

#### Finish:

- Basic frame, doors, side panels, modules: high-quality powder coating in light grey RAL 7035
- 482.6 mm (19") mounting angles: galvanised

#### Locking:

- Doors: standard swinghandle with security lock or other standard lock, 4-point locking system
- Side panels: screw fastened

#### International standards:

- IEC 297-1/2 482.6 mm (19")
- IEC 917-2-1 (metric)

#### SP54 Rack: complete racks for servers

#### 600 mm wide and 1000 mm deep, 800 mm wide and 900 mm deep or 800 mm wide and 1000 mm deep

···· ···· ···· ···· ···· ····				
Order no. light grey, RAL 7035	6412120	6420200	6420120	6420150
Width (mm)	600	800	600	800
Height (mm) inc. plinth	1300	2100	2100	2100
Depth (mm)	1000	900	1000	1000
Height units (U)	24	42	42	42
Scope of delivery				
Basic frame	1	1	1	1
Front door with safety glass panel	1	1	1	1
Steel rear door, solid	1	1	1	1
Side panels, screw-fastened, IP54	2	2	2	2
482.6 mm (19") mounting angles at front and rear	4	4	4	4
Depth stay	2	2	2	2
Top cover, single piece, solid	1	1	1	1
Bottom cover, single piece, with brush strip	1	1	1	1
Plinth, solid, with levelling feet, height: 100 mm	1	1	1	1
Also supplied				
Earthing kit	1	1	1	1
M6 cage nuts, 16 M6 screws, washers	50	50	50	50





Depth adjustable 482.6 mm (19") mounting angles offer maximum space for installing systems, sliding rails and shelves

The infinitely adjustable centre upright provides the central basis for the installation of all systems of differing depths optional accessories

#### **Recommended** accessories

482.6 mm (19")shelf, fixed Order no. 6550600

- 24-outlet C 13 power strip Order no. 7771630
- Side partition panel for heights of 2000 mm Order no. 6782420

#### sound-deadened + dust protected IT Enclosures

### SP54 – based IT Enclosures, Standard and Comfort





#### **IT Enclosures**

Basic frame with removable side-panels and glazed front door – single pane safety glass –, active ventilation and thermostat, sound insulation and mounted on castors for mobility.

- Standard: with shelves
- **Comfort:** with complete 19"-system installation (24 or 37 U)

Work stations in separate locations are increasingly being linked together in networks. SCHÄFER IT racks provide the ideal basis for IT infrastructures.

With this elaborate concept, which allows the installation of any IT components, such as servers, hubs, routers, switches and their wiring both for desktops and towers as well as for 482.mm (19") formats, a central enclosure can become the junction for the connection of numerous work stations. All IT Enclosures consist of a basic frame, on which side panels, front glazed door and sheet steel rear wall can all be detached to guarantee free access for installation and maintenance. Swinghandle with security locks prevent unauthorised access. There are two fans mounted in the roof plate (can be extended to four if required. Installation holes are available) with a thermostat to counter thermal problems right from the outset. All IT Enclosures are provided with sound insulation (approx. 39 dB (A) for 2 fans).

#### Material:

- Basic rack: 2.00 mm sheet steel
- Doors: 1.25 sheet steel
- Glass: 3 mm single pane safety glass (SPSG)
- Side panels: 1.00 mm steel sheet
- Top/bottom cover panels: 1.25 mm steel sheet

#### Finish:

- Basic frame, doors, side panels, modules: high-quality powder coating in light grey RAL 7035
- 482.6 mm (19") mounting angles: galvanised

#### Locking:

- Doors: standard swinghandle with security lock or other standard lock, 4-point locking system
- Side panels: sash fastener with safety lock, additionally screw fastened

#### Useable internal dimensions:

- Rack height 24 U:
   (W x H x D) 491 x 1091 x 980 mm
- Rack height 37 U:
   (W x H x D) 491 x 1691 x 980 mm





Retrofit ventilation kit with two fans, protective grille, cabling and fixing accessories Order no. 7719300

Comfort with 482.6 mm (19") components

#### IT Enclosures

Туре		Standard	Comfort	Comfort
Order no.	6481000	6481500	6482000	6482500
U	24 U	24 U	37 U	37 U
External dimensions in mm (W x H x D)	600 x 1360 x 1000	600 x 1960 x 1000	600 x 1360 x 1000	600 x 1960 x 1000
Basic model				
Enclosure frame with side panels	1	1	1	1
Glazed front door with 3 mm single-pane safety glass and swinghandle	1	1	1	1
Rear wall	1	1	1	1
19" mounting angle, front			2	2
19" mounting angle, rear			2	2
Shelves, depth 500 mm, fixed installation	2	3		
Castors, 2 locking	4	4	4	4
C-profile rails (mounted depth-wise)	2	2	2	2
Top cover panel with 2 active fans* with temperature regulator	1	1	1	1
inc. noise reduction, mains cable	I	I	I	I
Bottom cover panel, multi-piece, with rubber membrane aperture and	1	1	1	1
passively vented module with filter matting	1	1	1	1
Earthing kit supplied	1	1	1	1
*2 active fans (nor fan $162/19Em^3/h$ at $42 dP(\Lambda)$ )				

\*2 active fans (per fan 162/185m<sup>3</sup>/h at 43 dB (A) )

Т.

## Configurator for 600 mm racks

#### Customised configuration of your own rack

- **1** Determine basic frame dimensions (width, height, depth)
- **2** Select doors, 19"mounting angles, side panels and plinth
- **3** Choose top cover panel
- 4 Choose bottom cover panel

Completely assembled to your specifications, the rack will be delivered in the shortest possible time.

System accessories can be found from pages 70 and 88!



single wing, cloosed

Sheet steel door, double wing, cloosed



#### IP54 protected

#### **1** Basic Frame, 600 mm width

Width (mm)	600	600	600	600	600	600	600	600	600	600	600	600
Height (mm)	1200	1200	1200	1200	1800	2000	2000	2000	2000	2000	2200	2200
Depth (mm)	600	800	900	1000	900	600	800	900	1000	1200	1000	1200
Internal height (U)	24	24	24	24	37	42	42	42	42	42	46	46
Colour, light grey RAL 7035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035
Colour, black RAL 9005 – fine structure	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005
Basic framework	6612605	6612805	6612905	6611005	6618905	6620605	6620805	6620905	6621005	6621205	6622105	6622125

#### **2** Doors, 19" mounting angles, side panels and plinth

Glass door, single wing, with 3 mm ESG	6980505	6980505	6980505	6980505	6982505	6983505	6983505	6983505	6983505	6983505	6935505	6935505
Sheet steel door, single wing, cloosed	6985005	6985005	6985005	6985005	6987005	6988005	6988005	6988005	6988005	6988005	6936505	6936505
Sheet steel door, double wing, with 3 mm ESG						6756005	6756005	6756005	6756005	6756005	6759005	6759005
Glass door, single wing, with 3 mm ESG, passive ventilation	6990005	6990005	6990005	6990005		6990505	6990505	6990505	6990505	6990505		
Sheet steel door, single wing, passive ventilation (honeycomb perforation, 81 % open area)	6989005	6989005	6989005	6989005	6994005	6989505	6989505	6989505	6989505	6989505	6937505	6937505
Glass door, single wing, with 3 mm ESG, IP 54	6980506	6980506	6980506	6980506		6983506	6983506	6983506	6983506	6983506		
Sheet steel door, single wing, cloosed, IP 54	6985006	6985006	6985006	6985006		6988006	6988006	6988006	6988006	6988006		
Sheet steel door, double wing						6988005	6988005	6988005	6988005	6988005		
Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)						6956105	6956105	6956105	6956105	6956105	6957105	6957105
482.6 mm (19") mounting angle, front	6783505	6783505	6783505	6783505	6784505	6785005	6785005	6785005	6785005	6785005	6780505	6780505
482.6 mm (19") mounting angle, front and rear	6783515	6783515	6783515	6783515	6784515	6785015	6785015	6785015	6785015	6785015	6780515	6780515
482.6 mm (19") mounting angles, front, middle and rear			6778005	6778005	6777005	6778505	6778505	6778505	6778505	6778505		
Mounting bracket for 482.6 mm (19") angles, front	6727005	6727005	6727005	6727005	6727005	6727005	6727005	6727005	6727005	6727005	6727005	6727005
Mounting bracket for 482.6 mm (19") angles, front and rear	6728005	6728005	6728005	6728005	6728005	6728005	6728005	6728005	6728005	6728005	6728005	6728005
Mounting bracket for 482.6 mm (19") angles, front, middle and rear		6729005	6729005	6729005	6729005	6729005	6729005	6729005	6729005	6729005		
Depth stays for 482.6 mm (19") angles, (4)	6751005	6752005	6753005	6754005	6753005	6751005	6752005	6753005	6754005	6755005	6754005	6755005
Side panels, slot-in (2)	6732005	6932005	6736005	6733005	6734005	6735005	6935005	6737005	6739005	6740005	6738105	6741065
Side panels, screw-fastened, IP54 (2)		6932006	6736006	6733006		6735006	6935006	6737006	6739006	6740006	6742006	6741006
Plinth, with passive ventilation, levelling feet, height 100 mm	6721005	6722005	6726005	6722505	6726005	6721005	6722005	6726005	6722505	6728505	6722505*	6728505*
Plinth, solid, with levelling feet, height 100 mm	6723005	6724005	6725005	6723505	6725005	6723005	6724005	6725005	6723505	6727505	6723205*	6727505*

\* Plinth unassembled



with 3 mm SPSG,

passive ventilation



Glass door, single wing, with 3 mm SPSG



Glass door, double wing, with 3mm SPSG



Sheet steel door, single wing, passive ventilation (honeycomb perforation, 81% open area)



Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)

#### **3** Top cover panels

	IP54, one-piece solid	
Depth	Width 600	
600	6705015	
800	6715015	
900	6720015	
1000	6730015	
1200	6740015	

880 8880



cable brush supplied, 4 fans, assembled

Depth	Width 600
600	6705055
800	6715075
900	6720075
1000	6720135
1200	6720145

#### 4 Bottom cover panels



Multi-piece, solid

	i muni-piece,
Depth	Width 600
600	6615055
800	6615085
900	6620055
1000	6606105
1200	6606205
	1
-	

IP54 single-piece,
with IP cable entry

Depth	Width 600
600	-
800	-
900	-
1000	6815056
1200	6816056

One-piece, with brush strip Depth Width 600 600 6720095 800 6720105

900

10

1000	0/30105	
1200	6740105	
Ποοο	One-piece,	prepared for

6720115

----

cable brush supplied, 000 6 knockouts for fans

Width 600
6705065
6715065
6720065
6720125
6720255

	Multi-piece	e, with brush
Depth	Width 600	
600	6605035	

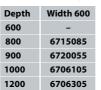
Depth	Width 600
600	6605035
800	6615035
900	6620035
1000	6606505
1200	6607505

#### One-piece with passive ventilation

Depth Width 600 600 6705035 6715035 800 6720035 900 1000 6730035



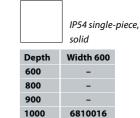
One-piece, prepared for cable brush supplied, and large fan



Single-piece, with passive ventilation

Depth	Width 600
600	6605025
800	6615025
900	6620025
1000	-





epth	Width 600
00	-
00	-
00	-
000	6810016

One-piece, 800 cable brush supplied, ⊠00

	2 fans, assembled
Depth	Width 600
600	6705045
800	6715045
900	6720045
1000	6706705
1200	6707705

П.

## Configurator for 700 mm racks

#### Configure your own customised rack

- **1** Determine basic frame dimensions (width, height, depth)
- **2** Select doors, 19" mounting angles, side panels and plinth
- **3** Choose top cover panel
- 4 Choose bottom cover panel

Completely assembled to your specifications, the rack will be delivered in the shortest possible time.

System accessories can be found from pages 70 and 88!



#### IP54 protected

#### **1** Basic Frame, 700 mm width

Width (mm)	700	700	700	700
Height (mm)	2000	2000	2200	2200
Depth (mm)	1000	1200	1000	1200
Internal height (U)	42	42	46	46
Colour, light grey RAL 7035	6007035	6007035	6007035	6007035
Colour, black RAL 9005 – fine structure	6009005	6009005	6009005	6009005
Basic framework	6521005	6521205	6522005	6522205

#### **2** Doors, 19" mounting angles, side panels and plinth

Glass door, single wing, with 3 mm ESG	6583505	6583505	6535505	6535505
Sheet steel door, single wing, cloosed	6588005	6588005	6537005	6537005
Sheet steel door, single wing, passive ventilation (honeycomb perforation, 81 % open area)	6594505	6594505	6595505	6595505
Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)	6556005	6556005	6557005	6557005
482.6 mm (19") mounting angle, front	6783005	6783505	6783505	6783505
482.6 mm (19") mounting angle, front and rear	6783015	6783515	6783515	6783515
Cross supports for 482.6 mm (19") angles, front, for symmetrical installation	6543005	6543005	6543005	6543005
Cross supports for 482.6 mm (19") angles, front and rear, for symmetrical installation	6543505	6543505	6543505	6543505
Depth stays for 482.6 mm (19") angles, (4), for asymmetrical installation,	6744005	6745005	6744005	6745005
(both order numbers must be given)	6946305	6946405	6946305	6946405
Bridge for 482.6 mm (19") angles, front, for symmetrical installation	6943315	6943315	6943315	6943315
Bridge for 482.6 mm (19") angles, front and rear, for symmetrical installation	6943325	6943325	6943325	6943325
Depth stays for 482.6 mm (19") angles, (6), for symmetrical installation	6554005	6554505	6554005	6554505
Side panels, screw-fastened, IP54 (2)	6739006	6740006	6742006	6741006
Plinth, with passive ventilation, levelling feet, height 100 mm	6522505	6521505	6522505	6521505
Plinth, solid, with levelling feet, height 100 mm	6523505	6524505	6523505	6524505



Sheet steel door, single wing, cloosed



double wing, cloosed



Glass door, single wing, with 3 mm SPSG



Glass door, double wing, with 3mm SPSG



Sheet steel door, single wing, passive ventilation (honeycomb perforation, 81% open area)



Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)

#### **3** Top cover panels

IP54, one-piece, solid Depth Width 700

6530015

6540015

One-piece, cable brush supplied, (3 ca Depth Widt

h 700	Depth
able entries)	
le brush supplied,	1000

One-piece, prepared for cable brush supplied, (3 cable entries) 6 knockouts for fans

Depth	Width 700
1000	6520125
1200	6520225

ept 1000

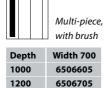
1000 6530115 1200 6540115 4 Bottom cover panels

Multi-piece,

1000

1200

solid Depth Width 700 1000 6506205 1200 6506305





Т.

## Configurator for 800 mm racks

#### Configure your own customised rack

- **1** Determine basic frame dimensions (width, height, depth)
- **2** Select doors, 19" mounting angles, side panels and plinth
- **3** Choose top cover panel
- 4 Choose bottom cover panel

Completely assembled to your specifications, the rack will be delivered in the shortest possible time.

#### System accessories can be found from pages 70 and 88!



single wing, cloosed

Sheet steel door, double wing, cloosed

#### **1** Basic Frame, 800 mm width

IP54 protected

Width (mm)	800	800	800	800	800	800	800	800	800	800	800	800
Height (mm)	1200	1200	1200	1800	1800	2000	2000	2000	2000	2200	2200	2200
Depth (mm)	600	800	900	800	900	800	900	1000	1200	800	1000	1200
Internal height (U)	24	24	24	37	37	42	42	42	42	46	46	46
Colour, light grey RAL 7035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035	6007035
Colour, black RAL 9005 – fine structure	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005	6009005
Basic framework	6812605	6812805	6812905	6818805	6818905	6820805	6820905	6821005	6823005	6822805	6822005	6822205

#### **2** Doors, 19" mounting angles, side panels and plinth

			_									
Glass door, single wing, with 3 mm ESG	6981005	6981005	6981005	6983005	6983005	6984005	6984005	6984005	6934005	6936005	6936005	6936005
Sheet steel door, single wing, cloosed	6985505	6985505	6985505	6987505	6987505	6988505	6988505	6988505	6988505	6937005	6937005	6937005
Sheet steel door, double wing, cloosed	6955005	6955005	6955005			6958005	6958005	6958005	6958005	6959005	6959005	6959005
Glass door, double wing, with 3 mm ESG,						6958505	6958505	6958505	6958505	6956005	6956005	6956005
Glass door, single wing, with 3 mm ESG, passive ventilation	6997505	6997505	6997505			6998505	6998505	6998505	6998505			
Glass door, single wing, with 3 mm ESG, IP 54	6981006	6981006	6981006			6984006	6984006	6984006	6984006	6936006	6936006	6936006
Sheet steel door, single wing, cloosed, IP 54	6985506	6985506	6985506			6988506	6988506	6988506	6988506	6937506	6937506	6937506
Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)						6956505	6956505	6956505	6956505	6958055	6958055	6958055
Sheet steel door, single wing, passive ventilation (honeycomb perforation, 81 % open area)	6993005	6993005	6993005	6995005	6995005	6994505	6994505	6994505	6994505	6938005	6938005	6938005
482.6 mm (19") mounting angle, front	6783505	6783505	6783505	6784505	6784505	6785005	6785005	6785005	6785505	6780505	6780505	6780505
482.6 mm (19") mounting angle, front and rear	6783515	6783515	6783515	6784515	6784515	6785015	6785015	6785015	6785015	6780515	6780515	6780515
482.6 mm (19") mounting angles, front, middle and rear		6778005	6777005	6777005	6777005	6778505	6778505	6778505	6778505			
Cross support for 482.6 mm (19") angles, front	6943005	6943005	6943005	6943005	6943005	6943005	6943005	6943005	6943005	6943005	6943005	6943005
Cross support for 482.6 mm (19") angles, front and rear	6943505	6943505	6943505	6943505	6943505	6943505	6943505	6943505	6943505	6943505	6943505	6943505
Cross support for 482.6 mm (19") angles, front, middle and rear	6943605	6943605	6943605	6943605	6943605	6943605	6943605	6943605	6943605	6943605	6943605	6943605
Bridge for 482.6 mm (19") angles, front	6943285	6943285	6943285	6943285	6943285	6943285	6943285	6943285	6943285	6943285	6943285	6943285
Bridge for 482.6 mm (19") angles, front and rear	6943215	6943215	6943215	6943215	6943215	6943215	6943215	6943215	6943215	6943215	6943215	6943215
Corner brackets for 482.6 mm (19") angles, front (4)	6943705	6943705	6943705	6943705	6943705	6943705	6943705	6943705	6943705	6943705	6943705	6943705
Corner brackets for 482.6 mm (19") angles, front and rear (8)	6943805	6943805	6943805	6943805	6943805	6943805	6943805	6943805	6943805	6943805	6943805	6943805
Corner brackets for 482.6 mm (19") angles, front, middle and rear (12)	6943905	6943905	6943905	6943905	6943905	6943905	6943905	6943905	6943905	6943905	6943905	6943905
Depth stays for 482.6 mm (19") angles, (4)	6941005	6952005	6953005	6952005	6953005	6952005	6953005	6954005	6954505	6952005	6954005	6954005
Heavy duty rectangular tube extension (1)	6943105	6943105	6943105	6943105	6943105	6943105	6943105	6943105	6943105	6943105	6943105	6943105
Side panels, slot-in (2)	6732005	6932005	6736005	6934005	6734005	6935005	6737005	6739005	6740005	6738005	6738105	6741065
Side panels, screw-fastened, IP54 (2)	6741006	6932006				6935006	6737006	6739006	6740006	6742006		6741006
Plinth, with passive ventilation, levelling feet, height 100 mm	6921005	6922005	6926005	6922005	6926005	6922005	6926005	6922505	6921505	6922005*	6922505*	6921505*
Plinth, solid, with levelling feet, height 100 mm	6923005	6924005	6925005	6924005	6925005	6924005	6925005	6923505	6924505	6924005*	6923505*	6924505 <sup>,</sup>
Plinth, with passive ventilation, levelling feet, height 200 mm		6922205	6926205	6922205	6926205	6922205*	6926205*	6928205*	6921205*	6922205*	6928205*	6921205*
Plinth, solid, with levelling feet, height 200 mm		6924205	6925205	6924205	6925205	6924205*	6925205*	6923205*	6927205*	6924205*	6923205*	6927205 <sup>*</sup>

\*plinth supplied, not assembled





Glass door, single wing, with 3 mm SPSG, passive ventilation

Glass door, single wing, with 3 mm SPSG



Glass door, double wing, with 3 mm SPSG



Sheet steel door, single wing, passive ventilation (honeycomb perforation, 81% open area)



Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)

## **3** Top cover panels

IP54, one-piece, solid

one-piece,

Depth	Width 800
600	6905015
800	6915015
900	6920015
1000	6930015
1200	6940015

ومور 000

6 knockouts for fans			
Depth	Width 800		
600	6905065		
800	6915065		
900	6920065		
1000	6920125		
1200	6920225		

#### 4 Bottom cover panels

	multi-piece, solid
Depth	Width 800
600	6815055
800	6815085
900	6820055
1000	6806205
1200	6806305

IP54 single-piece,
with IP cable entry

Depth	Width 800
600	-
800	6820106
900	6820036
1000	6806606
1200	6807606

epth	Width 800	
<u> </u>	one-piece, with brush :	strip

Depth	Width 800
600	6920095
800	6920105
900	6920115
1000	6930115
1200	6940115

multi-piece,

with brush Width 800

6805035

6815035

6820035

6806605

6806705

Depth

600

800

900 1000

1200

cable brush supplied, (3 cable entries)



Depth

600

800

900 1000 6915025 6920025 6930025 6940025

one-piece

with passive

ventilation

Width 800

6905025

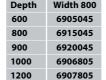
one-piece, prepared for brush strip (supplied),

<u> </u>	and large fan	
Depth	Width 800	
600	-	
800	6915085	
900	6920055	
1000	6906205	
1200	6906305	

	single-piece, with passive ventilation	
Depth	Width 800	
600	6805025	
800	6815025	
900	6820025	
1000	_	

	IP54 single- solid	piece
Depth	Width 800	
600	-	
800	6815016	
900	6820016	
1000	6800606	

one-piece, cable brush supplied, 800 (3 cable entries) 800 2 fans, assembled



Width 800 Depth

one-piece, cable brush supplied, 880 (3 cable entries) 880 4 fans, assembled

Depth	Width 800
600	6905055
800	6915075
900	6920075
1000	6920135
1200	6920145



## The Excellence Range – PX Racks from SCHÄFER







In this range, SCHÄFER offers classic network rack solutions and server racks in depths of 800 and 1000 mm and widths of 600 and 800 mm. Customers have the choice between extremely low-priced complete racks as convenient basic versions or solutions with rear doors.

PX Rack	
PX Excellence Range	34
PX Rack Complete Racks	36
PX Rack Configurator	38





#### PX Rack Range

## PX Rack – The Excellence Range



customers, provide interesting additions to the standard SP Rack range, thanks to their new frame design. In this range, SCHÄFER can offer the classical network rack solutions as well as server racks in depths of 800 and 1000 mm and widths of 600 and 800 mm. The customer has the

choice between extremely low-cost complete racks, which represent the basic, easy-to-use designs (with rear wall), or solutions including a rear door.

## Many of the complete racks can be delivered ex works.

In addition to complete racks, fully customised configurations are also possible, providing the perfect basis for specific projects.

The PX Rack also has the same important assembly benefits – such as the capability of **"halving" the frame** – that make all SCHÄFER racks so outstanding. This allows easy installation in any location and the rack can be assembled and mounted by one person working alone.

## The frame is extremely strong, with a load-bearing capacity of up to 700 kg. The efficiently designed interior allows 43 height units (U) to be used in the classic two metre PX Rack!

PX Racks can also be bayed together with SP Racks.

#### **Economical project solutions:**

PX Racks offer especially good-value project solutions for baying racks.

Standard network technology system accessories can also be used for PX Racks.

#### Load-bearing capacity of the 19" planes:

- 2 19" installation kits = 400 kg
- 3 19" installation kits = 600 kg
- 4 19" installation kits = 700 kg

#### New:

Doors can be installed on all 4 sides!



The sophisticated frame design enables doors to be mounted on all four sides of the PX Rack; SP Rack doors can also be used as surfacemounted doors

#### PX Rack – top cover



For 800 mm widths, it has 6 knockouts for fans and 3 for cable entry. For 600 mm widths, it has 6 knockouts for fans and 1 for cable entry

PX Rack – cladding elements



Doors with and without single pane safety glass (SPSG) with pivoted handle, can be exchanged for pivoted handle (prepared for profile half-cylinder)

#### PX Rack –





Side panels slot into place at the bottom and are held in place at the sides by a sash fastener. Can also be used as a rear wall

#### PX Rack –

#### depth-adjustable interior



The 19" mounting angles can be attached to both sides of the depth stays. For 800 mm wide PX Racks, an adapter set is required for each 19" plane



## Complete Solutions for Networks and Servers





#### Project and efficiency range with low-cost complete racks

- Models for maximum market coverage with 25 U and 43 U in heights of 1300 and 2100 mm respectively, depths of 800 and 1000 mm and widths of 600 and 800 mm
- Extremely strong framework with a load bearing capacity of up to 700 kg
- Frame is "demountable"
- High quality powder coating finish in light grey RAL 7035 on all cladding components
- All cladding, such as side panels and doors, can be removed in seconds
- Top cover panel prepared for brush strips and/or ventilators (for 800 mm widths, 6 knockouts for fans and 3 for cable entry. For 600 mm widths, 6 knockouts for fans and 1 for cable entry)

- Doors fitted with T-handles and locks, onepoint locking system
- Plinths, 100 mm high (always mounted)
- Standard depth-adjustable 482.6 mm (19") mounting angles
- Extreme cost benefit

#### Material:

- Basic frame:
- 1.5 mm steel sheet, multi-profiled
- Cladding: 0.75 mm steel sheet

#### Finish:

- High-quality powder coating in light grey RAL 7035
- Galvanised 482.6 mm (19") mounting angles

#### Locking:

- Doors: T-handle with lock
- Side panels: sash-fastener with security lock

#### International standards:

- IEC 297-1/2 482.6 mm (19")
- IEC 917-2-1 (metric)

#### PX Rack Complete Racks: depth 800 mm

Basic rack inc. side panels	7112800	7119810	7120820	7120840	7120860
Colour code	RAL 7035				
Internal height	25 U	25 U	43 U	43 U	43 U
External dimensions in mm (W x H x D)	600 x 1300 x 800	800 x 1300 x 800	600 x 2100 x 800	800 x 2100 x 800	800 x 2100 x 800
EXPRESS Range	>e>	>e>	>e>	>e>	>e>
Delivery comprises					
Front glazed door (flush-mounted) with single pane safety glass, T-handle	1	1	1	1	1
Steel rear door (flush-mounted) with T-handle	1	1			1
Steel rear wall (flush-mounted) with 2 locks			1	1	
482.6 mm (19") angles, mounted at front and rear, 4 depth stays	1	1	1	1	1
Top cover panel, solid, brush supplied, (prepared for 1 brush and 6 fans for 600 mm width) (prepared for 3 brushes and 6 fans for 800 mm width)	1	1	1	1	1
Plinth: height 100 mm, passively ventilated, with levelling feet	1	1	1	1	1
Also supplied					
Earthing kit	1	1	1	1	1
Fastening materials (M6 cage nuts and 16 x M6 screws, plastic washers)	50	50	50	50	50

#### PX Rack Complete Racks: depth 1000 mm

Basic rack inc. side panels	7113900	7113910	7120140	7120190	7120110
Colour code	RAL 7035				
Internal height	25 U	25 U	43 U	43 U	43 U
External dimensions in mm (W x H x D)	600 x 1300 x 1000	600 x 1300 x 1000	600 x 2100 x 1000	800 x 2100 x 1000	800 x 2100 x 1000
EXPRESS Range			>e>	>e>	>e>
Delivery comprises					
Front glazed door (flush-mounted), single pane safety glass, T-handle	1			1	
Sheet steel door (flush-mounted) with passive ventilation,		1	1		1
rounded perforations front and rear RV 3.8/4.5 and T-handle		I	I		I
Steel rear door (flush-mounted) with T-handle	1			1	
482.6 mm (19") angles, mounted at front and rear, 4 depth stays	1	1	1	1	1
Top cover panel, solid, brush supplied, (prepared for 1 brush and	1	1	1	1	1
6 fans for 600 mm width/prepared for 3 brushes and 6 fans for 800 mm width)	I	I	I	I	I
Plinth: height 100 mm, passively ventilated, with levelling feet	1	1	1	1	1
Also supplied					
Earthing kit	1	1	1	1	1
Fastening materials (M6 cage nuts and 16 x M6 screws, plastic washers)	50	50	50	50	50



## PX Rack Configurator

# Configurator for 600 and 800 mm wide racks



With the PX Rack Configurator, customised rack systems can be put together directly from our standard modules. There are two ways of making up your own personal configuration: use our catalogue or consult our specialists at our back office. The rack will then be delivered fully assembled in the shortest possible time.

- Models for maximum market coverage with 25 U and 43 U in heights of 1300 and 2100 mm, depths of 800 and 1000 mm and widths of 600 and 800 mm
- Extremely strong framework with a load bearing capacity of up to 700 kg
- Frame is "demountable"
- High quality powder coating finish in light grey RAL 7035 on all cladding components
- All cladding, such as side panels and doors, can be removed in seconds
- Top cover modules prepared for brush strips and/or fans (for 800 mm widths, 6 knockouts for fans and 3 cable entry apertures. For 600 mm widths, 6 knockouts for fans and 1 cable entry aperture)
- Doors fitted with T-handles and locks
- Plinths always assembled, 100 mm high
- Standard depth-adjustable 482.6 mm (19") mounting angles
- Side panels can be used on all four racks sides

#### Material:

- Framework: 1.5 mm steel sheet, multi-profiled
- Cladding: 0.75 mm steel sheet
- Glass pane: 3 mm SPSG

#### Finish:

- High-quality powder coating in light grey RAL 7035
- Galvanised 482.6 mm (19") mounting angles

#### Locking:

- Doors: T-handle with lock
- Side panels: T-handle with security lock

#### International standards:

- IEC 297-1/2 482.6 mm (19")
- IEC 917-2-1 (metric)

### Configure your own customised rack

**1** Determine basic frame dimensions (width, height, depth)

**2** Select doors, 482.6 mm (19") angles, side panels and bottom modules

### The completely assembled rack will be delivered in the shortest possible time. System accessories can be found from pages 82 and 88!







Steel sheet door with 3 mm SPSG

Sheet steel door, single wing

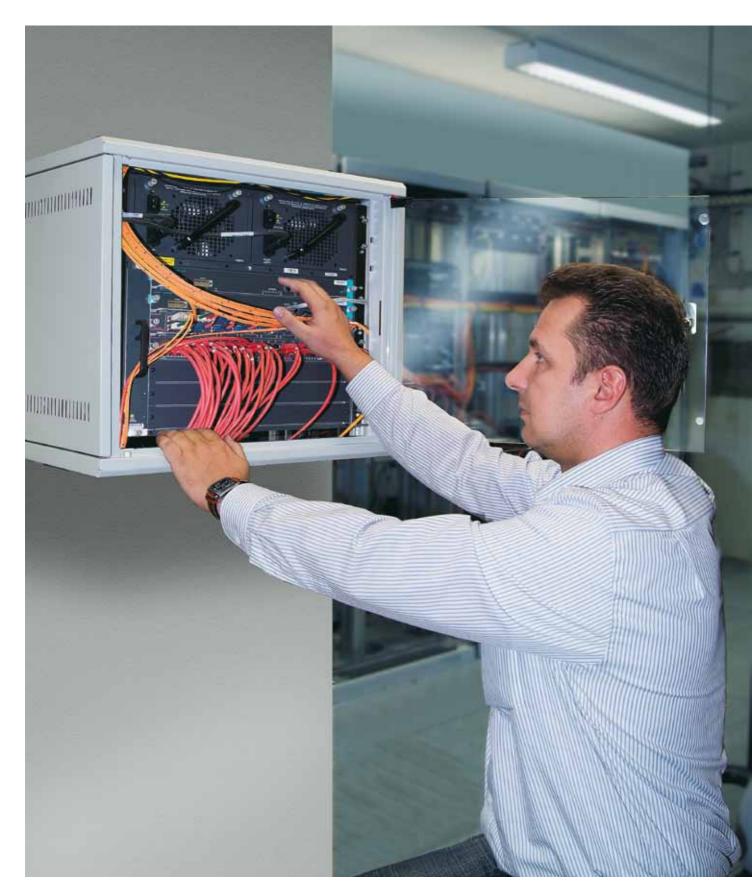
Vented steel sheet door (rounded perforation), single wing

### **1** Basic Frame

Width (mm)	600	800	600	600	800	600	800
Height (mm)	1300	1300	1300	2100	2100	2100	2100
Depth (mm)	800	800	1000	800	800	1000	1000
Useable height (U)	25	25	25	43	43	43	43
Colour: Light grey RAL 7035 smooth finish							
Basic framework	7613805	7813805	7613105	7621805	7821805	7621105	7821105

### **2** Doors, 482.6 mm (19") mounting angles and side panels

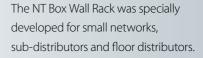
Front glazed door (flush-mounted) with single pane safety glass, T-handle	7612005	7812005	7612005	7620505	7820505	7620505	7820505
Steel door (flush-mounted), with T-handle	7685005	7885005	7685005	7688505	7888505	7688505	7888505
Steel panel (flush-mounted) with 2 locks	7831105	7832105	7831105	7833105	7835105	7833105	7835105
Steel door (flush-mounted), with passive ventilation,	7680005	7002005	7600005	7000505	7002505	7000505	7002505
round perforation RV 3.8/4.5 and T-handle	7689005	7892005	7689005	7889505	7893505	7889505	7893505
Side panels (flush-mounted) with 2 sash fasteners	7832005	7832005	7838005	7835005	7835005	7839005	7839005
Bottom module, multi-piece, solid	7615805	7815085	7606105	7615805	7815085	7606105	7806205
Bottom module, multi-piece, solid, with brush strip	7615035	7815035	7606505	7615035	7815035	7606505	7806605
Installation kit for 482.6 mm (19") mounting angles (4 depth stays)	7628005	7628005	7620005	7628005	7628005	7620005	7620005
482.6 mm (19") adapter for 800 mm widths for each plane		7828005			7828005		7828005
482.6 mm (19") mounting angle, front	7783505	7783505	7783505	7785005	7785005	7785005	7785005
482.6 mm (19") mounting angle, front and rear	7783515	7783515	7783515	7785015	7785015	7785015	7785015
482.6 mm (19") mounting angle, front, middle and rear	7778005	7778005	7778005	7778505	7778505	7778505	7778505



# Economical and easy to assemble – Wall Racks and Mini Racks from SCHÄFER







III.

#### NT Box wall racks, NT Mini Rack

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# Economical and easy to assemble



- High-grade steel housing (light grey RAL 7035) complete with basic equipment
- Optimum accessibility for fast installation: once the door is open, the side panels can be pulled forward
- Mounted ready for installation, glazed door at front, inc. lock, 482.6 mm (19") mounting angles at front, cable entry apertures in top and bottom and cable management rails
- Individual units in separate transport packaging
- Depths of 400, 500 and 600 mm, from 6 – 21 U

The wall-mounted NT Box was specially developed for small networks, sub-distributors and floor distributors.

The major practical problem of accessibility is solved by the fact that the door can be very quickly removed once opened, allowing the side panels to be slid out forwards.

This way, the housing is easily accessible from three sides and allows all components to be installed easily.

To change the doors from left to right-hand opening, simply lift out the hinge pin and

replace them in the fixings provided. Cable entry apertures with brush strips are fitted in the top and bottom panels and/ or rear panel and can be replaced by flange plates on request. The side panels are passively ventilated.

The NT Box is available in 18 different sizes. The integrated 482.6 mm (19") mounting angles can be installed either at the front or rear and are depth adjustable.

All NT Boxes and the provided accessories follow the plug & play principle.

All NT Boxes can also be placed on the floor, whether they are fitted with feet or not.

#### Material:

- Framework: 1.25 mm steel sheet
- Door: 4 mm single pane safety glass panel
- Side panels: 0.75 mm steel sheet
- 482.6 mm (19") mounting angles:
   1.5 mm steel sheet

#### Finish:

- Framework, side panels: powder coated in RAL 7035 light grey
- Galvanised 482.6 mm (19") mounting angles

#### Locking:

 Security lock (standard)
 Handle for a profile half cylinder (optional, see page 84)

#### Cable entry:

Depth: 35 mm, length: 400 mm

#### **Delivery comprises:**

- 1 framework housing with 2 brush strips
- 1 door with lock and hinge mounting brackets
- 2 side panels with passive ventilation
- 2 x 482. mm (19") mounting angles, front
- 1 cable support rail
- Earthing kit, supplied

#### Load-bearing capacity:

 NT Boxes have a load bearing capacity of 3 kg per height unit

#### Useable internal space:

Box depth minus 55 mm

#### Cable entry dimensions (D x W):

📕 90 x 400 mm



After opening the door and removing the red securing ring, the door can be raised and removed easily. Then, the side panels can be slid out forwards without tools. When the door is closed, the side panels cannot be removed



For cable entry, every NT Box has brush strips as standard, which can be exchanged for flange plates with fans, if required



Each individual NT Box unit is delivered in its own high-grade transport packaging



In the rear panel, there is a cable support rail as standard for use with cable ties. Brush strips can be retrofitted as an option



Only the 19" 1 + 2U shelves can be installed in the Boxes as fixed or sliding shelves (depth: min. 500 mm)

Depth (mm)	EXPRESS Range	Height units (U)		Height (mm)	Order no.
400		6	570	350	7306400
400		9	570	475	7309400
400		12	570	625	7312400
400		15	570	750	7315400
400		18	570	875	7318400
400		21	570	1025	7321400
500	>e>	6	570	350	7306500
500	>e>	9	570	475	7309500
500	>e>	12	570	625	7312500
500	>e>	15	570	750	7315500
500	>e>	18	570	875	7318500
500	>e>	21	570	1025	7321500
600		6	570	350	7306600
600		9	570	475	7309600
600		12	570	625	7312600
600		15	570	750	7315600
600		18	570	875	7318600
600		21	570	1025	7321600

NT Box system accessories (from page 84) and general system accessories (from page 88)

### NT Box Flat-Pack



# Practical delivery form and quick to assemble Flat-Pack



The development of the flat-pack version of the NT Box is SCHÄFER's response to the growing logistics and assembly demands of network technology.

The base model consists of the SCHÄFER lowcost, modular, standard wall-mounted system with removable doors and side panels. The flat-pack NT Boxes are designed to have the lowest possible packaging volume, while keeping the required assembly work to a minimum.

In only four steps, the complete distributor – either on the ground or wall-mounted – can be assembled by one person. Our standard range of accessories enables the Box to be extended as required.

- Economic efficiency: maximum saving of transport volume
- Economic efficiency: maximum saving of storage space, low space requirement despite model variety
- Cost effective and efficient assembly on site in only four steps and by only one person
- Easy installation and maintenance: removable doors and side panels guarantee optimum accessibility from all sides, standard accessories



Preparation for assembly: check that all individual parts have been delivered. The rear panel can be used as a drilling template. Mark the drill hole positions, drill the holes and attach the rear panel to the wall. Alternatively, the Box can be assembled on the ground



Slide the floor into the longitudinal slits provided and secure it with corner connectors, which are then fastened into place by screws



Erect the vertical stays and screw them into place



Place the roof on the top of the vertical stays and bolt into place. Insert corner connectors and screw them tight



Mount the 482.6 mm (19") angles in the required position and slide the left and right hand side panels into place. Then, install the glass door by inserting the hinge pin into the top drill hole first, before allowing the bottom pin to slide into the lower hole. Secure the door at the top with the red securing ring

Order no.	7406500	7409500	7412500	7415500	7418500	7421500
Useable height U (mm)	6 (350)	9 (475)	12 (600)	15 (750)	18 (875)	21 (1000)
External dimensions in mm (W x D)			570 :	x 500		
EXPRESS range	>e>	>e>	>e>	>e>	>e>	>e>
Delivery comprises						
Rear wall panel	1	1	1	1	1	1
Roof and floor panels with brush strips	2	2	2	2	2	2
Corner connectors for mounting the frame and vertical stays	4	4	4	4	4	4
Side panels with passive ventilation	2	2	2	2	2	2
Glass door, front, with lock	1	1	1	1	1	1
482.6 mm (19") mounting angles for front installation	2	2	2	2	2	2
Earthing kit	1	1	1	1	1	1

NT Box system accessories (from page 84) and general system accessories (from page 88)

Wall Mounting Enclosures

NT Box

# For optimal accessibility



- High-grade steel housing (light grey RAL 7035) complete with basic equipment
- Hinged centre section, 500 mm, with a two-way lock
- Optimum accessibility for fast installation: once the door is open, the side panels can be pulled forward
- Mounted ready for installation, glazed door at front, inc. lock, central swivel mounting frame, 482.6 mm (19") mounting angles at front, cable entry apertures in top and bottom
- Individual units in separate transport packaging
- Overall depth of 650 mm, from 6 18 U

#### Material:

- Framework: 1.25 mm steel sheet
- Door: 4 mm single pane safety glass panel
- Side panels: 0.75 mm steel sheet
- 482.6 mm (19") mounting angles:
   1.5 mm steel sheet

#### Finish:

- Framework, side panels: powder coated in RAL 7035 light grey
- Galvanised 482.6 mm (19") mounting angles

#### Locking:

- Security lock in glazed door
- Two-way lock in central mounting frame



#### **Delivery comprises:**

- 1 door with lock and hinge mounting brackets
- 2 side panels with passive ventilation
- Fixed wall panel with perforations, brush strips supplied, inc. 3 mm two-way lock and key
- Swivel mounting frame, inc. 2 x 482.6 mm (19") mounting angles for front installation
- Earthing kit, supplied

#### Load-bearing capacity:

 NT Boxes have a load bearing capacity of 3 kg per height unit

#### Useable internal dimensions:

Central mounting frame: installation depth 450 mm

Order no.	7306650	7309650	7312650	7315650	7318650
Useable height (U)	6 (350)	9 (475)	12 (600)	15 (750)	18 (875)
External dimensions in mm (W x D)	570 x 650 (150 + 500)				
Delivery comprises					
Fixed wall panel with perforations, brush strips supplied,	1	1	1	1	1
inc. 3mm two-way lock and key	I	I	I	I	I
Swivel mounting frame, inc. 2 x 482.6 mm (19") mounting angles for front installation	1	1	1	1	1
2 side panels with passive ventilation	2	2	2	2	2
Front glazed door with lock	1	1	1	1	1
Earthing kit, supplied	1	1	1	1	1

### **NT Box Slimline**

# The Space Savers



- High-grade steel housing (light grey RAL 7035) complete with basic equipment
- Mounted ready for installation, glazed door at front, inc. lock, 482.6 mm (19") mounting angles at front, cable entry apertures at top and bottom, angled door with lock
- Individual units in separate transport packaging

The Slimline NT Box, designed for wall mounting with a minimum of depth, was specially developed for small networks, sub-distributors and floor distributors.

Light grey RAL 7035

#### Material:

Framework: 1.25 mm steel sheet

- Door: 4 mm single pane safety glass panel
- 482.6 mm (19") mounting angles:
   1.5 mm steel sheet
- Angled door at rear, removable:
   1.25 mm steel sheet

#### Finish:

- Framework, side panels: powder coated in RAL 7035 light grey
- Galvanised 482.6 mm (19") mounting angles

#### Locking:

Security lock

#### **Delivery comprises:**

- 1 framework housing with 2 brush strips
- 1 door with lock and hinge mounting brackets
- Angled door with passive ventilation
- 2 x 482.6 mm (19") mounting angles for front installation
- Earthing kit, supplied

#### Load-bearing capacity:

The Slimline NT Boxes have a load bearing capacity of 5 kg per height unit

#### Useable internal dimensions:

📕 480 mm

#### Cable entry dimensions (W x D):

- 90 x 45 mm (standard)
- 90 x 90 mm (optional)

Order no.	7317000	7318000
Useable depth U (mm)	4 (245)	6 (350)
External dimensions in mm (W x H)	600	x 600
EXPRESS range	>e>	>e>
Delivery comprises		
Top and bottom section with brush strip, prepared for fan installation	1	1
Front 482.6 mm (19") mounting angle, fixed	1	1
Glazed door, removable, with lock, in front of 482.6 mm (19") mounting angle	1	1
Angled door (steel), removable, with lock at side and rear	1	1
Earthing kit	1	1

# Small but smart



- High-grade steel housing (light grey RAL 7035) complete with basic equipment
- Optimum accessibility for fast installation: once the door is open, the side panels can be pulled out forwards, enabling easy access from 3 sides
- Mounted ready for installation, glazed door at front, inc. lock, 482.6 mm (19") mounting angles at front, cable entry apertures in bottom cover and rear wall

The NT Mini Rack was specially developed for small networks, sub-distributors and floor distributors as a floor-standing unit.

#### Material:

- Basic housing: 1.25 mm sheet steel
- Door: 4 mm single pane safety glass
- Side panels, door: 0.75 mm sheet steel
- 482.6 mm (19") mounting angles:
   1.5 mm steel sheet

#### Finish:

- Housing, side panels: powder coated in RAL 7035 light grey
- Galvanised 486.2 mm (19") mounting angles

#### Locking:

Security lock

#### **Delivery comprises:**

- 1 framework housing with 2 brush strips
- 1 door with lock and hinge mounting brackets
- 2 side panels with passive ventilation
- 2 x 482.mm (19") mounting angles, front
- Levelling feet
- Earthing kit, supplied

#### Load-bearing capacity:

 NT Mini Racks have a load bearing capacity of 3 kg per height unit

#### Usable internal space:

📕 545 mm

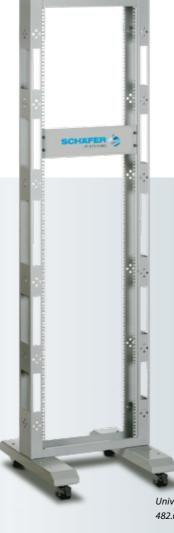
Order no.	7318680	7318690
Useable height U (mm)	18 (910)	18 (910)
Dimensions in mm (W x D)	570	x 600
EXPRESS range	>e>	
Delivery comprises		
Basic housing with levelling feet, brush strips in floor and rear wall, top cover panel prepared for additional brush strip or fan	1	1
482.6 mm (19") mounting angle, front mounted	1	1
Side panels, with passive ventilation	2	2
Glass front door, with lock	1	
Steel door, with lock and passive ventilation		1
Earthing kit	1	1

NT Box system accessories (from page 84) and general system accessories (from page 88)

### NT Universal Rack

# All-round access





## Component and cable accommodation with easy access from all sides

This practical universal rack, as a mobile or stationary open unit, can accommodate all 482.6 mm (19") components on 45 height units. The torsion-resistant frame made of 1.5 mm sheet steel with plinth is a very stable structure. Its all-round accessibility makes installation easy. All accessories from the SCHÄFER IT standard range are of course fully compatible.

2 mounting planes can be installed one behind the other.

#### All parts have to be ordered separatly!

#### Universal rack with 482.6 mm (19") mounting plane

#### Finish:

Powder coating in RAL 7035 light grey

#### **Useable height:**

📕 45 U

#### Weight:

- Approx. 20 kg, 482.6 mm (19") mounting angle, approx. 13.5 kg
- Load bearing capacity up to 200 kg, with plinth

Load bearing capacity up to 800 kg, when mounted on ground

#### External dimensions (W x H):

📕 609 x 2092 mm

#### Base plate dimensions (W x D):

- External width 600 mm
- Depth: 700 mm

Universal rack	order no.
45 U inc. 482.6 mm (19") mounting angle	7495100
Plinth, mobile	7495600
Wall mounting brackets, 4 pieces	7495700

IV



# Secure Accommodation for Hardware in an Industrial Environment – IT Enclosures from SCHÄFER







- For the secure accommodation of PC's, printers, monitors, keyboard and mouse in an industrial environment
- Colour: rack, light grey RAL 7035 / Front, Gentian blue, RAL 5010
- Complete with two fixed, galvanised shelves, height adjustable in mounting hole pitch pattern
- Front door and fold-up keyboard tray can be locked separately
- Keyboard tray with detachable mouse pad (for right or left-handers)
- Useable internal dimensions in mm (W x H x D): 530 x 1620 x 510
- Comfort model with IP54 protected
- Keyboard dimensions in mm (W x H x D): 480 x 50 x 215
- Height of keyboard tray top edge above floor: 1040 mm





Rack trolley with castors

IT Enclosures	EXPRESS range	Order no.
PC Case Basic	>e>	7530000
External dimensions in mm (W x H x D) 640 x 1800 x 600		
PC Case Comfort (IP54 protected)	>e>	7540000
External dimensions in mm (W x H x D) 640 x 1800 x 600		







Active fan set (2 fans)

IT Enclosures	EXPRESS range	Order no.
PC Case Fokus	>e>	7560000
External dimensions in mm (W x H x D) 620 x 1930 x 795		
PC Case Fokus Workstation		7560500
Bottom front door with quick access to printer and printer shelf		
External dimensions in mm (W x H x D) 620 x 1930 x 795		



- Ideal for the secure accommodation and safekeeping of PCs, printers, monitors, keyboard and mouse in an office environment
- Colour: rack and door, aluminium silver/design strip, black RAL 9011
- The pitch pattern inside enables the height of the shelves to be varied and 482.6 mm (19") mounting angles to be installed, as an option
- Monitor shelf installed
- Separately accessible keyboard tray with fold-up front panel and security lock
- 4 double castors, 2 with locking bolt
- Useable internal dimensions in mm (W x H x D): 539 x 1680 x 735
- Removable rear wall panel with security lock

# **Effective Protection**



#### IT Enclosures

Dimensions H x W x D (mm)	Colour case/doors	Туре	Order no.
500 x 250 x 500	Light grey RAL 7035/Gentian Blue RAL 5010	Mini	84004642
600 x 250 x 620	Light grey RAL 7035/Gentian Blue RAL 5010	Midi	84004694

- Protects computers from unauthorised access, dirt and moisture, IP54 protected
- Protective steel sheet casing, completely powder coated
- External dimensions in mm
   (H x W x D): 500 x 250 x 500/600 x 250 x 620
- Useable internal dimensions in mm (H x W x D): 450 x 204 x 450/550 x 204 x 570
- PC enclosure depth: max. 380 or 500 mm
- Steel sheet front door with circumferential seal and SPSG window
- Sash-fastener lock, closure 2233
- Rear side cable entry for 6 cables
- Inc. air intake filter and axial fan, aeration capacity (free blowing) 11 m<sup>3</sup>/hr (with filter fan 8 m<sup>3</sup>/hr)



# Mobile IT Rack

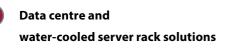


Order no. 87095262

- Steel housing, powder-coated in light grey RAL 7035
- Graphite worktop for documents
- Ventilated sheet steel door with safety cylinder lock, two keys
- Strong keyboard drawer
- Separate lockable keyboard tray enables quick access to keyboard
- Practical rear-side cable entry
- Monitor housing H x W x D (mm): 550 x 540 x 270 for screens up to 482.6 mm (19")
- 4 strong castors, 2 with arrestors
- Bottom rack with 1 storage shelf for PC, printer or workshop utensils

#### **IT Terminals**

Dimensions	Colour case/doors	Order no.
H x W x D (mm)		
1640 x 600 x 600	Light grey RAL 7035	87095262
1640 x 600 x 600	Aluminium silver	87095263





# Data centre and water-cooled server rack solutions from SCHÄFER



Air-conditioned, scalable, robust, spacesaving, economical, reliable, with high availability, always controllable from anywhere and with all SCHÄFER services included – this is what the data centre and water-cooled server rack solutions from SCHÄFER can offer you.

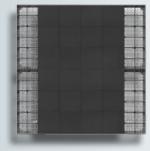


## LOOPUS

58
52
54
66



SECTION

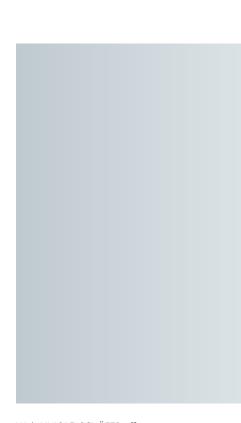






### Data centre and Water-cooled server rack solutions

# UNIQLE – 5 Elements · 1 System



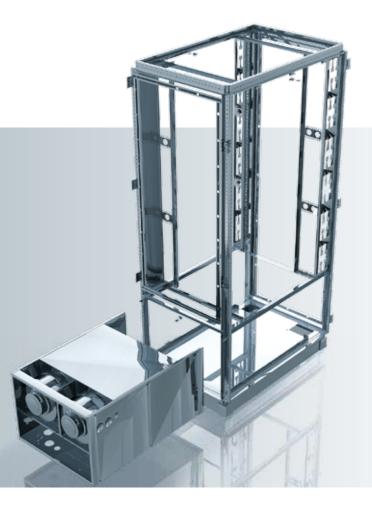
With UNIQLE, SCHÄFER offers a system platform to meet current and future requirements.

- Scalable
- Modular design
- IP54 protected
- Variable connecting technology
- All-round 25 mm pitch pattern without switch rack appearance
- Load-bearing capacity of up to 1000 kg
- 1 U taken up by RMS
- Demountable
- Rack dimensions for UNIQLE solutions: 50 U, front and rear, height: 2240 mm inc. rollers and 54 U, front and rear, height: 2440 mm inc. rollers
- Width: 800 mm
- Depth: 1200 mm
- Weight with cooling unit: approx. 245 kg
- Weight without cooling unit: approx. 165 kg



UNIQLE, 4 – 21 kW usable cooling capacity with RMS and regulator	6420220
800 x 2400 x 1200 mm, 35 U horizontal/15 U vertical, black RAL 9005 – fine structure	0420220
UNIQLE, 4 – 21 kW usable cooling capacity with RMS and regulator	6420240
800 x 2440 x 1200 mm, 39 U horizontal/15 U vertical, black RAL 9005 – fine structure	6420240
UNIQLE, 4 bis 21 kW usable cooling capacity with RMS and regulator	6420520
lower section 800 x 600 x 1200 mm, black RAL 9005 – fine structure	6420520
Optional	
UNIQLE pipe set (VE/2 pipes) 2 m long	6420260
UNIQLE RMS emergency control	6420280
UNIQLE condensation pump	6420300
UNIQLE trays 2 U	6420360
UNIQLE trays 3 U	6420340
UNIQLE automatic door opening system, UNIQLE standard	6420500
UNIQLE lower section	6420520





#### The 5 Elements

- SP54 Rack
- Cooling System
- Rack Control
- Power Management
- Partnership Management

Please note: Pipe work and a cold water generator are to be provided by the customer. Air-intake temperature is regulated by RMS with integrated control. Operation and configuration via SNMP or http.

- Full integration as a compact unit
- From 4 to 21 kW usable cooling capacity
- 100 % circulating air operation
- Thermally independent of the ambient air
- Parts carrying cooling water in separate housing

With UNIQLE, SCHÄFER is systematically implementing the principle of a cooling system integrated in the server rack. The decision for integration is a logical step.

#### **Argument 1: Energy efficiency**

- Low pressure loss, pump rating correspondingly lower
- Long fan lifetimes as fans are not mounted in heated sections

#### **Argument 2: Space efficiency**

Server space is not unlimited! And through the trend to higher and higher computer performance accompanied by a greater packing density, server racks must guarantee a maximum of space efficiency. This enables the maximum computer density per m<sup>2</sup> of floor space to be achieved.

#### **Comparison of floor space**

- UNIQLE (integrated cooling system), floor area in mm (W x H x D): 800 x 2240 x1200
- Server rack of 800 mm width with side cooling solution (300 mm), floor space in mm (W x H x D): 1100 x 2200 x 1200

#### Floor space needed for 100 U

UNIQLE	1.92 m <sup>2</sup>
Server rack	3.96 m <sup>2</sup>

#### **Cooling Unit Features**

1 cooling unit (self-supporting, insulated housing) installed in lower section of the UNIQLE unit, consisting of:

- 1 high-capacity heat exchanger
- 1 electrically actuated 3-way valve
- 2 fans (electronically controlled)
- 1 fuse box
- Technical features
- Protective housing for heat exchanger
- Maintenance during operation
- Automatic circuit breaker operated from front

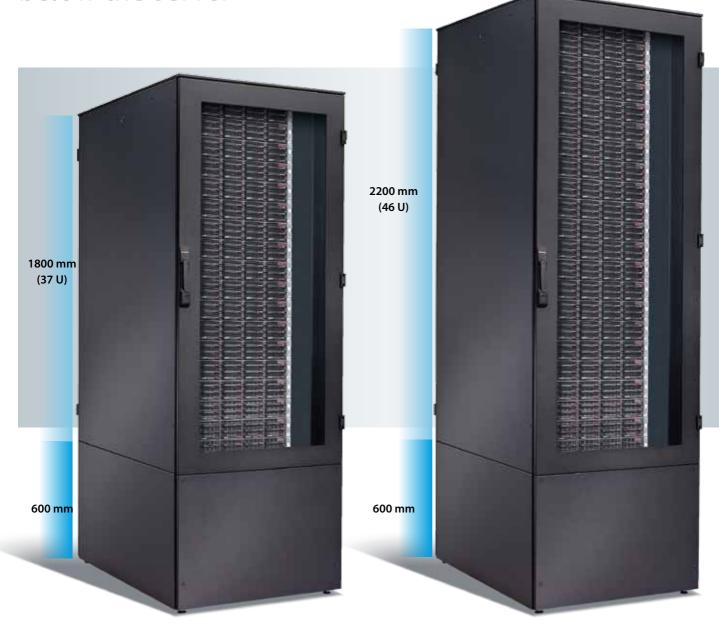
#### **Cooling Unit technical data**

Operating voltage	230 volts
Power consumption	1.04 kW
Input current	6 A
Spread chilled water	12/18°
Max. air capacity	3500 m²/h
Water throughput rate	2.9 m³/h
Air supply temperature to server	r 21°C – 25°C
Dissipated heat	approx. 700 Watt (at 21 KW refrigeration
	capacity/20° C ambient temperature)
	approx. 300 Watt (at 7 KW refrigeration
	capacity/23° C ambient temperature)
Water connection for heat exchar	nger 3/4" external thread (from below)
Connection for condensate tray	5/8" hose connection
Pressure loss (water-side)	1 bar max. (inc. 3-way valve)
Operating pressure heat exchan	ger 10 bar
Coolant	water (optional: glycol mixture)

## Data centre and Water-cooled server rack solutions

### UNIQLE

# Water-cooled rack with heat exchanger below the server



The UNIQLE modular, water-cooled highdensity Rack solution, gives you the perfect operating climate for your high-performance computers.

The heat exchanger at the bottom of the rack is supplied with cold water and provides up to 21 kilowatts of usable cooling capacity. The cooling-on-demand principle will supply the servers with precisely the cooling capacity needed to cover the server's thermal requirements by means of air circulation. Compared to static cooling systems, this leads to significant energy savings. The UNIQLE system using 37 U to 58 U can be assembles on less than one square meter of space, depending on what is available. This is possible due to the separation of the air-water heat exchanger and the SCHÄFER server racks (available in heights of 1800 to 2200 mm) into two units.

This way, UNIQLE combines high userfriendly availability with extreme energy efficiency.









Article no. for lower section, see page 58

#### Benefits at a glance

- Effective cooling allows maximum computer density
- Usable cooling capacity of up to 21 kilowatts
- Energy efficient due to reduced volume of equipment to be cooled
- High availability
- Integrated rack management system for permanent monitoring
- Increased fan service life, due to installation outside hot zones
- Load bearing capacity of up to 1.000 kilos
- IP54 protected
- Air-water heat exchanger and server rack as separate units → enables quicker and easier replacement of standard server rack (modular design)
- Low space requirement: footprint 800 x 1200 mm (space efficient)

### LOOPUS

# LOOPUS – high efficiency, water-based side cooler solution for server racks



System available as an open or closed loop air cycle, designed for use in new or existing data centres. Useable cooling capacity per rack, up to 30 kW.

#### LOOPUS Closed Loop System with

Data centre and

Water-cooled server rack solutions

CLS side cooler

LOOPUS: CLS Side Cooler	Order No. RAL 7035	Order No. RAL 9005
Basis: Frame SP20, cooler, closed front-rear door W/H/D: 300 x 2000 x 1200 mm	6421000	6421050
Basis: Frame SP20, cooler, closed front-rear door W/H/D: 300 x 2200 x 1200 mm	6421100	6421150
Side panels		
Side walls screw fastened, D/H: 1200 x 2000 mm, Air-inlet/air-outlet openings in right and left side walls	6422000	6422050
Side walls screw fastened, D/H: 1200 x 2000 mm, air-inlet/air-outlet openings in left side wall, right side wall is solid	6422100	6422150
Side walls screw fastened, D/H: 1200 x 2000 mm, air-inlet/air-outlet openings in right side wall, left side wall is solid	6422200	6422250
Side walls screw fastened, D/H: 1200 x 2200 mm, air-inlet/air-outlet openings in left and right side walls	6422300	6422350
Side walls screw fastened, D/H: 1200 x 2200 mm, air-inlet/air-outlet openings in left side wall, right side wall is solid	6422400	6422450
Side walls screw fastened, D/H: 1200 x 2200 mm, air-inlet/air-outlet openings in the right side wall, left side wall is solid	6422500	6422550

LOOPUS: OLS Side Cooler	Order No. RAL 7035	Order No. RAL 9005
Basis: SP20 Frame, cooler, passively ventilated	6421200	6421250
front door, W/H/D: 300 x 2000 x 1200 mm Basis: Frame SP20, cooler, passively ventilated		
front door, W/H/D: $300 \times 2000 \times 1200$ mm	6421300	6421350
Rear door		
Rear door, B/H: 300 x 2000 mm, passively ventilated	6421400	6421450
Rear door, B/H: 300 x 2000 mm, closed	6421500	6421550
Rear door, B/H: 300 x 2200 mm, passively ventilated	6421600	6421650
Rear door, B/H: 300 x 2200 mm, closed	6421700	6421750
Side panels	0421700	0421750
Side walls screw fastened, D/H: 1200 x 2000 mm, air inlets (at rear) in left and right side walls	6423000	6423050
Side walls screw fastened, D/H: 1200 x 2000 mm, air inlets (at rear) in left side wall, right side wall is solid	6422600	6422650
Side walls screw fastened, D/H: 1200 x 2000 mm, air inlets (at rear) in right side wall, left side wall is solid	6422700	6422750
Side walls screw fastened, D/H: 1200 x 2000 mm, right and left walls are solid, no top hat profile	6744060	6744050
Side walls screw fastened, D/H: 1200 x 2200 mm, air inlets (at rear) in left and right side walls	6423100	6423150
Side walls screw fastened, D/H: 1200 x 2200 mm, air inlets (at rear) in side left wall, right side wall is solid	6422800	6422850
Side walls screw fastened, D/H: 1200 x 2200 mm, air inlets (at rear) in right side wall, left side wall is solid.	6422900	6422950
Side walls screw fastened, D/H: 1200 x 2200 mm, right and left side walls are solid, no top hat profile	6743060	6743050



LOOPUS CLS side cooler

### **Cooling Unit Features:**

1 cooling unit (self-supporting, insulated housing) installed in lower section of the UNIQLE unit, consisting of:

- 1 high-capacity heat exchanger
- 1 electrically actuated 3-way valve
- 5 fans (electronically controlled)
- 1 powerbar

#### **Technical features:**

- Maintenance during operation
- Fan operated from front

Order no.
6430100
6430200
6430300
6420270









**LOOPUS** OLS side cooler

**Please note:** the customer must provide pipe work and a cold water generator

#### Cooling Unit technical data:

Operating voltage	230 volts
Power consumption	915 Watt
Input current	4 A
Spread chilled water	12/18° depending on type
Max. air capacity	4000 m²/h
Air supply temperature to server	21° C – 25° C
Water connection for heat exchanger	1" internal thread (from below)
Connection for condensate tray	hose connection
Pressure loss (water-side)	1 bar max. (inc. 3-way valve)
Operating pressure heat exchanger	10 bar
Coolant	water (optional: glycol mixture)

LOOPUS (DX) coolant-based on request

### Data centre and Water-cooled server rack solutions

### COLD SECTION

# COLD SECTION – the flexible cold-aisle enclosure



#### COLD SECTION:

#### The solution for efficient cold/warm aisle separation

 Avoiding air short circuits (warm and cold air mixing together)

#### Arguments:

- Economical solution
- Scalability of additional cooling (e.g. UNIQLE or LOOPUS)
- Raised floor makes cooling capacity adaptable
- Easy assembly



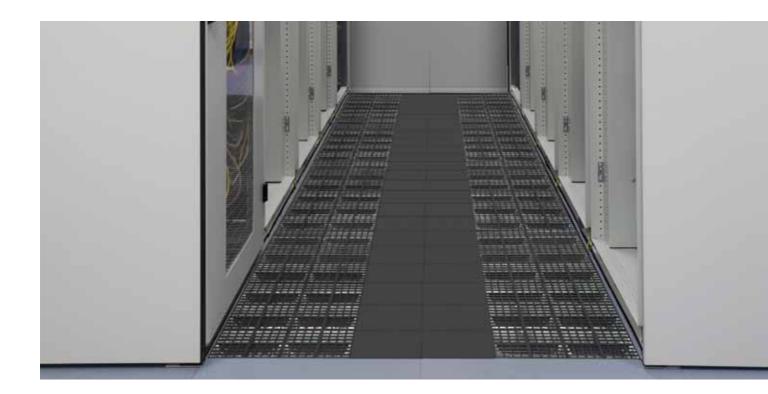


Article	Rack width	Aisle width	Rack height	Rack depth	Colour	Order no.
Sliding door system front/rear		1000 mm	2000 mm	ab 900 mm	light grey RAL 7035	6340000
		1000 mm	2000 mm	ab 900 mm	black RAL 9005	6340050
		1200 mm	2000 mm	ab 900 mm	light grey RAL 7035	6340100
		1200 mm	2000 mm	ab 900 mm	black RAL 9005	6340150
		1800 mm	2000 mm	1000/1200 mm	light grey RAL 7035	6340700
		1800 mm	2000 mm	1000/1200 mm	black RAL 9005	6340750
		1000 mm	2100 mm	ab 900 mm	light grey RAL 7035	6340800
		1000 mm	2100 mm	ab 900 mm	black RAL 9005	6340850
		1200 mm	2100 mm	ab 900 mm	light grey RAL 7035	6340200
		1200 mm	2100 mm	ab 900 mm	black RAL 9005	6340250
		1800 mm	2100 mm	1000/1200 mm	light grey RAL 7035	6340500
		1800 mm	2100 mm	1000/1200 mm	black RAL 9005	6340550
		1000 mm	2200 mm	ab 900 mm	light grey RAL 7035	6340600
		1000 mm	2200 mm	ab 900 mm	black RAL 9005	6340650
		1200 mm	2200 mm	ab 900 mm	light grey RAL 7035	6340300
		1200 mm	2200 mm	ab 900 mm	black RAL 9005	6340350
		1800 mm	2200 mm	1000/1200 mm	light grey RAL 7035	6340900
		1800 mm	2200 mm	1000/1200 mm	black RAL 9005	6340950
		1200 mm	2300 mm	ab 900 mm	light grey RAL 7035	6340400
		1200 mm	2300 mm	ab 900 mm	black RAL 9005	6340450
Aisle roof with laminated PVC	300 mm	1000 mm				6341300
nc. 2 brush strips to separate	300 mm	1200 mm				6341700
he racks from the raised floor	300 mm	1800 mm				6341800
	600 mm	1000 mm				6341600
	600 mm	1200 mm				6341100
	600 mm	1800 mm				6341200
	700 mm	1000 mm				6341000
	700 mm	1200 mm				6341900
	700 mm	1800 mm				6341910
	800 mm	1000 mm				6341920
	800 mm	1200 mm				6341400
	800 mm	1800 mm				6341500
Support bracket for aisle ceiling ca. 100 mm	300 mm				light grey RAL 7035	6342300
backaging unit: 2 items	300 mm				black RAL 9005	6342350
	600 mm				light grey RAL 7035	6342100
	600 mm				black RAL 9005	6342150
	700 mm				light grey RAL 7035	6342500
	700 mm				black RAL 9005	6342550
	800 mm				light grey RAL 7035	6342200
	800 mm				black RAL 9005	6342250
	2400 mm				light grey RAL 7035	6345100
	2400 mm				black RAL 9005	6345150
Support bracket for aisle ceiling ca. 200 mm	300 mm				light grey RAL 7035	6343300
backaging unit: 2 items	300 mm				black RAL 9005	6343350
	600 mm				light grey RAL 7035	6343100
	600 mm				black RAL 9005	6343150
	700 mm				light grey RAL 7035	6343400
	700 mm				black RAL 9005	6343450
	800 mm				light grey RAL 7035	6343200
	800 mm				black RAL 9005	6343250
	2400 mm				light grey RAL 7035	6345200
	2400 mm				black RAL 9005	6345250
Cladding panel (2x B/H 800x1200)					light grey RAL 7035	6344300
					black RAL 9005	6344350
Ceiling elevation 200 mm front/rear		1000 mm			light grey RAL 7035	6344000
above the sliding doors		1000 mm			black RAL 9005	6344050
		1200 mm			light grey RAL 7035	6344100
		1200 mm			black RAL 9005	6344150
		1800 mm			light grey RAL 7035	6344200
					HI- H DAL 0005	
		1800 mm			black RAL 9005	6344250
support bracket (F) profile, anodized for	300 mm	1800 mm			DIACK RAL 9005	6344250 6344400
	300 mm	1800 mm			DIACK KAL 9005	
beginning-/endracks, for 300 mm wide SP Racks	300 mm 600 mm	1800 mm			DIACK KAL 9005	
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for		1800 mm			DIACK KAL 9005	6344400
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks		1800 mm			DIACK KAL 9005	6344400
beginning-/endracks, for 300mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600mm wide SP Racks Support bracket (F) profile, anodized for	600 mm	1800 mm			DIACK KAL 9005	6344400 6344500
beginning-/endracks, for 300mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700mm wide SP Racks	600 mm	1800 mm			DIACK KAL 9005	6344400 6344500
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for	600 mm 700 mm	1800 mm			DIACK KAL 9005	6344400 6344500 6344600
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 800 mm wide SP Racks	600 mm 700 mm	1800 mm				6344400 6344500 6344600 6344700
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 800 mm wide SP Racks	600 mm 700 mm	1800 mm	length	height	colour	6344400 6344500 6344600 6344700 order no.
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 800 mm wide SP Racks	600 mm 700 mm	1800 mm	length 2400 mm	height 100 mm	colour light grey RAL 7035	6344400 6344500 6344600 6344700 order no. 6345100
Support bracket (F) profile, anodized for beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 800 mm wide SP Racks Article	600 mm 700 mm	1800 mm	2400 mm	100 mm	colour light grey RAL 7035 black RAL 9005	6344400 6344500 6344600 6344700 0rder no. 6345100 6345150
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 800 mm wide SP Racks	600 mm 700 mm	1800 mm			colour light grey RAL 7035 black RAL 9005 light grey RAL 7035	6344400 6344500 6344600 6344700 0rder no. 6345100 6345150 6345200
beginning-/endracks, for 300 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 600 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 700 mm wide SP Racks Support bracket (F) profile, anodized for beginning-/endracks, for 800 mm wide SP Racks	600 mm 700 mm	1800 mm	2400 mm	100 mm	colour light grey RAL 7035 black RAL 9005	6344400 6344500 6344600 6344700 0rder no. 6345100 6345150

### SWAP PANEL 9

### Data centre and Water-cooled server rack solutions

# Modular and flexible – SWAP PANEL 9



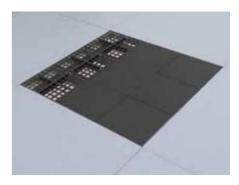
Flexible raised floor systems are now an integral part of modern data centre architecture. Access to the installations room must be possible at all times without disrupting operations. Elevated floor systems must comply with certain essential criteria:

- 1. Walkability
- 2. Accessibility
- 3. Air flow capacity
- 4. Cable routing

As the grid dimensions of IT server racks normally deviate from standard elevated floor dimensions (600 x 600 mm), floor panels are often permanently blocked by the racks erected on them. Accessibility for cabling is no longer sufficiently guaranteed, the cooling air from the elevated floor can no longer be guided precisely to the places where it is needed. No modifications are possible during operation, the available free clearance has not been used to optimum effect.

SWAP PANEL 9 elevated floor elements are compatible with standard 600 x 600 mm elevated floor panels. So existing floors can be fitted with the new system quickly and flexibly.

The modular and flexible SWAP PANEL 9 elevated floor system from SCHÄFER IT-Systems now offers a range of different floor elements specially adapted to use in data centres. An innovative frame accommodates 9 tiles (each 200 x 200 mm) which can be adapted to very different functional requirements: standard and heavy duty loads, ventilation and cable routing. Breaking up the rigid 600 x 600 mm pattern makes precisely routed air circulation and cable routing possible.

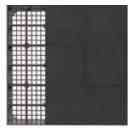


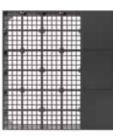


Their high-quality graphite powder coating makes the tiles electrically conductive. SWAP PANEL 9 complies with the European test and classification standard for floor systems (DIN EN 12825 raised floors and DIN EN 13213

hollow floors).

Fitting 9 ventilation tiles enables SWAP PANEL 9 to achieve free clearance of 60 %







#### Technical Data

Dimensions		
Frame	dimensions	600 x 600 mm <sup>-0,4</sup>
height (at the rest	ing points)	35 mm <sup>-0,5</sup>
height (max. frame height)		80 mm
Tiles	dimensions	approx. 200 x 200 mm
height		3 mm
Overall height fran	ne + tile (at the resting points)	38 mm
Static load capa	city* in acc. with DIN EN 12825	
Frame	net load (class 6)	10000 N
breaking load ( saf	fety factor 2)	> 10000 N
	net load (class 4)	4000 N
breaking load ( saf	fety factor 2)	> 9000 N
Heavy-duty tiles	net load (class 6)	6000 N
breaking load ( saf	fety factor 2)	> 12000 N
Ventilation tiles	max. load capacity	1000 N
Electrostatics in	acc. with DIN EN 1081, DIN VDE 0100 T610	
Ground resistance $R_2$ – procedure B – in acc. with DIN EN 1081		$R_2 < 10^9 \Omega$
Contact location resistance R <sub>st</sub> in acc. with DIN VDE 0100 T610		$R_{st} > 5 \times 10^4 \Omega$
Dynamic pressu	re	
Max. dynamic pres	Max. dynamic pressure	
Fire protection i	n acc. with DIN 4102 T1	
Carrier plate fire ra	Carrier plate fire rating	

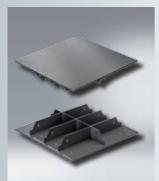
\* Load applied to centre of the frame and the centre of SWAP PANEL 9

### SWAP PANEL 9

# The System

rame		Frame inc. height adjuster	Order no
_	Weight: 15 kg	Basic frame, 600 x 600 mm,	6350000
	Material: graphite cast iron	Height adjuster 4 x 1 mm and	
	Frame size: 600 x 600 mm	4 x 2 mm	
20-11	Frame height (at resting points): 35 mm		
	Frame height max.: 80 mm	Height adjuster, separate	
	Net load (class 6): 10000 N	Height adjuster 4 x 1 mm and	6359000
	Breaking load (safety factor 2): > 10000 N	4 x 2 mm	
tandard tile, solid		Ctandardaile calid	Ordov p
tandard tile, solid	Weight: 1.2 kg	Standard tile, solid	Order no
tandard tile, solid	Weight: 1.2 kg	198.5 x 198.5 mm,	
tandard tile, solid	Material: steel sheet 3 mm	198.5 x 198.5 mm, packaging unit 3 items	
tandard tile, solid	Material: steel sheet 3 mm Total clearance area: 394.02 cm <sup>2</sup>	198.5 x 198.5 mm, packaging unit 3 items 198.5 x 198.5 mm,	Order no 6352350 6352950
tandard tile, solid	Material: steel sheet 3 mm Total clearance area: 394.02 cm <sup>2</sup> Net load (class 4): 4000 N	198.5 x 198.5 mm, packaging unit 3 items	6352350
tandard tile, solid	Material: steel sheet 3 mm Total clearance area: 394.02 cm <sup>2</sup>	198.5 x 198.5 mm, packaging unit 3 items 198.5 x 198.5 mm,	6352350

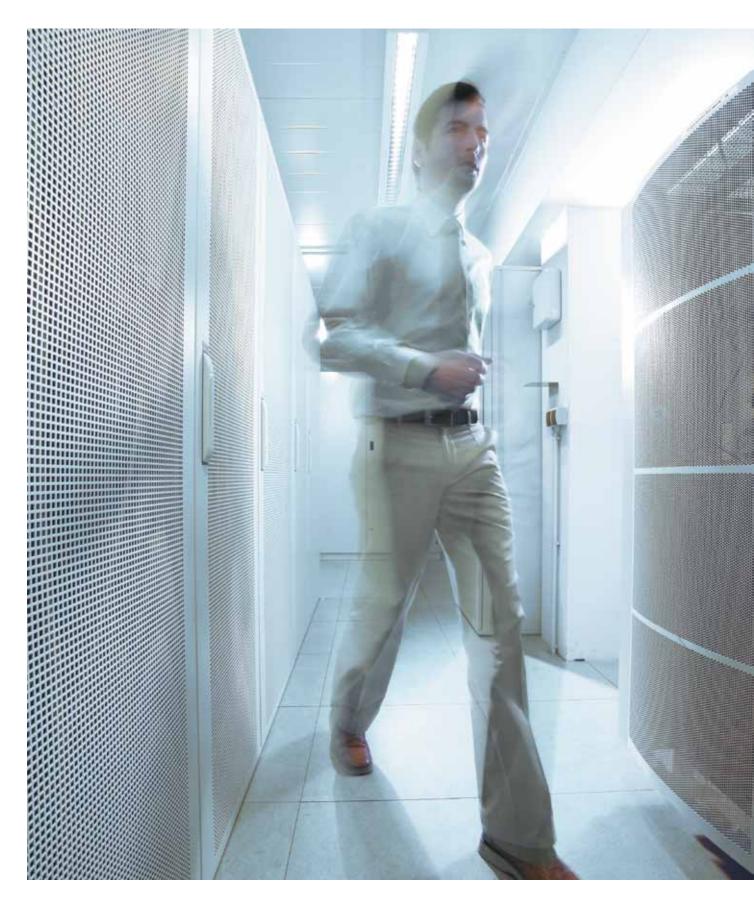
#### Heavy-duty tile, solid



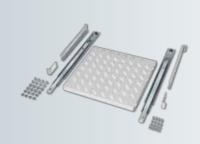
Weight: 1.75 kg Material: steel sheet 3 mm Total clearance area: 394.02 cm<sup>2</sup> Net load (class 6): 6000 N Breaking load (safety factor 2): > 12000 N Colour: Graphite black RAL 9011

Heavy-duty tile, solid	Order no.
198.5 x 198.5 mm,	6353350
packaging unit 3 items	0353350
198.5 x 198.5 mm,	6353950
packaging unit 9 items	0353950

Weight: 0.5 kg Material: steel sheet 3 mm Total clearance area: 39402 cm <sup>3</sup> Free clearance: 2435 cm <sup>3</sup> Air flow: 61.76 % Max. load bearing capacity: 1000 N Colour: Graphite black RAL 9011       198.5 x 198.5 mm, packaging unit 3 items       63543         Cable routing panel       Weight: 0.75 kg Material: steel sheet 3 mm Total clearance: 2402 cm <sup>3</sup> Free cable routing space: 130 x 130 mm Colour: Graphite black RAL 9011       Cable routing panel       0rderr 198.5 x 198.5 mm, packaging unit 9 items       63513         Weight: 0.75 kg Material: steel sheet 3 mm Total clearance area: 39402 cm <sup>3</sup> Free cable routing space: 130 x 130 mm Colour: Graphite black RAL 9011 Material: cellular rubber (fire rating UL94/V-O; flames extinguished within 10 seconds)       198.5 x 198.5 mm, packaging unit 9 items       63513         Accessories       Accessories       Accessories       0rderr	entilation tile		Ventilation tile, solid	Order no
Total clearance area: 394.02 cm <sup>2</sup> Free clearance: 243.36 cm <sup>2</sup> Free clearance: 243.36 cm <sup>2</sup> Free clearance: 243.36 cm <sup>2</sup> Air flow: 61.76 %       Max. load bearing capacity: 1000 N       Colour: Graphite black RAL 9011       Golder couting panel         Image: Strate Strat				6354350
Weight: 0.75 kg       Material: steel sheet 3 mm       198.5 x 198.5 mm, packaging unit 3 items       63513         Total clearance area: 394.02 cm <sup>2</sup> Free cable routing space: 130 x 130 mm       Colour: Graphite black RAL 9011       Material: cellular rubber       (fire rating UL94/V-O;       fmanes extinguished within 10 seconds)       63519         cccessories         Lifting magnet       Lifting magnet       Colour: Graphite black RAL 9011/Red		Total clearance area: 394.02 cm <sup>2</sup> Free clearance: 243.36 cm <sup>2</sup> Air flow: 61.76 % Max. load bearing capacity: 1000 N	198.5 x 198.5 mm,	6354950
Total clearance area: 394.02 cm <sup>2</sup> 198.5 x 198.5 mm, packaging unit 9 items       63519.         Free cable routing space: 130 x 130 mm       Colour: Graphite black RAL 9011       Material: cellular rubber       (fire rating UL94/V-O; flames extinguished within 10 seconds)       63519.         cccessories       Lifting magnet       Colour: Graphite black RAL 9011/Red       Accessories       Order         Lifting magnet       Colour: Graphite black RAL 9011/Red       635991	able routing panel		198.5 x 198.5 mm,	Order no 6351350
Lifting magnet Colour: Graphite black RAL 9011/Red		Total clearance area: 394.02 cm <sup>2</sup> Free cable routing space: 130 x 130 mm Colour: Graphite black RAL 9011 Material: cellular rubber (fire rating UL94/V-O;	198.5 x 198.5 mm,	6351950
				Order no 6359100



# For all rack applications – System accessories from SCHÄFER











The complete range of accessories for your server and network racks.

### VI.

#### System Accessories

System Accessories for SP Racks	72
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## SP Rack

#### See also general system accessories from page 88

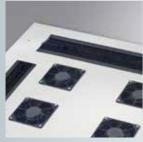
	Top cover, one-piece, solid, IP54		
The racks can be mechanically closed with this cover panel	Depth (mm)	Width 600	Width 800
	600	6705010	6905010
	800	6715010	6915010
	900	6720010	6920010
	1000	6730010*	6930010*
	1200	6740010*	6940010*
Spacer sleeves for raising the top covers. Material: steel Finish: galvanised Delivery comprises: 6 spacer sleeves 40 mm, 6 fixing screws	Spacer sleeves		Order no. 6715000
ventilation The passively vented cover panels close the SP Racks mechanically while allowing heat dissipation in the top or bottom areas. Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 cover panel, fixing accessories 63 % open area	Cover panel, on Depth (mm) 600 800 900 1000 1200	e-piece, passive v Width 600 6705030 6715030 6720030 6730030 6740030	entilation Width 800 6905020 6915020 6920020 6930020 6940020
	<ul> <li>Material: steel</li> <li>Finish: galvanised</li> <li>Delivery comprises: 6 spacer sleeves 40 mm,</li> <li>6 fixing screws</li> </ul> <b>Ventilation</b> The passively vented cover panels close the SP Racks mechanically while allowing heat dissipation in the top or bottom areas. Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035	The racks can be mechanically closed with this cover panel completely. To facilitate passive ventilation, the modules can be raised by means of spacers. <b>Depth (mm)</b>	The racks can be mechanically closed with this cover panel completely. To facilitate passive ventilation, the modules can be raised by means of spacers. Material: 1.25 mm steel sheet          Finish: power coated in RAL 7035             Delivery comprises: one top cover, fixing accessories               90             6720010                 Spacer sleeves for raising the top covers.             Material: steel               Spacer sleeves for raising the top covers.          Material: steel               Pinish: galvanised               Spacer sleeves for raising the top covers.          Material: steel               Finish: galvanised               Sepacer sleeves for raising the top covers.          Material: steel               Finish: galvanised               Delivery comprises: 6 spacer sleeves 40 mm,                 fixing screws               The passively vented cover panels close the SP Racks             mechanically while allowing heat dissipation in the top or               Cover panel, one-piece, passive ve                 900             6720030               600               673030                 Peth (mm)               Vidth 600               600                 Delivery comprises: A spacer sleeves 40 mm,             6 fixing screws               Cov

For easy cable entry with no subsequent mechanical re-working. Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 top cover panel, fixing accessories **Brush strip order-no. 7713100 VE 2 items for** retrofitting

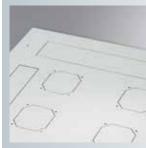
Depth (mm)	Width 600	Width 800
600	6720090	6920090
800	6720100	6920100
900	6720110	6920110
1000	6730100*	6930110*
1200	6740100*	6940110*

\* with 1 pre-punched hole in each corner

## Top cover panel with active ventilation



Top cover panel with active fans



Top cover panel without active fans





**Mains cable:** 3 x 0.75 mm<sup>2</sup> cables, 2 m in length with two-pole schuko angled plug, and with IEC C13 plug, **order no. 6763200** 

### Please note: Dimensions cable entry

800 mm wide racks	600 x 95 mm
700 mm wide racks	600 x 50 mm at the side
	600 x 95 mm at the rear

The covers with ventilation fans provide optimum and economical air conditioning for all SP Racks. The number of fans can be easily extended by plug & play to a maximum of 6.

Delivery comprises: 1 cover panel with two or 4 fans, inc.

Aeration capacity per fan (free blowing) 162/195m<sup>3</sup>/h at

Thermostat order no. 6763000 must be ordered

Separate active fan with protective grill and fixing accessories, order no. 7719300 VE 2 units. Replace-

ment fan without accessories, order no. 7719100

cables ready for connection, fixing accessories

Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035

Operating voltage 230V

Max. noise emission:

Rated output 22/21 W at 50/60 Hz

■ Temperature range -20° C to +70° C

1 fan 45/50 dB (A) free blowing

Technical data:

50/60 Hz

separately

## Top cover panel with large ventilator fan (prepared for brush)



Optimum rack ventilation, even when internal rack temperatures are high, while keeping noise levels to a minimum is not an either-or choice.

- Air-volume flow rate of 1600 m<sup>3</sup>/h or 1900 m<sup>3</sup>/h at 50/60 Hz
- Operating voltage 230V
- Rated output 65 W/68 W
- Temperature range: -10 to +55°C
- Fan height: 80 mm
- Noise level: 51/55 dB (A).

Delivery comprises: 1 top cover panel, 1 fan, connector cable, fixing accessories

Top cover, one-piece, with brush and 2 fans

mounted		
Depth (mm)	Width 600	Width 800
600	6705040	6905040
800	6715040	6915040
900	6720040	6920040
1000	6706700	6906800
1200	6707700	6907800

Top cover, one-piece, with brush and 4 fans mounted

mounted		
Depth (mm)	Width 600	Width 800
600	6705050	6905050
800	6715070	6915070
900	6720070	6920070
1000	6720130	6920130
1200	6720140	6920140

Top cover, one-piece, with brush (supplied) and prepared for 6 fans

Depth (mm)	Width 600	Width 800
600	6705020	6905030
800	6715020	6915030
900	6720020	6920030
1000	6720120	6920120
1200	6720250	6920220

Top cover panel with large ventilator fan (prepared for brush)

Depth (mm)	Width 600	Width 800
800	6715080	6915080
900	6720050	6920050
1000	6706100	6906200
1200	6706300	6906300

## SP Rack

## Bottom cover panel, one-piece, with passive ventilation



The passively vented bottom cover closes the SP Rack mechanically while allowing heat dissipation in the top or bottom areas. Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 cover panel, fixing accessories 63 % open area Bottom cover, one-piece with passive ventilation for rack dimensions

Depth (mm)	Width 600	Width 800
600	6605020	6805020
800	6615020	6815020
900	6620020	6820020

## Bottom cover panel, multi-piece with brush strip

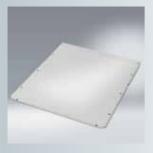


For easy cable entry with no subsequent mechanical re-working. Material: 1.00 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 top cover panel, fixing accessories

### Division of module (brush strip module 200 mm):

Depth: 600 mm: 90 mm, 200 mm, 200 mm Depth: 800 mm: 90 mm, 300 mm, 300 mm Depth: 900 mm: 90 mm, 200 mm, 200 mm, 300 mm Depth: 1000 mm: 90 mm, 200 mm, 300 mm, 300 mm Depth: 1200 mm: 90 mm, 200 mm, 200 mm, 300 mm, 300 mm

## Bottom cover panel, multi-piece, solid



With multi-piece covers, the racks can be closed flexibly as the modules can be moved into different positions Material: 1.00 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: modules, fixing accessories

## Division of module (brush strip module 200 mm):

Depth: 600 mm: 90 mm, 200 mm, 200 mm Depth: 800 mm: 90 mm, 300 mm, 300 mm Depth: 900 mm: 90 mm, 200 mm, 200 mm, 300 mm Depth: 1000 mm: 90 mm, 200 mm, 300 mm, 300 mm Depth: 1200 mm: 90 mm, 200 mm, 200 mm, 300 mm, 300 mm

## Filter mat for passively ventilated bottom cover panels (single or multi-piece)

Fixed by a Velcro fastener on the cover panel. Can be cut to size. Bottom cover panel, multi-piece with brush for rack dimensions

Depth (mm)	Width 600	Width 800
600	6605030	6805030
800	6615030	6815030
900	6620030	6820030
1000	6606500	6806600
1200	6607500	6806700

Bottom cover panel, multi-piece, solid for rack dimensions

Depth (mm)	Width 600	Width 800
600	6615050	6815050
800	6615080	6815080
900	6620050	6820050
1000	6606100	6806200
1200	6606200	6806300

## For rack dimensions

Depth (mm)	Width 600	Width 800
600 - 1000	6725900	6725530

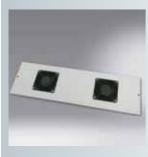
## Passively ventilated module for bottom cover panels, multi-piece



As replacement part in multi-piece bottom cover modules. Material: 1.00 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 module Passively ventilated bottom cover module for rack dimensions

Rack width	Module depth	Order no.
(mm)	(mm)	
600	200	6615090
800	200	6815090

## Active bottom cover module, multi-piece



With two active fans without mains cable. Mains cable: **Order no. 6763200** 

Rack width	Module depth	Order no.
(mm)	(mm)	
600	200	6615100
800	200	6815100

## Plinth, solid



The four removable side panels on this solid plinth allow cable routing underneath the SP Rack. No intermediate panels are required for rack baying.

Material: 1.25 mm sheet steel

Panels: 1 mm steel sheet

Finish: powered coated in RAL 7035

Delivery comprises: 4 corner elements with levelling feet, 4 solid side panels, fixing accessories

Rack	Rack		Height
width		100 mm	200 mm
(mm)	(mm)		
300	1200	6312000	6312200
300	1200	6312050*	6312250*
600	600	6723000	
600	800	6724000	
600	900	6725000	
600	1000	6723500	
600	1200	6727500	
800	600	6923000	
800	800	6924000	6924200
800	900	6925000	6925200
800	1000	6923500	6923200
800	1200	6924500	6927200

\* RAL 9005

## SP Rack

## **Plinth with passive ventilation**



The four removable side panels on this passively ventilated plinth allow cable routing underneath the SP Rack. The slits in the front and rear panels provide optimum ventilation. No intermediate panels are required for rack baying. Material, plinth: 1.25 mm sheet steel, panels: 1.00 mm sheet steel

Finish: powered coated in RAL 7035

Delivery comprises: 4 corner elements with levelling feet, 2 solid side panels, 2 panels with venting slits, fixing accessories

Rack	Rack	Height	Height
width	depth	100 mm	
(mm)	(mm)		
600	600	6721000	
600	800	6722000	
600	900	6726000	
600	1000	6722500	
600	1200	6728500	
800	600	6921000	
800	800	6922000	6922200
800	900	6926000	6926200
800	1000	6922500	6928200
800	1200	6921500	6921200

## Side panels, solid, slot-in



The side panels represent the mechanical finish of an individual rack or row of racks and are inserted into the framework at the bottom and secured by means of a safety lock. For the mechanical separation of individual racks in bays, the panels can be left in place. Material: 1.00 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 2 side panels with safety lock 2233, fixing accessories

Spare key for side panel Order no. 7799500

## Side panels, solid, screw-fastened, IP54 protected



**SP Rack partition walls** 

The partition walls can be inserted between two SP racks after they have been bayed together.

Material: galvanised steel sheet

Delivery comprises: 1 dividing wall, 6 mounting brackets, fixing accessories

Rack height	Rack depth	Order no.
(mm)	(mm)	
600	600	6731000
1200	600	6732000
1200	800	6932000
1200	900	6736000
1200	1000	6733000
1800	800	6934000
1800	900	6734000
2000	600	6735000
2000	800	6935000
2000	900	6737000
2000	1000	6739000
2000	1200	6740000
2200	800	6738000
2200	1000	6738100

Rack height (mm)	Rack depth (mm)	Order no.
1200	800	6932060
2000	800	6935060
2000	900	6737060
2000	1000	6739060
2000	1200	6740060*
2200	1200	6741060*
* double wing		

Rack height	Rack depth	Order no.
(mm)	(mm)	
2000	1000	6739100
2000	1200	6739200
2200	1000	6739300
2200	1200	6739400

### **SP Rack doors**



single wing,

cloosed



wing, with 3 mm

SPSG, passive ventilation

Sheet steel door double wing, cloosed



single wing,

with 3 mm SPSG



Glass door.

Sheet steel door, double wing, with single wing, 3mm SPSG passive ventilation



on request.

The doors can be mounted at the front or rear of the rack and are equipped as standard with

The latter can be replaced by profile half cylinders

Door with 4-point locking system and 3 hinges

(honeycomb perforation, 81 % open area).

pivoted handles and security locks.

Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 door, fixing accessories

Sheet steel door, double wing, passive ventilation (honeycomb perforation, 81 % open area)

## Mounting brackets, corner brackets, cross supports or bridge for 482.6 mm (19") mounting angles

(honeycomb

perforation,

81% open area)



Mounting bracket



For installing 482.6 mm (19") variable depth mounting angles over the entire height of the rack. Material: 1.50 mm sheet steel Finish: galvanised

Delivery comprises: mounting brackets for 600 mm racks widths, corner brackets or cross supports for 800 mm racks widths, fixing accessories



Bridge, above and below

## Depth stay for 482.6 mm (19") mounting angle/or shelf, fixed (not 482.6 mm (19"))



For mounting the fixed shelves in the 25 mm pitch pattern, the depth stays for 600 mm racks widths must be used Material: 1.50 mm sheet steel Finish: galvanised Delivery comprises: 2 depth stays, fixing accessories

	Width	Height	Order
	(mm)	(mm)	no.
Glass door, single wing,	600	2000	6983500
with 3 mm ESG	600	2200	6935500
	700	2000	6583500
	700	2200	6535500
	800	2000	6984000
	800	2200	6936000
Glass door, single wing,	800	2000	6986000
with 3 mm ESG, for swivel frame			
Glass door, single wing,	600	2000	6990500
with 3 mm ESG, passive venting	800	2000	6998500
Glass door, single wing,	600	2000	6756000
with 3 mm ESG	600	2200	6759000
	800	2000	6958500
	800	2200	6956000
Sheet steel door, single wing,	600	2000	6988000
closed	600	2200	6936500
	700	2000	6588000
	700	2200	6537000
	800	2000	6988500
	800	2200	6937000
Sheet steel door, double wing,	600	2000	6988100
losed	800	2000	6958500
	800	2200	6956200
sheet steel door, single wing,	600	2000	6989500
passive venting (honeycomb	600	2200	6937500
perforation, 81% open area)	700	2000	6594500
	700	2200	6595500
	800	2000	6994500
	800	2200	6938000
Sheet steel door, double wing,	600	2000	6956100
passive venting (honeycomb	600	2200	6957100
perforation, 81% open area)	700	2000	6556000
	700	2200	6557000
	800	2000	6956500
	800	2200	6958050
Glass door, single wing,	600	2000	6983560
with 3mm ESG, IP 54	800	2000	6984060
	800	2200	6936000
Sheet steel door, single wing,	600	2000	6988060
IP 54	800	2000	6988560

Rack width (mm)		19"- angle v	19"- angle v/h	19"- angle v/M/h
600	Mounting bracket	6727000	6728000	6729000
800	Corner bracket	6943700	6943800	6943900
800	Cross support	6943100	6943500	6943600
800	Bridge symmetric	6943200	6943210	-
700	Bridge asymmetric	6943300	6943320	-

Rack width	Rack depth	2 depth stays
(mm)	(mm)	
600	600	6741000
600	800	6742000
600	900	6742500
600	1000	6744000
600	1200	6745000
800	600	6946000
800	800	6946100
800	900	6946200
800	1000	6946300
800	1200	6946400

Cross support

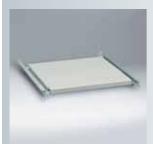


## SP Rack

VI.

482.6 mm (19") mountin		Height			482,6 mm	
8 8	For the installation of 482.6 mm (19") components over the full	(mm)				
	or partial rack height, these mounting angles can be installed			f	f/r	f / mid. /
200 1	either at the front or rear of the SP Rack. Additional positioning	600	10	6783000	6783010	-
	holes in the height unit (U) pitch pattern facilitate installation.	1200	24	6783500	6783510	677800
Kan C I	According to your desired fixing method in the SP Rack,	1800	37	6784500	6784510	677700
	additional installation kits or cross supports must be ordered	2000	42	6785000	6785010	677850
	separately.	2200	46	6780500	6780510	-
4 0 E 0	Material: 2.00 mm sheet steel, finish: galvanised Delivery comprises: 2/4/6 x 482.6 (19") mounting angles depen- ding on type, fixing accessories					
Centre rail		Rack heig	ght	Height unit	ts Or	der no.
51H	Serves as the central mounting point between the front and	(mm)		(U)		
	rear mounting angles for the installation of systems or	1200		24	67	79000
- TH	different depths, shelves and slide rails. The centre rails them-	2000		42	67	79500
and the	selves are mounted on the 482.6 (19") installation kit parts.	2200		46	67	80000
14	Material: 2.00 mm sheet steel Finish: galvanised Delivery comprises: 2 centre rails, fixing accessories					
1 U mounting bracket		1 U mounting bracket			Or	der no.
N	With the 1 U mounting brackets, power strips can be mounted sideways onto the centre rail.	1U				82500
N a M		2 U			77	82600
482.6 mm (19") mountin	g angle support (for rectangular tube)	Rack wid	th			Order no.
	This rectangular tube can be inserted into the side of the	(mm)				
	cross support to provide the for 482.6 mm (19") mounting	800				6943100
Alterna Contraction of the Contr	angles with additionally stability when accommodating					
	heavy components. The combination of cross support/depth					
	stay and rectangular tube can increase the load bearing					
	capacity of the 486.2 mm (19") mounting angles to 1000 kg.					
Shelf, fixed (not 482.6 mi	n (19"))	For	Ch	alf	holf (	)rdor po
		For				Order no.
	Depending on rack dimensions, the shelves are mounted with	rack				
	the shelf supports - which must <b>be ordered separately</b> (see	width				
	page 77) (depth stays for 600 mm width) - directly onto the SP	(mm)			nm)	
	Rack framework in the 25 mm pitch pattern. Shelves of varying	600				6744500
	depth can be used. 482.6 (19") installation is only partially possible.	600				6745500
		600	4	66 (	500	6746500
	Material: 1.50 mm sheet steel	800				6944500
			6	66	500	6944500 6945500 6946500

## Shelf, pull-out (not 482.6 mm (19"))



The pull-out shelves are mounted with the telescopic rails directly onto the SP Rack framework in the 25 mm pitch pattern. 482.6 (19") installation is only partially possible. Material: 1.50 mm sheet steel Finish: powder coated in RAL 7035 Static load capacity: 50 kg Delivery comprises: 1 shelf, 2 telescopic rails, fixing accessories

rack	rack	shelf	shelf	order no.
width	depth	width	depth	
(mm)	(mm)	(mm)	(mm)	
600	600	466	400	6747500
600	800	466	500	6748500
600	900/1000	466	600	6749500
800	600	666	400	6947500
800	800	666	500	6948500
800	900/1000	666	600	6949500

Cable duct		Rack height	Order no.
0.0000000	Cable duct for SP Racks for cable routing can be mounted	(mm)	
*****************	directly on the frame or on the fepth profiles.	2000	6780200
	Delivery comprises: 1 Cable duct, fixing accessories Width: 300 mm Depth: 30 mm	2200	6780220
Rack levelling feet		Feet	Order no.
STREET, STREET	The feet can be retrofitted to the bottom of the rack	SP Rack	6790500
SP Rack PX Rack	Delivery comprises: 4 levelling feet, fixing accessories M12 thread	PX Rack	6790600
Castors		Rack rollers	Order no.
	Castors/rack rollers add mobility to the SP Racks and can	for SP Rack without plinth, 100 mm	6790300
	be retrofitted to the bottom of the rack. Total height: 100/40 mm Load bearing capacity per castor: 100 kg, max. 300 kg static load capacity per SP Rack. Delivery for SP Rack without plinth comprises: 2 castors-		
Rack rollers	with arrester, two castors/4 rack rollers , fixing accessories		
Ro		Rack rollers40 mm clearance, 250 kg per roller	Order no. 6790400
CO CO SE	Note: The plinth has to be removed!		
Anti-toppling plate		Anti-toppling plate	Order no.
1 1 1	A retrofit part to secure the SP Rack mechanically to the floor. Material: 2.00 mm sheet steel	for SP Rack with castors/plinth, 100 mm	6950500
	Finish: powder coated in RAL 7035	for SP Rack with rack rollers,	6950400
6	Delivery comprises: 1 installation bracket, fixing accessories	40 mm	
Paving kit for CD Pack/CC	) Pask as CD Pask/DV Pask	RAL 7035 (light grey)	
Daying Kit for SP Kack/SF	P Rack or SP Rack/PX Rack	Baying kit	Order no.
and the second s	For fast, easy and mechanically stable baying of	for SP Rack to SP Rack	6790200*
	IT racks.	for SP Rack to PX Rack	7690200
V. J. V.	The baying kit does not interfere with the installation plane	RAL 9005 (black)	
A.	in the rack interior Material: steel	Baying kit	Order no.
SP Rack/SP Rack	Finish: galvanised	for SP Rack to SP Rack	6790350*
•	Delivery comprises: 1 baying kit Finish: powder coated in RAL 7035 / 9005	* inc. 10 mm seal (cellular rubber)	
SP Rack/PX Rack			

## SP Rack

## Universal air guiding panels for 800 mm wide SP Racks with 2 x 2 U vertical



The cover panel closes gaps over the cables on the left and right. Additionally, the cover panel with 2 x 2 U are installed vertically (not closed). Material: 1.50 mm steel sheet Surface: powder coated in RAL 7035 Delivery comprises: 2 cable cover panels Cable brush: side 91

Rack height (mm)	Order no.
2000	6782410
2200	6784410

## Hinged air guiding panels for 800 mm wide SP Racks



The hinged panels cover the gaps over the cables on the left and right and can be swung open if required. Installation is only possible with 482.6 mm (19") mounting angles, which are installed by means of upper and lower cross supports,

order no. 6943000

Material: 1.50 mm steel sheet Finish: powder coated in RAL 7035 Delivery comprises: 2 hinged cable cover panels Fixing materials

## Universal air guiding panels for SP Racks



For cross supports, depth stays and corner brackets with 2 x 1 U vertical (closed). Material: 1.50 mm steel sheet Finish: powder coated in RAL 7035 Delivery comprises: 2 cover panels, 4 blind panels 1 U Cable brush: side 91

Rack height	Height units	Order no.
(mm)	(U)	
2000	42	6781400

Cabinet width (mm)	Cabinet height (mm)	Height (U)	Туре	Order no.
600	2000	42	solid	6783300
600	2200	46	solid	6783400
700*	2000	42	2 x 1 U vertical, closed	6783700
700*	2200	46	2 x 1 U vertical, closed	6783800
800	2000	42	2 x 1 U vertical, closed	6783100
800	2200	46	2 x 1 U vertical, closed	6783200

\* 482.6 mm (19") mounting angles installed asymmetrically (2 x 1U only in one panel)

## **C**-profile rails

**Earthing kit** 



Cable support rails enable the structured clamping and strain relief of cables routed along the width and depth of the rack by means of cable clamps and/or fasteners. The rails are mounted at various depths in the rack between the vertical profiles.

- Material: 1.50 mm sheet steel
- Finish: galvanised

Delivery comprises: 2 cable clamping rails, fixing accessories

Supplementary cable clips available for clamping and guiding cable ties (see page 92)

Rack width	Rack depth	Order no.
(mm)	(mm)	
600		6761500
800		6961500
	600	6762500
	800	6962500
	900	6959500
	1000	6960500
	1200	6960510

Earthing kit

7790000

on request

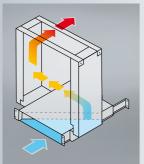


Used for the appropriate earthing of all system components, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm<sup>2</sup> Delivery comprises: 1 earthing kit, fixing accessories

## **Air Tube Switch**



The Air Tube Switch enables the supply of cold air to be targeted to the side of the switch for a maximum effect of the offered cold air (TCO). The switch can be mounted at the front or rear of 800 mm wide racks 19" planes. Use of the Air Tube Switch means that several switches can be mounted in rows without any mutual thermal influence. Air Tube Switch can be supplied for many different switch types on request.



81

## PX Rack

VI.

## See also general system accessories from page 88

	g angles	Rack height	Height units	Order no
81	For the installation of 482.6 mm (19") components over the	(mm)	(U)	
	full or partial rack height, these mounting angles can be	1200	25	7783500
	installed either at the front or rear of the PX Rack. Additi-	2000	43	7785000
0.0.0				
	onal positioning holes in the height unit (U) pitch pattern			
an 9 1	facilitate installation. According to your desired fixing			
	method in the PX Rack, additional installation kits			
0.1	or cross supports must be ordered separately.			
	Material: 2.00 mm sheet steel			
n :	Finish: galvanised			
	Delivery comprises: 2 x 482.6 (19") mounting angles,			
	fixing materials			
Depth stay for 482.6 mm	(19") mounting angle	Rack width	Rack depth	Order no
. ,		(mm)		
	For installing 482.6 mm (19") variable depth mounting angles	600	800	7628000
and the second se	over the full or partial height of the rack.			
	Material: 1.25 mm sheet steel	800	800	7628000
	Finish: galvanised	600	1000	7620000
And and a second s	Delivery comprises: 4 depth stays, fixing accessories	800	1000	7620000
		for 800 mm widt	hs, adapters must be	ordered
		separately		
		Adapter (4 unit	(s)	Order no
		per 482.6 mm (19		7828000
		per 402.0 mm (r.	) plane	7020000
	Pivoted handle with cylinder lock, can be exchanged for a cylinder lock as an option.	Installation set fo cylinder lock* *see page 97	vith cylinder lock or profile half	7590600
	Colour: black	See page 37		
arthing kit		Earthing kit		
arthing kit	Used for the appropriate earthing of all system compo-			
arthing kit	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are			
1	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework.			
1	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm			
Ma	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm <sup>2</sup>			
arthing kit	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm			
Ma	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm <sup>2</sup>			
1	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm <sup>2</sup>			
M	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm <sup>2</sup>			
arthing kit	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm <sup>2</sup>			Order no 7290000
M	Used for the appropriate earthing of all system compo- nents, like side panels, doors, modules, etc. which are attached to the framework. Cable length: 4 x 240 mm, 4 x 150 mm Wire cross section: 6 mm <sup>2</sup>			

Baying kit for PX Rack/	/SP Rack/PE Rack	Baying kit		Order no.
	For fast, easy and mechanically stable baying of	PX Rack an PX/SP	Rack	7690200
• •	IT racks. The baying kit does not interfere with installation in the rack interior Material: steel	PX Rack an PE Rac	:k	7690300
PX Rack/PX Rack/SP Rack	Finish: RAL 7035 Delivery comprises: 1 baying kit			
PX Rack/PE Rack				
Top/bottom mounting		Top/bottom mo	unting bracket	Order no.
	For securing the PX Rack to the floor, or to the wall by means of the top cover Delivery comprises: 4 mounting brackets, fixing accessories (on the rack)			7650500
C-profile rails		Rack width (mm)	Rack depth (mm)	Order no.
8	Cable support rails enable the structured clamping and	600		7161500
	strain relief of cables routed along the width and depth of the rack by means of cable clamps and/or fasteners.	800		7161550
	Material: 1.25 mm sheet steel		800	6961500
	Finish: galvanised Delivery comprises: cable clamping rails, fixing accessories		1000	7160000
*	Supplementary cable clips available for clamping and guiding cable ties (see page 92)			
Cover Panel, fixed	The fixed cable routing panels on the left and right cover	Rack height (mm)	Height units (U)	Order no
	the cable compartments. They are fixed on the side of the 482.6 mm (19") mounting angle. Material: 1.50 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 2 panels, fixing accessories	2000	43	778240
Active fans		Active fans 2 fans		Order no. 7719300
	Active fans, inc. protective grille and fixing accessories order no. 7719300,	1 fan without acc	essories	7719100

## **NT Boxes**

## See also general system accessories from page 88

Handle for profile half cy	linder Handle for profile half cylinder Delivery comprises: 1 handle (RAL 9005), fixing accessories without cylinder Delivery comprises: The handle can be retrofitted to every Box. Hole diameter 22 mm	Handle for profile half cylinder	Order no. 7100010
Mounting kit for wall-mo	unting For mounting NT Boxes on walls Delivery comprises: 4 screws DIN 571 4 washers 4 wall plugs 4 wall spacers (clearance 13 mm)	Mounting kit	Order no. 7100900
Feet	For mounting underneath the NT Boxes Delivery comprises: 4 rubber feet 4 self-tapping screws	Feet	Order no. 7110500
Flange plate, solid	As an optional extra, the solid flange plate can be used to cover the brush strip apertures. Material: 1.5 mm sheet steel Finish: powder coated in RAL 7035 Delivery comprises: 1 flange plate, fixing accessories	Flange plate, solid	Order no. 7100800
Flange plate with active f	<ul> <li>The flange plate with active fans can be installed in place of the brush strip, if required.</li> <li>Deliver comprises: 1 flange plate with two active fans, fixing accessories</li> <li>Technical Data: <ul> <li>Air-volume flow rate per fan (free blowing): 50/60 m<sup>3</sup>/h</li> <li>Operating voltage: 230 V 50/60 Hz</li> <li>Power consumption: 14.5/14 W</li> <li>Noise level: 35 dB(A)</li> </ul> </li> </ul>	Flange plate with fans schuko C 13 mains cable	Order no. 7100700 6763200

Cable support rail		Housing width (mm)	- Order po
	The cable support rails cable support rails enable the structured clamping and strain relief of cables routed along the rack width by means of cable clamps and/or fasteners. Material: 1.5 mm sheet steel Finish: galvanised Delivery comprises: cable clamping rails, fixing accessories	Housing width (mm) 570	Order no. 7110150
482.6 mm (19") mount	ing angles	Height units (U)	Order no.
	For the depth variable installation of two 482.6 mm (19") com-	6	7100060
	ponents in the rack rear plane. The angles are mounted directly	9	7100090
	onto the housing. The additional positioning perforations in the	12	7100120
	height unit pitch pattern make installation easier.	15	7100150
	Material: 1.50 mm sheet steel	18	7100180
	Finish: galvanised Delivery comprises: 2 x 482.6 mm (19") mounting angles,	21	7100210
Slim line fan	Technical data:	Slim line fan	Order no. 7719400
	<ul> <li>Operating voltage: 230 Volt</li> <li>Air volume flow rate: 165 m<sup>3</sup>/h</li> <li>Nominal output: 25 Watts</li> <li>Max. noise emission: 1 fan 45 dB(A) free blowing</li> <li>W x H x D (mm) 120 x 120 x 120</li> <li>2 protective grilles</li> <li>100 mm mains cable with IEC C 13 plug</li> </ul>		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

## **IT Enclosures**

## See also general system accessories from page 88

Shelf (not 482.6 mm (19"	')), pull-out (standard only)	Shelf, pull-out	Order no
	The pull-out shelves are mounted with the telescopic rails directly onto the framework in the 25 mm pitch pattern. Dimensions: width 466 mm, depth 600 mm Material: 1.25 mm sheet steel Finish: powder coated in RAL 7035 light grey Static load capacity: 50 kg Delivery comprises: 1 shelf, 2 telescopic rails, fixing accessories		6749500
helf, fixed installation	Depending on the rack dimensions, the shelves are fixed to the IT Enclosure directly using <b>the depth stays, which must be ordered separately</b> (see page 77). Static load bearing capacity: 75 kg Delivery comprises: 1 shelf	Shelf, fixed installation	Order no 6745500
ack trolley, galvanised	(for PC case basic/comfort)	Rack trolley, galvanised	Order no
and the second second	Can be retrofitted on IT Enclosures, with castors or	with castors	7530800
000	levelling feet. Material: 2.00mm steel sheet Finish: galvanised Static load bearing capacity: 200kg Delivery comprises: 1 rack trolley	with levelling feet	
helf, fixed (for PC case b	The shelf is attached to the 25 mm pitch pattern by means of mounting hooks. Height can be varied as required.	Shelf, fixed	Order no 7471500
4444	Dimensions: width 635 mm, depth 500 mm Material: 1.00 mm steel sheet		
	Finish: galvanised Static load: 40 kg Delivery comprises: 1 shelf, 4 mounting hooks		
Shelf, pull-out (for PC cas	Finish: galvanised Static load: 40 kg Delivery comprises: 1 shelf, 4 mounting hooks	Shelf, pull-out	Order no 7474500

ctive ventilation set wit	th one fan (for PC case basic/comfort)	Active ventilation set with	Order no
144	The ventilation unit is intended for retrofitting to the rack rear wall. Material: 1.25 mm steel sheet Finish: powder coating RAL 7035 Delivery comprises: 1 fan set, 1 fan power cable, fixing accessories Fan technical data: Operational voltage: 230 V Nominal output: 22/21 W at 50/60 Hz Air-volume flow rate per fan (free blowing): 118m <sup>3</sup> /h Max. noise emission: 36 dB (A)	mains cable	7483000
ctive ventilation set wi	th 2 fans (for PC case fokus)	Active ventilation set	Order no
	The fan unit is intended for retrofitting to the rack rear wall. Material: 1.25 mm steel sheet Width: 330 mm, depth: 80 mm, height: 270 mm Finish: powder coating RAL 7035 Delivery comprises: 1 fan set, 1 fan power cable, fixing	2 fans 2 fans with thermostat and noise reduction	7484500 7485500
	accessories Fan technical data: Operational voltage: 230 V Nominal output: 14/13 W at 50/60 Hz Air-volume flow rate per fan (free blowing): 118m <sup>3</sup> /h Max. noise emission: without noise reduction, 43 dB(A), with noise reduction, 39 dB(A)		
an mains cable (2.0 m)	For connecting fans to the main power supply.	Fan mains cable (2.0 m)	Order no 7763100
	<ul> <li>Technical data:</li> <li>Cable 3 x 0.75 mm<sup>2</sup>, length, 2.0 m, with schuko angled plug and coded wieland connector</li> </ul>		

## 1 U fan tray with speed controller and temperature display



Speed and temperature controller with plain text menu, temperature-dependent infinitely variable speed control, mains connection via IEC plug, relay alarm output and sensor: 2-pole plug, LC display (LCD) Delivery comprises: fan tray with 3, 6 or 9 axial fans, Mains supply cable, 230 V, Temperature sensor with 1.5 m cable

1 U fan tray	Order no.
3 fans	6670510
6 fans	6670520
9 fans	6670530

## Fan filter/Exhaust filter



The best solution for thermal problems. Operation can be changed from blowing to suction simply by turning the fan motor round. Material: plastic, in accordance with UL94VO, self extinguishing Colour: RAL 7035 Delivery comprises: 1 filter fan/Exhaust filter, fixing accessories, C 13 adapter cable Protection rating: IP54

## Fan filter

Order no.	7680000	7680500
Dimensions (mm)	148 x 148 x 64,5	250 x 250 x 126
Operating voltage	230 V 50/60 Hz	230 V 50/60 Hz
Current consumption	0,11 A	0,3 A
Power consumption	19/18 W	45/39 W
Rotation speed	2650/3100 min-1	2760/3030 min-1
Temperature range	-10 ℃ to +55 ℃	-10 °C to +55 °C
Life span	27500 h	40000 h
Sound level	42 dB (A)	52 dB (A)
Aeration capacity (free-blowing)	63 m³/h	250 m³/h
Dust absorption (10 µm)	85 %	85 %
Approvals	CE, UL, CSA	CE, UL, CSA

## Exhaust filter

Order no.	7681000	7681500
Dimensions (mm)	148 x 148 x 26	250 x 250 x 35

## Thermostat for fan control, fully wired



Deliver comprises: 1 thermostat, 1 thermostat support, 1 connecting box, fixing accessories Technical data:

- adjustment range: 0 60°C +/- 2k
- max. switching capacity: 6A/230 V AC

interference suppression class: N Protection class: IP30, approval: CE in acc. with VGB 4 (Mains cable must be ordered separately.

May possibly be included in delivery of rack or fans)

## T-grooved mounting rails



For the installation of 482.6 mm (19") components at infinitely variable heights. Please order installation kits and M6 spring nuts separately. Material: aluminium extrusion profile Finish: chromed Deliver comprises: 2 T-grooved rails, fixing accessories

Thermostat for fan control	Order no.
	6763000

Mains cable, length 2 m	Order no.
D	6763200
F/B	6763210
СН	6763220
GB	6763230
1	6763240

Rack height	Height units	Order no.
(mm)	(U)	
1200	24	6785500
2000	42	6787000
2200	46	6788000

M6 spring nuts for T-groo	ved mounting rails	M6 spring nuts		Order no.
	The spring nut is inserted into the T-groove, after the latter has been installed, to guarantee the secure, height adjustable installation of components. Material: steel Finish: galvanised Delivery comprises: 50 M6 spring nuts, 50 bolts M6 x 10, 50 plastic washers			7787500
Mounting kit, 482.6 (19")		Mounting kit		Order no.
©	For mounting 482.6 (19") components. Delivery comprises: 50 M6 cage nuts, 50 M6 x 16 oval head screws 50 plastic washers	M5 M6		7963200 7963000
Set of screws	For mounting components onto the frame profiles.	Set of screws		Order no. 7963100
	Delivery comprises: 20 self-tapping screws			
482.6 mm (19") 2 U shelf,	fixed or pull-out	RAL 7035 (light o	grey)	
1: 12 14	The shelf can be installed in all SP Racks which already have	2 U version:		Order no.
	482.6 mm (19") mounting angles.	Fixed		6750000
	Dimensions: 482.6 mm x 2 U x 400 mm	Pull-out		6750500
	Material: 1.50 mm sheet steel	RAL 9011 (black)		
	Finish: powder coating			
	Static load capacity: 40 kg (2 U)	2 U version:		Order no.
8	Delivery comprises: 1 shelf, 1 pair of telescopic rails	Fixed		6750050
	(for pull-out version), fixing accessories	Pull-out		6750550
		RAL 7035 (light g	grey)	
ř.	482.6 mm (19" x 1 U) shelf, fixed	1 U version:		Order no.
	Dimensions: 482.6 mm x 1 x 250 mm Static load capacity: 15 kg	Fixed		7750250
482.6 mm (19") shelf		RAL 7035 (light g		
	The 482.6 (19") shelf for fixed installation, with passive	Width (mm)	Depth (mm)	Order no.
and the second se	venting, is mounted in the pitch pattern of the front and rear	448	400	6550400*
	482.6 (19") mounting plane.	448	500	6550500
1 marsh	Material: 1.00 mm sheet steel	448	600	6550600
( services )	Finish: powder coated in RAL 7035	RAL 9005 (black)	)	
1 33333311	Static load capacity: 120 kg	Width (mm)	Depth (mm)	Order no.
	Delivery comprises: 1 shelf, fixing materials	448	400	6550450*
		448	500	6550550
	Can be used in racks of all manufacturers	448	600	6550650
			Detween mounting ar	
	Installation dimensions of 400 to 850 mm	max. 650 mm, m		-

VI.

## **General Accessories**

482.6 mm (19") shelf, dra	wout	RAL 7035 (light grey)		
	The pull-out version of the 482.6 mm (19") shelf with	Width (mm)	Depth (mm)	Order no.
2	passive venting is installed in the pitch pattern of the front	422	400	6757500*
(1A)	and rear 482.6 (19") mounting plane.	422	500	6758500
Illassan h	Material: 1.00 mm sheet steel	422	600	6760500
	Finish: powder coated in RAL 7035 Static load capacity: 50 kg Delivery comprises: 1 shelf, telescopic rails, fixing accessories		e between mounting 50 mm, min. depth 5	
	Can be used in racks of all manufacturers	Width (mm)	Depth (mm)	Order no.
	Installation dimensions of 440 to 750 mm	422	500	6758550
	Installation dimensions of 440 to 750 mm	422	600	6760550
182.6 mm (19") heavy-du	ity shelf, pull-out	RAL 7035 (light	grey)	
	The pull-out version of the 482.6 mm (19") heavy-duty shelf	Width (mm)	Depth (mm)	Order no.
	with passive venting is installed in the pitch pattern of the	410	500	6796000
MEEscon	front and rear 482.6 (19") mounting plane.	RAL 9005 (black	()	
Martin Martin	Material: 2.00 mm sheet steel	Width (mm)	Depth (mm)	Order no.
	Finish: powder coated in RAL 7035	410	500	6796050
	Static load capacity: 100 kg			
	Delivery comprises: 1 shelf, telescopic rails,			
and a a	fixing accessories			
	Can be used in racks of all manufacturers			
Cable support		Cable support		Order no.
	Safely guides the connection cables from the pull-out shelf to the framework. Material: sheet steel Finish: galvanised Delivery comprises: 1 cable support, fixing accessories			7790100
Mounting plate	With the 42 U mounting plate, any non-482.6 mm (19")	Rack width (mi	n)	Order no. 6791000
Contraction of the local division of the loc	components can be installed in 2000 mm high SP Racks.	800		6991000
	The plate itself is mounted between the 19" mounting angles and can be positioned in the rack at any required depth. Should any additional 482.6 mm (19") mounting angles be required at the front of 800 mm wide SP Racks,			

Material: 2.00 sheet steel. Finish: galvanised Delivery comprises:

for 600 mm width: 1 mounting plate, fixing accessories for 800 mm width: 1 mounting plate, fixing accessories

Should the rack contain no 482.6 mm (19") mounting angles, two sets of depth stays (see page 77) must be ordered separately

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182.6 mm (19") swing fi	rames	Swing frames		
	Swing frames for installing 482.6 mm (19") components	Rack height	Height units	Order no.
	over the entire height of 800 mm wide SP Racks/PX Racks	(mm)	(U)	6002000
	provide optimum access from the rear. The frames are installed in the rack as retrofit components slightly	2000	40	6992000
	off-centre.	Multi-piece bo	ttom panels for	SP Racks
	With T-handle.	Max. Installati	on depth for sys	stem
2	Material: 1.50 mm sheet steel	components: 4	l50 mm	
	Finish: powder coated in RAL 7035	Swing frame lo	oad bearing cap	acity: 200 k
	Delivery comprises: 1 x 482.6 mm (19") swing frame,	Installation kit		
I Real Property in	1 installation kit, fixing accessories. 1 U and 2 U shelves can also be installed in the swing	Installation Kit		
	frame (see page 89)		Rack depth	Order no.
	For the rack with the swing frame, there is a separate gla-	SP Rack	(mm) 800	6227000
REMAIL	zed door available, in which the pane is installed	PX Rack	800	6229000
	asymmetrically (see page 77, SP Rack doors)	PA NOLK	800	0229000
82.6 mm (19") Blind pa	anel	RAL 7035 (light g		
	Used for covering empty spaces or for the installation of	Height units (U)		Order no.
	specific individual components.	1		7976000
	Material: 1.50 mm sheet steel			7976500
1	Finish: powder coating	3		7977000
1	Delivery comprises: 2 blind panels, fixing accessories	4 7978500		/9/8500
		RAL 9005 (black)	)	
ni		Height units (U)		Order no.
		1		7976050
		2		7976550
		3		7977050
		4		7978550
		5		7976850
82.6 mm (19") clip-on	blind panel	RAL 7035 (light c	grey)	
	Can be mounted quickly without any tools.	Height units (U)		Order no.
	Consistent use will guarantee specifically targeted air flow.	1 pack: 10 units		7978200
E	Material: ABS, UL 94 – VO	RAL 9005 (black)	)	
t b		Height units (U)		Order no.
1 5		1 pack: 10 units		7978250
1		2 packs: 5 units		7978350
32.6 mm (19") cable gi	uide nanel	RAL 7035 (light g	grey)	
		Height units (U)		Order no
	Cable guide panel for cable routing from rear to front.	1		7977500
	Dimensions of cable opening: 420 x 25/40 mm Material: 1.50 mm sheet steel	1 with brush		7977600
	Finish: powder coating	1 with brush oper	n	7977700
-	Delivery comprises: 2 cable guide panels, fixing accessories	2		7978000
	Denvery comprises, 2 capie guide parters, fixing accessories	2 with brush		7978100
		RAL 9005 (black)	)	
		Height units (U)		Order no.
		1		7977550
		1 with brush		7977650
		1 with brush oper	n	7977750
		2		7978050
		2 with brush		7978150

482.6 mm (19") swing frames

Swing frames

	Rack depth	Order no.
	(mm)	
Rack	800	6227000
Rack	800	6229000

482.6 mm (19") routing panel x 1U		RAL 7035 (light grey)	
	For horizontal routing of patch cables using 5 snap-on	Height units (U)	Order no
	cable clamps, which are pushed into the insertion holes	1	7970000
	from the front.	RAL 9005 (black)	
	Dimensions: guiding clamp: 60 x 44 mm		Ondanas
	Material: 1.50 mm sheet steel	Height units (U)	Order no
Sec.	Finish: powder coating Guiding clamps: black	1	7970050
and the second second	Delivery comprises: 1 routing panel, 5 guiding clamps,		
	fixing accessories		
82.6 mm (19") panel for	steel guiding clips	RAL 7035 (light grey), clip, ch	romatised
-	For the horizontal routing of patch cables.	Height units (U)	Order no
	Material: 1.50 mm sheet steel	1	7979000
0.0.0.0.0	Finish: powder coating		
	Delivery comprises: 1 panel with steel guiding clips	RAL 9005 (black), clip, chrom	atised
	(depth: 75mm, height: 35 mm),	Height units (U)	Order no
	fixing accessories	1	7979050
100	Guiding clip (depth: 65mm, height 35mm)		udor caste
0-10		RAL 7035 (light grey), clip, po	
ST TT P		Height units (U)	Order no
and a company		1	7979100
22 6 mm (10") sabla faa	d through papal	RAL 7035 (light grey), ring, ch	romatised
32.6 mm (19") cable fee		Height units (U)	Order no
	For the horizontal routing of patch cables with cable	1	7979200
	feed-through apertures/Material: 1.50 mm sheet steel Finish: powder coating/Delivery comprises: 1 U panel with	1	7979200
	steel guiding clamps (depth: 75 mm, height: 35 mm), fixing accessories		
outing panel, 2U		Routing panel, 2 U	Order no
		RAL 7035	7979150
	For horizontal routing of patch cables	IAL 7033	
	For horizontal routing of patch cables. Front panel is fold-up or removable.	RAL 9005	7979550
ATTITUTUTE .			7979550
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005		
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005	RAL 9005	
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005	Cable guiding rings, steel	Order no
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005	RAL 9005         Cable guiding rings, steel         Dimensions:	Order no 7968100
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>PPS</b> To achieve systematic cable routing, the rings can be screwed laterally onto the 482.6 mm (19") mounting angles or	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220	Order no 7968100 7968200
3	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>Pps</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170	Order nd 7968100 7968200 7968300
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 PPS To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings, fixing accessories, <b>Order no. 7968400</b>	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112	Order nd 7968100 7968200 7968300
No.	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>Pps</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings,	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112	7979550           Order no           7968100           7968200           7968300           7968400
12	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>Pps</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings, fixing accessories, <b>Order no. 7968400</b> (packaged in units of 5) To achieve systematic cable routing, the clamps can be	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112	Order no 7968100 7968200 7968300 7968400
No.	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>PpS</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings, fixing accessories, <b>Order no. 7968400</b> (packaged in units of 5) To achieve systematic cable routing, the clamps can be screwed laterally onto the 482.6 mm (19") mounting angles	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112         90 x 330	Order no 7968100 7968200 7968300 7968400
No.	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>PpS</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings, fixing accessories, <b>Order no. 7968400</b> (packaged in units of 5) To achieve systematic cable routing, the clamps can be screwed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern.	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112         90 x 330	Order no 7968100 7968200 7968300 7968400
No.	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>PpS</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings, fixing accessories, <b>Order no. 7968400</b> (packaged in units of 5) To achieve systematic cable routing, the clamps can be screwed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: plastic	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112         90 x 330	Order no 7968100 7968200 7968300 7968400 stic Order no
able guiding rings/clam	Front panel is fold-up or removable. Material: steel sheet Finish: powder coating in light grey RAL 7035 / 9005 <b>PpS</b> To achieve systematic cable routing, the rings can be scre- wed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern. Material: steel Finish: chromed Delivery comprises: 10 cable guiding rings, fixing accessories, <b>Order no. 7968400</b> (packaged in units of 5) To achieve systematic cable routing, the clamps can be screwed laterally onto the 482.6 mm (19") mounting angles or the SP Rack framework's 25 mm pitch pattern.	RAL 9005         Cable guiding rings, steel         Dimensions:         82 x 220         82 x 170         82 x 112         90 x 330	Order no 7968100 7968200 7968300 7968400 stic Order no 7969550

Velcro cable fastener		Velcro cable fastener	Order no.
	This is the most economical solution for cable threads that have to be regularly fastened and unfastened or for cables that are retrofitted. The fastener is attached to the perfora- tions in the rack frame by means of a self-tapping screw. Material: plastic Colour: black Delivery comprises: 10 Velcro cable fasteners, fixing accessories		7998000
Pocket for wiring diagrar	ns	Wiring diagram pocket	Order no.
	A4 size retro-fit pocket for wiring diagrams. Mounted using double-sided adhesive tape. Material: plastic Colour: RAL 7035 Delivery comprises: 1 pocket for wiring diagrams Dimensions in mm (W x H x D): 264 x 236 x 32.5		7964500
Keyboard tray, economy		Keyboard tray, economy	Order no.
/ /	482.6 mm (19") lockable keyboard tray, with integrated mouse	Keyboard tray, empty Keyboard tray with keyboard	7540100
~	pad and tray, which can be installed in all racks with front and rear 482.6 mm (19") angles. Dimensions: 482.6 mm (19") x 485 mm x 1 U	and mouse	7542300
La la	Useable internal dimensions for keyboard: (W x H x D ) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coated in RAL 7035 Weight: approx. 7.6 kg	Required space between mountin max. 640 mm	g angres.
	Delivery comprises: 1 keyboard tray, fixing accessories		
Keyboard tray, comfort	Delivery comprises: T keyboard tray, fixing accessories	RAL 7035 (light grey)	
Keyboard tray, comfort		RAL 7035 (light grey) Keyboard tray, comfort	Order no.
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm	Keyboard tray, comfort Keyboard tray, empty	7540200
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°.	Keyboard tray, comfort	
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard:	Keyboard tray, comfort Keyboard tray, empty Keyboard tray with keyboard and mouse RAL 9005 (black)	7540200 7542200
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm	Keyboard tray, comfort Keyboard tray, empty Keyboard tray with keyboard and mouse RAL 9005 (black) Keyboard tray, comfort	7540200 7542200 Order no.
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel	Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboardand mouseRAL 9005 (black)Keyboard tray, comfortKeyboard tray, empty	7540200 7542200 Order no. 7540250
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm	Keyboard tray, comfort Keyboard tray, empty Keyboard tray with keyboard and mouse RAL 9005 (black) Keyboard tray, comfort	7540200 7542200 Order no.
	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coating Weight: approx. 8.1 kg Delivery comprises: 1 keyboard tray with telescopic rails,	Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboardand mouseRAL 9005 (black)Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboard	7540200 7542200 Order no. 7540250
	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coating Weight: approx. 8.1 kg Delivery comprises: 1 keyboard tray with telescopic rails,	Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboardand mouseRAL 9005 (black)Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboardand mouseRAL 7035 (light grey)Description	7540200 7542200 Order no. 7540250 7542250 Order no.
	<ul> <li>482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°.</li> <li>Dimensions: 482.6 mm (19") x 485 mm x 1 U</li> <li>Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm</li> <li>Material: 1.25 mm sheet steel</li> <li>Front finish: powder coating</li> <li>Weight: approx. 8.1 kg</li> <li>Delivery comprises: 1 keyboard tray with telescopic rails, fixing accessories</li> <li>Pull-out document tray: ¾ (380 mm) 482.6 mm (19") document tray which can be installed in all SP Racks with front and rear</li> </ul>	Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 9005 (black)         Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 7035 (light grey)         Description         Document tray       1 U	7540200 7542200 Order no. 7540250 7542250 Order no. 7963500
	<ul> <li>482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°.</li> <li>Dimensions: 482.6 mm (19") x 485 mm x 1 U</li> <li>Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm</li> <li>Material: 1.25 mm sheet steel</li> <li>Front finish: powder coating</li> <li>Weight: approx. 8.1 kg</li> <li>Delivery comprises: 1 keyboard tray with telescopic rails, fixing accessories</li> <li>Pull-out document tray: ¾ (380 mm) 482.6 mm (19") document tray which can be installed in all SP Racks with front and rear 482.6 mm (19") mounting angles. The tray can be locked.</li> </ul>	Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboardand mouseRAL 9005 (black)Keyboard tray, comfortKeyboard tray, emptyKeyboard tray with keyboardand mouseRAL 7035 (light grey)Description	7540200 7542200 Order no. 7540250 7542250 Order no.
	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coating Weight: approx. 8.1 kg Delivery comprises: 1 keyboard tray with telescopic rails, fixing accessories Pull-out document tray: ¾ (380 mm) 482.6 mm (19") document tray which can be installed in all SP Racks with front and rear 482.6 mm (19") mounting angles. The tray can be locked. Dimensions: 482.6 mm (19") x 485 mm x 1 U or 2 U	Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 9005 (black)         Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 7035 (light grey)         Description         Document tray       1 U	7540200 7542200 Order no. 7540250 7542250 Order no. 7963500
	<ul> <li>482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°.</li> <li>Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coating Weight: approx. 8.1 kg Delivery comprises: 1 keyboard tray with telescopic rails, fixing accessories</li> <li>Pull-out document tray: ¾ (380 mm) 482.6 mm (19") document tray which can be installed in all SP Racks with front and rear 482.6 mm (19") mounting angles. The tray can be locked. Dimensions: 482.6 mm (19") x 485 mm x 1 U or 2 U Useable internal dimensions for document storage:</li> </ul>	Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 9005 (black)         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 7035 (light grey)         Description         Document tray       1 U         Document tray       2 U         RAL 9005 (black)       Description	7540200 7542200 Order no. 7540250 7542250 7542250 Order no. Order no.
Keyboard tray, comfort	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°. Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coating Weight: approx. 8.1 kg Delivery comprises: 1 keyboard tray with telescopic rails, fixing accessories Pull-out document tray: ¾ (380 mm) 482.6 mm (19") document tray which can be installed in all SP Racks with front and rear 482.6 mm (19") mounting angles. The tray can be locked. Dimensions: 482.6 mm (19") x 485 mm x 1 U or 2 U	Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 9005 (black)         Keyboard tray, comfort         Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 7035 (light grey)         Description         Document tray       1 U         Document tray       2 U         RAL 9005 (black)	7540200 7542200 Order no. 7540250 7542250 Order no. 7963500
	482.6 mm (19") keyboard tray, with integrated mouse pad and tray, for installation in all racks with front and rear 482.6 mm (19") angles. The tray can be locked and the keyboard support can be raised by 7°.Dimensions: 482.6 mm (19") x 485 mm x 1 U Useable internal dimensions for keyboard: (W x H x D) 406 x 32 x 182 mm Material: 1.25 mm sheet steel Front finish: powder coating Weight: approx. 8.1 kg Delivery comprises: 1 keyboard tray with telescopic rails, fixing accessoriesPull-out document tray: ¾ (380 mm) 482.6 mm (19") document tray which can be installed in all SP Racks with front and rear 482.6 mm (19") mounting angles. The tray can be locked. Dimensions: 482.6 mm (19") x 485 mm x 1 U or 2 U Useable internal dimensions for document storage: (W x H x D) 415 x 35/70 x 420 mm Material: 1.25 mm sheet steel Front finish: powder coating	Keyboard tray, comfort         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 9005 (black)         Keyboard tray, empty         Keyboard tray with keyboard         and mouse         RAL 7035 (light grey)         Description         Document tray       1 U         Document tray       2 U         RAL 9005 (black)       Description	7540200 7542200 Order no. 7540250 7542250 7542250 Order no. Order no.

Cable routing tile for rai	<ul> <li>ised floors</li> <li>Cable routing tile as a seal for installation in the raised floor, in two parts.</li> <li>Usable cable aperture: 203 x 102 mm</li> <li>Dimensions: (L x W x H) 279 x 210 x 41 mm</li> <li>Material: plastic</li> <li>Delivery comprises: Cable routing tile, 2-part</li> </ul>	Cable routing tile for raised floors	Order no. 7963800
Chassis rails (depth adju	<ul> <li>ustable)</li> <li>The slide rails can be extended to the required length and screwed into place between the front and rear 482.6 mm (19") mounting angles. The component for installation is pushed onto the rails and fixed into place. Can be used in racks of all manufacturers! Use of lower height units is limited (-2 mm).</li> <li>Length: min. 540 mm, max. 750 mm</li> <li>Load capacity: 100 kg</li> <li>Contact area: 28 mm right/left</li> <li>Material: steel sheet, galvanised</li> <li>Delivery comprises: 2 slide rails, fixing accessories</li> </ul>	Chassis rails (depth adjustable)	Order no. 7777200
Cable clips	For attachment to C-profile rails to enable the clamping and guiding of cables by means of cable ties. Material: PA Delivery comprises 4 clips	Cable clip	Order no. 7760000
Equipotential earthing	<b>bar</b> For retrofitting horizontally or vertically in the framework's 25 mm pitch pattern. Material: 12 x 5 mm copper rail 1 equipotential earthing bar, 2 isolators, 5 feeder terminals 1.5 – 16 mm <sup>2</sup> , fixing accessories	Horizontal installation for rack width (mm) 600 800 Additional feeder terminals UPP = 10	Order no. 7760200 7760100 Order no. 7765000
	000000	Vertical installation for rack height (mm) 2000 Central earthing point	Order no. 7760300 Order no. 6760100

Door contact switch for (	0.5 U lamp	Door contact switch	Order no.
	Door contact switch with 1.5 m cable and angled plug for the lamp outlet socket		7763700
Interior lamp 0.5 U	Interior lamp for direct installation on the 482.6 mm (19") angle, including switch, socket-outlet box and 3 m power cable.	Interior lamp 0.5 U 8 W fluorescent tube 6 x 1 W LEDs	Order no. 7764100 7764200
Le Contraction of the second s	<ul> <li>Delivery comprises: 1 interior lamp, 0.5 U</li> <li>Technical Data: <ul> <li>8 W/230 V (fluorescent tube), 6 W/230 V (LED)</li> <li>Approval: CE, ENEC, UR</li> <li>(L x W x H) 448 x 545 x 26 mm</li> <li>Magnetic fastener, screw fasteners or clip-on horizontally on 19" pitch pattern</li> </ul> </li> </ul>		
Interior lamp, comfort	This multi-purpose not only provides perfect lighting, but also serves as a "plug & play" distribution and connection device	Interior lamp, comfort Comfort interior lamp with screw fasteners	Order no. 7841000
	for door contact switch, thermostat and fan. The space-saving interior lamp is screw fastened and can be mounted both	Comfort interior lamp with magnetic fastener	7841100
	horizontally and vertically on the SP Rack's 25 mm pitch pattern, or as an alternative, attached magnetically to any sheet steel surface (magnetic attraction force: approx. 10 kg) Dimensions: (L x W x H) 225 x 88 x 44 mm Material: 1.00 mm sheet steel Finish: powder coated in RAL 7035 (smooth finish) Delivery comprises: 1 Comfort interior lamp, 1 power cable (2 m) with socket and dual earthing two-pole schuko plug, fixing accessories.	Light bulb	7841500
	System interfaces: 1 socket for 230 V supply lead 1 coded two-pole jack for thermostat, daisy chain wiring		
	<ul> <li>1 coded three-pole jack for fan</li> <li>1 coded two-pole jack for door contact switch</li> <li>Integrated front side switch (On/Off door contact switch)</li> </ul>		
	Technical Data: Input voltage: 230 V / 50 Hz		

- Input current: 50 mA
- System: 6 W
- Integrated electronic self ballast

rmostat and door con	tact switch for interior lamp, comfort	Thermostat	Order no.
	<ul> <li>Thermostat</li> <li>The thermostat enables the fan and the door contact switch to be connected to each other and to the power supply simply and professionally. Retrofitting is also possible.</li> <li>Delivery comprises: 1 thermostat with a 1 m lead and plug, fully wired, 1 mains cable (2 m), 1 mounting kit, fixing accessories</li> <li>Technical data: <ul> <li>Adjustment range: 0 – 60° +/- 2k</li> <li>Max. switching capacity: 6A/230 V AC</li> <li>Noise depression class: N</li> <li>Protection class: IP20</li> </ul> </li> </ul>		7841200
0.000	<ul> <li>Door contact switch</li> <li>Is connected to the Comfort interior lamp.</li> <li>Delivery comprises: 1 door contact switch with 0.5 m lead and connector plug, fully wired, 1 mounting kit, fixing accessories</li> <li>Technical data: <ul> <li>Continuous current: 10 A/500 V AC</li> <li>Protection class: IP68</li> </ul> </li> </ul>	Door contact switch	Order no 7841300
nish applicator	For touching up or repairing damage to the powder coated finish. Volume: 12 ml	Colour RAL 7035 (light grey) RAL 9005 (black)	Order no 7999000 7999050
6 mm (19") adhesive	<b>tape measure strip for mounting angles</b> Numerically marked in inches to indicate height units. Numbered from top to bottom or vice versa. Material: self-adhesive transparent foil Delivery comprises: 2 rolls of tape	Self-adhesive tape measure strip 47 – 1 U 1 – 47 U 1 – 47 U from top to bottom	Order no 6699200 6699400 6699500

		TFT console 17"	Keyboard	Order no
TFT console		Colour light grey, RAL 7035	D	7545500
	Efficient server management in 19" racks	Colour black, RAL 9005	D	7546000
	17" LCD monitor	Colour black, RAL 9005	UK	7546010
	Resolution: 1280 x 1024 (SXGA)	Colour black, RAL 9005	US	7546020
	Brightness type 300 cd/m <sup>2</sup>	Colour black, RAL 9005	F	7546030
Alternation	Contrast type ratio 500:1	Colour black, RAL 9005		7546040
All Marsons	16.7 million colours	Colour black, RAL 9005	E	7546050
	On Screen menu	Colour black, RAL 9005	CH	754606
	Approvals: CE, FCC	COIOUI DIACK, NAL 9003		754000
	Dimensions (W x D x H): 482 x 490 x 44 mm			
	2 telescopic rails			
	Max. rated power: 30 watts			
	Power consumption in standby < 1 watt			
	Touchpad with integrated mouse keys and scrolling			
	function			
	Touchpad with integrated number block			
	(88 keys on German version)			
Spare key for door (SP, I	NT Box. Slimline)	Spare key for door		Order no.
		Spare key for door		7999500
	Lock type: EMKA 333			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Delivery comprises: 1 key			
100				
15				
()				
Spare key for side pane				0.1
Spare key for side palle		Spare key for side panel		Order no.
	Lock type: EMKA 2233X			7799500
	Delivery comprises: 1 key			
10				
- THE				
Lill				
-10g				
La				
- All				
Installation set for profi	le half cylinder lock	Installation set for profi		Order po
Installation set for profi		Installation set for profi	le	Order no
Installation set for profi	For retrofitting DIN 18252 profile half cylinder locks in	Installation set for profi half cylinder lock	le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	Order no 7590600
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
Installation set for profi	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	
	For retrofitting DIN 18252 profile half cylinder locks in pivoted handles.		le	

Up	ower box								3 U p	ower box			order no
	_		For swite	ches, one-v	vay switch	es or powe	r strips on	frame-					6670540
			works or	scaffoldin	g. Up to 22	modules	with 18 mn	n wide					
			can be c	onnected.	DIN rail m	ounting rai	l has a dep	th					
			adjustab	le range of	f 15 mm. T	he box is e	quipped w	ith two					
10-10-10-10-10-10-10-10-10-10-10-10-10-1			10 x 8 m	m earthing	g rails. Cabl	e entry ap	erture 400 :	x 35 mm					
		• -	with bru	sh on rear	side.								
			Length:	120 mm w	ith 15 x M5	5 inlets							
			Material:	1.5 mm st	eel sheet								
			Finish: R	AL 7035									
			VE: 1 pie	ce									
owe	r supply strip	o, D moo	del						Techr	nical Data (	depending	on model)	)
		100		na on the	model the	nower sur	ply strips c	an he		-	c. with DIN		d CEE F/III
				-			ither vertica			0	oltage 240		
	100	e .				-	ne framewo			-	protector		
	( )	÷.					turning the				art 6/A1/A		
	6		, ,	0 0			ire integrate				temperatu		-
		6		,			ving the us				onitoring,		
				-			neight of or				ductor 6.5	KA, deflect	or voltag
		0		-			mm (19") ai			50 V/50 Hz		filter	عادل رو
		S					stic in acc. v	-			uppression		.c. with
			UL94VO								5, part 3/5	.80	
			Colour R	AL 7035						ansient pro	Diection		
			Delivery	comprises:	1 power s	upply strip	with a 2 m	lead (3 x	W: Ro	ocker swite	:h		
			Denvery										
	0				ko plug dej		the mode			-	protector	and noise	
	900		1.5 mm²)		ko plug dej				su	vervoltage Ippression		and noise	
		1	1.5 mm²)	and Schul	ko plug de					-		and noise	
No	Length	With	1.5 mm²)	and Schul	ko plug de With				su	-		and noise "C19"	Order n
		With	1.5 mm <sup>2</sup> , fixing ac	) and Schul cessories.		pending or	n the mode	l,	su CE	ippression	filter		
	Length (mm)		1.5 mm <sup>2</sup> ; fixing acc	) and Schul cessories. Without	With	pending or With	" the mode	l, "F"	su CE "UK"	"CH"	filter "C13"	"C19"	
of ocket	Length (mm)		1.5 mm <sup>2</sup> , fixing acc With plug.	) and Schul cessories. Without	With overV.	oending or With display	"D" model	l, "F"	su CE "UK"	"CH"	filter "C13"	"C19"	Order 1
f ocket	Length (mm) ts		1.5 mm <sup>2</sup> ) fixing act With plug. schuko	) and Schul cessories. Without	With overV. protec.	oending or With display	"D" model schuko	l, "F"	su CE "UK"	"CH"	filter "C13"	"C19"	Order 1
f ocket	Length (mm) ts 482.6 mm (19*)		1.5 mm <sup>2</sup> , fixing acc With plug, schuko X	) and Schul cessories. Without	With overV. protec. X	oending or With display	"D" model schuko	l, "F"	"UK" model	"CH"	filter "C13"	"C19"	Order 1 77705 77717
f ocket	482.6 mm (19")		1.5 mm <sup>2</sup> , fixing acc With plug. schuko X X	) and Schul cessories. Without	With overV. protec. X	oending or With display	"D" model schuko	l, "F"	"UK" model	"CH"	filter "C13"	"C19" model	Order 1 77705 77717 77718
f ocket	Length (mm) 482.6 mm (19°) 482.6 mm (19°) 482.6 mm (19°)		1.5 mm <sup>2</sup> , fixing acc With plug. schuko X X	and Schul cessories.	With overV. protec. X X	oending or With display	"D" model schuko	l, "F"	"UK" model	"CH" model	filter "C13"	"C19" model	Order 1 777050 777177 77718 777706
f ocket	Length (mm) 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19")		1.5 mm <sup>2</sup> fixing acc With plug. schuko X X X	and Schul cessories.	With overV. protec. X X	oending or With display	"D" model schuko	l, "F"	su CE "UK" model	"CH" model	filter "C13"	"C19" model	Order 1 77705 77717 77718 77706 77717
f ocket	Length (mm) 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19")		1.5 mm <sup>2</sup> fixing acc With plug. schuko X X X	Without plug	With overV. protec. X X	oending or With display	"D" model schuko	l, "F"	x x x	"CH" model	filter "C13"	"C19" model	Order 1 77705/ 77717/ 77718 77706/ 77717/ 77717/
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ocket	Length (mm) 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19") 482.6 mm (19")	switch	1.5 mm <sup>2</sup> , fixing act	Without plug	With overV. protec. X X	With display (A)	"D" model schuko x 	l, "F"	x x x	"CH" model	filter "C13"	"C19" model	Order 1 77705 77717 77718 77706 77717 77717 77717 77717 77717
f	Length (mm) 482.6 mm (19°) 482.6 mm (19°)	switch	1.5 mm <sup>2</sup> , fixing act	Without plug	With overV. protec. X X	With display (A)	"D" model schuko X X X	l, "F"	x x x	"CH" model	filter "C13"	"C19" model	Order 1 777050 777177 77718 777060 777177 777177 777177 777170 777170
f ocket	Length (mm) 482.6 mm (19") 482.6 mm (19")	switch	1.5 mm <sup>2</sup> , fixing act	Without plug	With overV. protec. X X	With display (A)	"D" model schuko X X X X X	l, "F"	x x x	"CH" model	filter "C13"	"C19" model	Order 1 777050 777170 77718 777060 777177 777170 777170 777170 777100 777110
focket	Length (mm) 482.6 mm (19°) 482.6 mm (19°)	switch	1.5 mm <sup>2</sup> , fixing acc With plug, schuko X X X X X X X X	Without plug	With overV. protec. X X	With display (A)	"D" model schuko X X X X X	l, "F" model	x x x	"CH" model	filter "C13"	"C19" model	Order 1 77705 777170 77718 77718 77717 77717 77717 77710 77710 77717
f ocket	Length (mm) 482.6 mm (19°) 482.6 mm (19°)	switch	1.5 mm <sup>2</sup> , fixing acc With plug. schuko X X X X X X X X	Without plug	With overV. protec. X X	With display (A)	"D" model schuko X X X X X	l, "F" model	x x x	"CH" model	filter "C13"	"C19" model	Order 1 777050 777170 77718 777060 777170 777100 777170 777170 77718 77718 77718
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ocket	Length (mm) 482.6 mm (19°) 482.6 mm (19°)	switch	1.5 mm <sup>2</sup> , fixing act with plug. schuko X X X X X X X X X X X X X X X X X X X	Without plug	With overV. protec. X X	With display (A)	"D" model schuko X X X X X X X X X X	l, "F" model	x x	"CH" model	filter	"C19" model	Order r           777050           777170           777170           777170           777170           777170           777100           777100           777100           777100           77718           77718           77704           777150           777150

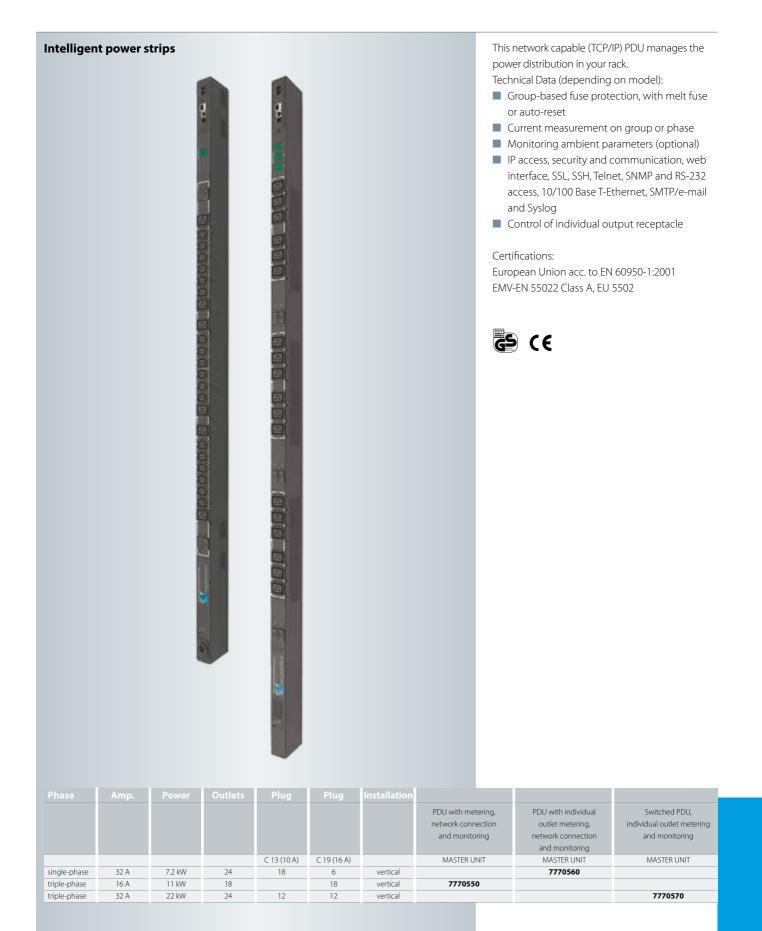
7771850

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765

CEE 16 A 1-pole





## Power Control, 1 U, power strip with integrated functions for measuring current, voltage, output, phase angle, frequency and energy

Aluminium profile 1 U, natural anodised, approx. 450 mm in length with specifications as follows:

- Plastic end face and receptacles in grey
- 230 V power supply via the right/lower end face by means of a fixed HO5VV-F 3G 1,5 mm<sup>2</sup> 2 m mains cable with angled schuko plug
- With integrated current/output meter
   (allowing for phase shift) -> 0–16 A, 3-digit ampere display
- Measuring range from 0.1 16 A
- Fully insulated power inputs in acc. with low voltage directive accuracy class 1
- 8 IEC C 13 sockets, black or
   6 Schuko sockets, 35° angled, grey
- With optional locking for C 13
- Delivery includes 2 brackets for mounting the power strip horizontally/vertically on/in the rack



Туре	Order no.
6 outlet schuko	7770650
8 outlet IEC C 13	7770660

## Switchable 24-outlet C 13 power strip, 32 A (SNMP)

- 24 IEC outlets, each with 10 A capacity, divided into 3 groups of 8 x C 13
- Each group of 8 protected with 16 A fuse
- Overall capacity 32 A
- Connector cable length 2m
- CEE 32 A socket, 3-pole blue, or CEE 16 A 5-pole, red
- Status Led red/green (switch on/switch off) per port
- Status LED for fuses
- ON delay can be individually set for each port (1 sec. 30 min.)
- Soft start (after PowerOn, ports switch on gradually with time delay)
- Memory function (after PowerOn, ports will assume on, off or last status)
- Batch function (each port can be switched off and restarted automatically after x seconds)
- Control via Ethernet, HTML and script
- All ports can be switched by hand on the device itself, also in the event of power failure
- SNMP 1 and 2.c, Syslog functionality
- Password protection for user/admin and IP ACLs (firewall)
- Can be updated via Ethernet, also when in operation (port status remains unchanged)
- Mounting holes in 25 mm pitch pattern
- I U, overall length 1500 mm, depth only 60 mm

Туре	Order no.
Switchable 24-outlet C 13 power strip, 32 A	7771600
3-pole, L/N/PE (SNMP)	
Switchable 24-outlet C 13 power strip, 3 x 16 A	7771610
5-pole L <sub>1</sub> /L <sub>2</sub> /L <sub>3</sub> /N/PE (SNMP)	

## Modular Rack Management System

## Multifunctional modular monitoring system for server rooms and data centres



The 8-port module is attached onto the side of the CPU module and provides 8 connector ports for universal application



The CPU module is the communication unit which processes the information from the port modules and passes it on by SNMP via data networks

Plug connectors to neighbouring modules provide the required electricity and data line links. Simply connect sensors/actuators with RJ45 plugs\*) to the rear side, whether digital or analogue, input or output \*) 8-port module is also available with a clamp connector



Simply slot together and secure with a cross support (for wall/table mounting)



CPU and 8-port module with Bracket for rack mounting



The concentrator is used in large-scale applications (building control systems, industrial environments, large-scale data centres). It serves as a consolidation point for high density installations

## **Benefits:**

- Modular design to suit customer requirements
- Integration in existing infrastructures
- Scalable
- Multifunctional and universal
- No software installation required
- Access via web browser
- Hot plugged
- 🔳 1 U
- Fast configuration

## Article no. on request!

## **Rack Management System**

## **Rack management system**



Complete security for computer centres and racks

The rack management system serves as an intelligent network agent for monitoring all environmental influences on network, switch and server racks in computer centres, on campus and in eternal locations. All monitored environments can be evaluated accordingly and necessary control operations carried out. In reaction to particular events, alarm messages are generated automatically and/or switching operations triggered. The RMS is operated via SNMP or a web browser. Private MIB allows the RMS to be integrated in all common network monitoring systems. The RMS is an autonomously functioning system and secures the operation of the entire electronic data processing system. All results can be recorded and evaluated as required.

### All features at a glance

- Stable, high-availability operating system (Linux)
- Extensive range of sensors for all usual environmental influences
- Compatible with other sensor technology due to analogue input channels
- Internal power supply for all sensors (no additional mains adapter required)
- Programmable filter system for the realisation of any alarm conditions
- Operation and configuration by SNMP, http.
- Alarm messages by LED, buzzer, switching outputs and network management (SNMP traps)
- Compatible for all usual network management platforms
- Integrated user administration (password-protected)
- Optional access control (keypad, chip card, GSM)
- Update function

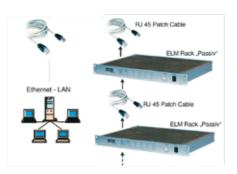
### **Technical data**

	Comfort	Economy
Order no.	7570100	7570200
1 mains connection	85264 V AC optional 48 V DC	85264 V AC optional 48 V DC
8 digital inputs	max. 48 V, 1 A	max. 48 V, 1 A
8 digital inputs	max. 12 V DC	max. 12 V DC
4 analogue inputs	max. 10 V DC	max. 10 V DC
4 relay outputs	max. 48 V, 1 A	max. 48 V, 1 A
1 COM interface	serial interface	serial interface
2 USB interfaces	configuration, memory	no
2 CAN interfaces	for additional external modules	for additional external modules
1 Ethernet network interface	100Mbit, RJ45	10Mbit, RJ45
Protocols	SNMP, http	SNMP
Display	2-line, 20 places, alpha numerical	no
Status LEDs	yes	yes
DC optional	48 V DC	48 V DC
Int. power supply for sensors	yes	yes
SNMP 1.0 and 2.C	yes	yes
http	yes	no
Operating temperature	+ 550° C	+ 550° C
Humidity	585 % rel. humidit	zy, non-condensing
Dimensions (H x W x D)	43.5 (1 U) x 481 x 210 mm	43.5 (1 U) x 481 x 210 mm
Weight	2.9 kg	2.9 kg
Delivery comprises	RMS, inc. mains cable, C	D: software and manual

#### 7580450 Temperature sensor with 2 m cable + plug Climate temp/humidity sensor with 2 m cable 7580600 7580750 Smoke alarm 2 m cable + plug Door contact sensor 4 m cable + plug 7580800 Vibration sensor with 2 m cable + plug 7590000 Extension cable for handle/sensor, 3 m 7590110 Extension cable for handle/sensor, 7 m 7590120 Extension cable for handle/sensor, 12 m 7590130 Keyboard with combination lock 7590150 Card reader 7590160 Pivoted handle, electromagnetic operation 7590200

## **Connections at the rear**





## Uninterruptible Power Supply Systems

## Line interactive







## **Double-phase** transformer







### Line interactive technology with buck-boost function and sinusoidal output voltage

- Combined rack-tower model, only 2 U
- Scalable stored energy time (from ZINTO A 1500)
- Hot-swap battery: intelligent battery management, self test and quick-charge system
- Selectable input and output voltages generator-compatible
- Overvoltage protection for telephone and data lines
  - Hot standby capable, raises operational reliability for servers with redundant mains adapters
- USB and RS-232 interfaces, potential-free contacts, emergency OFF
- Slot for optional interface cards (AS400, SNMP/network, relay contact, etc.)
- Includes DataWatch shut-down, management and monitoring software
- 2 years warranty with immediate warranty replacement

#### Accessories

- Rack mounting rail for ZINTO A series: compatible with racks of all manufacturers, due to variable length of 465 - 865 mm, max. load 68 kg, dimensions in mm (W x H x D): 490 x 75 x 50, art. no. 6591330
- Rack mounting kit for ZINTO A 800/1000: for mounting in 19" rack, excluding rack mounting rails, which must be ordered separately if required, dimensions in mm: (W x H x D): 500 x 95 x 280, art. no. 6591340
- Rack mounting kit for ZINTO A 1500/1500BP/2000/2000BP: for mounting in 19" rack, excluding rack mounting rails, which must be ordered separately if required, dimensions in mm: (W x H x D): 500 x 95 x 65, art. no. 6591350

		ZINTO A 1000	ZINTO A 1500	ZINTO A 2000	ZINTO A 3000
Order no.	6591700	6591800	6591000	6592100	6592200
Nominal output					
Apparent power	800 VA	1000 VA	1500 VA	2000 VA	3000 VA
Effective power	530 W	700 W	1000 W	1340 W	2000 W
Input					
Nominal voltage		230	) volt, selectivity adjusta	able	
Frequency			50/60 Hz +/- 10 %		
Current intensity, max.	3,6 A	4,5 A	6,8 A	9,1 A	13,6 A
Input connector	IEC 320 C14	IEC 320 C14	IEC 320 C14	IEC 320 C14	IEC 320 C20
Output					
Nominal voltage		230 volt,	+/- 5%, 220/240 volt cor	nfigurable	
Frequency			50/60 Hz +/- 0,2 %		
Switchover time			4 ms		
Efficiency, normal operation			> 95 %		
Efficiency, battery operation			> 85 %		
Output socket	4 x IEC 320 C13	6 x IEC 320 C13	6 x IEC 320 C13	6 x IEC 320 C13	8 x IEC 320 C13
					1 x IEC 320 C19
Stored energy time		50	%/100 % active power l	oad	
Standard (internal battery) min.	23 (3)	14(6)			13 (5)
Plus 1 battery pack (min.)			16 (7)	14 (6)	
Plus 2 battery packs (min.)			40 (16)	34 (15)	
Plus 3 battery packs (min.)			67 (28)	56 (25)	
Plus 4 battery packs (min.)			95 (40)	78 (36)	

servers with redundant mains adapters

RS-232 interface and potential-free contacts

(AS400, SNMP/network, relay contact, etc.) Includes DataWatch shut-down, management and

2 years warranty with immediate warranty replacement

Rack mounting rail, art. no. 6591320

Slot for optional interface cards

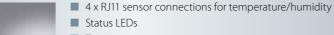
monitoring software

### Double-phase transformer technology, classification VFI-SS-111 Hot standby capable, raises operational reliability for

- Double-phase transformer technology,
  - classification VFI-SS-111
- Combined rack-tower model
- Extremely quiet due to regulated high-performance fan
- Black, attractive design also suitable for office environment
- Hot-swappable battery: conversion without interrupting
- operation
- Scalable stored energy time due to extreme battery packs
- Selectable input and output voltages –generator-compatible

	Xanto RT 1000	Xanto RT 2000	Xanto RT 3000		
Order no.	6591100	6591200	6591300		
Nominal output					
Apparent power	1000 VA	2000 VA	3000 VA		
Effective power	700 W	1400 W	2100 W		
Input					
Nominal voltage		230 volt			
Frequency		50/60 Hz +/- 10 %			
Current intensity, max.	3,8 A	7,8 A	10,7 A		
Input connector	IEC 320 C 14	IEC 320 C 14	IEC 320 C 20		
Output					
Nominal voltage	230 volt, +/- 5 %, 220/240 volt configurable				
Frequency		50/60 Hz +/- 0,2 %			
Voltage distortion, linear load	< 2 % THD, R load				
Voltage distortion non-linear load		< 2 % THD, RCD load			
Power loss, max.	49 W	98 W	147 W		
Output socket	4 x IEC 320 C 13	4 x IEC 320 C 13	2 x IEC 320 C 13		
			terminal		
Stored energy time	50 0	% / 100 % active power	load		
Standard (internal battery) min.	18 (6)				
Plus 1 battery pack (min.)		17 (6)	15 (5)		
Plus 2 battery packs (min.)		52 (20)	37 (16)		
Plus 3 battery packs (min.)		94 (37)	55 (26)		
Plus 4 battery packs (min.)		122 (54)	78 (40)		

## Temperature and humidity controller



- Temperature measuring range
- Humidity measuring range
- Application areas: floor, table, rack/furniture-mounted, wall-mounted
- International mains adapter 110/230 V AX
- Power consumption: 2.5 VA
- Dimensions: 130 x 90 x 30 mm
- Weight: 350 g
- Network: 10 MBit, RJ45
- Protocols and standards: http, dhcp, smtp, snmp
- Operating temperature: +5° C to +40° C

Delivery comprises: 1 housing with electronic accessories

- 1 mains adapter
- 1 temperature sensor -10° C to +70° C
- 1 data cable
- 1 software CD
- 1 set of operating instructions

## 1U Speed and temperature controller

# -

LC display (LCD) with plain text menu. Temperature-dependent infinitely variable speed control. Mains connection via IEC plug. Relay alarm output and sensor: 2-pole plug

Technical data:

- Operating voltage: 110 240 Volt/50 + 60 Hz
- Power consumption, max.: 250 W (max. load)
- Max. switching capacity: 10 A
- No-load loss: ~ 1 W
- Alarm output: 1 changeover, 24 V UC 5 A (max. 48 V – 10 A)
- Fuse: M 1.6 A 250 V (5 x 20mm)
- Temperature range: +5° C to +60° C
- Switching range: +5° C to +60° C
- Temperature units: ° C and ° F, adjustable
- Switching differential: 1° C to 5° C, adjustable
- Temperature sensor: PTC-sensor with plug (KTY81-2)
- Display/Switching accuracy : +/- 2 Kelvin
- Storage of minimum and maximum recorded temperatures, reset possible

Dimensions:

Installation depth: 210 mm Width: 19" (housing: 437 mm) height: 1 U

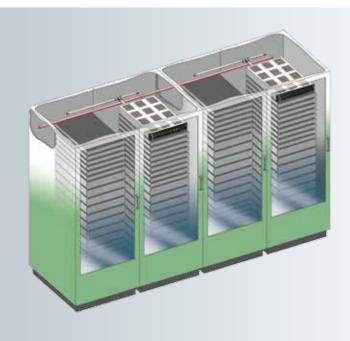
Equipment/Delivery comprises: Speed and temperature controller Mains supply cable Temperature sensor with 1.5 m cable 1 data cable, 1 software, 1 operating manual

RMS 200	Order no.
RMS 200	6670420
Temperature sensor, -10° C to +70° C	7580400
Humidity sensor	7580500

1 U Speed and temperature

ruer nor







## Space-saving fire protection for server racks

Data processing, server or switchgear racks are among the most important technical equipment in any company. They are responsible for managing internal data flow or controlling manufacturing processes and yet, more often than not, these racks are positioned inaccessibly or are insufficiently integrated into existing security systems. The new **TITANUS RACK-SENS**<sup>®</sup> can put an end to this situation.

- Can be installed vertically
- Plug and play
- Easy-to-handle, space saving 482.6 mm (19") module
- Integrated air-sampling smoke detection system
- Available in 1 U or 2 U
- Extinguishing media: Novec 1230 (non-conductive, leaves no residues, direct use on open flame results in formation of acid)
  - 1 U version with external extinguishing gas cylinder
  - 2 U version with integrated extinguishing gas cylinder
- VdS (German fire safety inspection institute) approval (1 U)
- Network (Ethernet ISNMP)
- Certified Microsoft server management interface

Designed for:

- Network and server racks
- Telecommunications racks

## Article no. available on request!



- Can be used universally
- Can be mounted on any SP54 Rack
- Light grey RAL 7035

## Roof mounting air conditioner

Roof mo	ounting air conditioner	WxHxD (mm)	Order no.
1400 W	Roof mounting air conditioner 230 V/1/50-60 Hz, weight 45 kg, 65 dB (A); only for racks from 800 mm depth upwards	604 x 350 x 448	6310110
2000 W	Roof mounting air conditioner 230 V/1/50-60 Hz, weight 44 kg, 65 dB (A); only for racks from 800 mm depth upwards	604 x 350 x 448	6310120
2700 W	Roof mounting air conditioner 230 V/1/50-60 Hz, weight 81 kg, 67 dB (A); only for racks from 900 mm depth upwards	804 x 487 x 480	6310130

Air/water heat-exchanger, roof mounted		
2200 W	Roof mounting heat exchanger 230 V/1/50-60 Hz, weight 30 kg, 58 dB (A); only for racks from 900 mm depth upwards	6310160

Width (mm)	Depth (mm)	Order no.				
Top cover RAL 7035 for air conditioner 2700 watts						
600	1000	6730016				
800	1000	6930016				
Top cover RAL 7035 for air co	Top cover RAL 7035 for air conditioner 1400/2000 watts					
600	1000	6731060				

## Please note:

For air/water heat exchangers, a source of cold water generation must be provided by the customer. For air conditioners, the customer must ensure sufficient cold intake/warm outlet air.



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6310050 6310110	75	6353950 6354350	68 69	6543505 6550400	28 89	6670530 6670540	88 98	6730010 6730015	27	6763200 6763200	84
6310110	106	6354950	69	6550450	89	6699200	98	6730015	106	6763210	88
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7999500	97
84004642	54
84004694	54
87095262	55
87095263	55

## Professional and intelligent

## Service

You can rely totally on SCHÄFER service quality. Regardless of whether you have a question about one of our products or need advice on a specific project, we can provide competent advice quickly and without complications. With active project support and individual services like express delivery, unloading and carrying, disposal of packaging materials and on-site assembly, we and our well-practised team of partners will provide you with all the assistance you need.

## Logistics

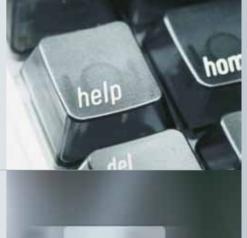
From our Express range, we can supply complete customer solutions including the most important accessories straight from stock at short notice.

## **Customised Branding**

You can have your company logo put on all assemblies we supply. This is the simplest, quickest and most economical solution for labelling your products.

## **Certified quality**

All production sites are certified in accordance with DIN EN ISO 9001:2008 and are covered by a professional quality management system in all manufacturing processes. Within this quality management system, technical testing, measuring and inspection procedures ensure the work we perform for our customers will be faultless. The auditing of procedures for quality verification and manufacturing by well-known international clients, as well as the customisation of testing procedures and cycles is part of SCHÄFER's everyday business. Inspection protocols and quality certificates are, in most cases, sent to customers electronically and the objective evaluation of working processes is guaranteed by our cooperation with independent inspection bodies.





## SCHAFER





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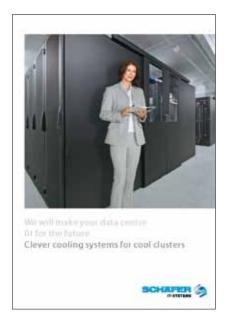
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## More information?





SCHÄFER IT Systems, innovative manufacturer of made-to-measure network and cabinet solutions for both conventional and complex applications, is part of the internationally successful company SCHÄFER WERKE.

The owner-led group of companies has its headquarter in Neunkirchen in Germany's Siegerland region. The work of all the SCHÄFER WERKE divisions – SCHÄFER IT Systems, SCHÄFER Industrial Solutions, SCHÄFER Interior Systems, SCHÄFER Container Systems, SCHÄFER Perforated Metal, EMW Steel Service Centre – is based on high-quality fine steel sheet. The processing of this material is one of the core competencies of this enterprise.

## Our production plants



Plant Neunkirchen



Plant Betzdorf



Plant Ledeč nad Sázavou (CZ)





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