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Cabinet monitoring

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Cable management

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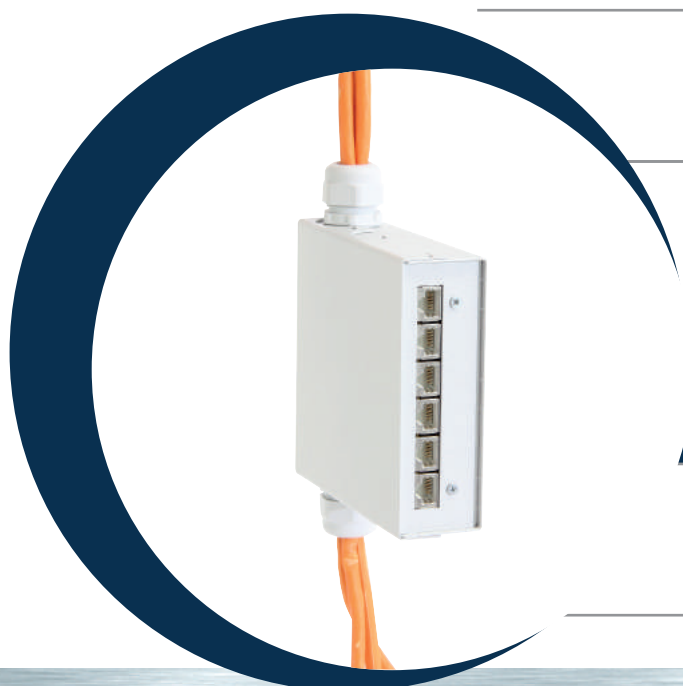
Distribution technology

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General accessories /
distribution technology

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You can read more about products
from the apra-group at www.apra-norm.com



213 • Modular DIN rail system

Modular DIN rail system

The DIN rail housing consists of an upper shell (1), a lower shell (2) and a DIN rail holder (3). It is provided with one cable entry each for an M20 and M25 cable gland (4). Depending on the network application, the DIN rail housing is differentiated into a copper "Cu" and a glass fiber "Gf" version and supplemented by further accessories (see below).

Cu version:

The DIN rail housing is additionally equipped with a high-quality Cu distribution panel in the "6-fold CAT 6A" version.

GF version:

The DIN rail housing is supplemented with a "GF cable manager" (5) for routing cable reserves as well as a front panel for the corresponding type of coupling (6). Various types of common fiber optic couplings for the industrial environment are available here.

Pre-assembly and execution in special colors on request!

Material:

sheet metal

Finish:

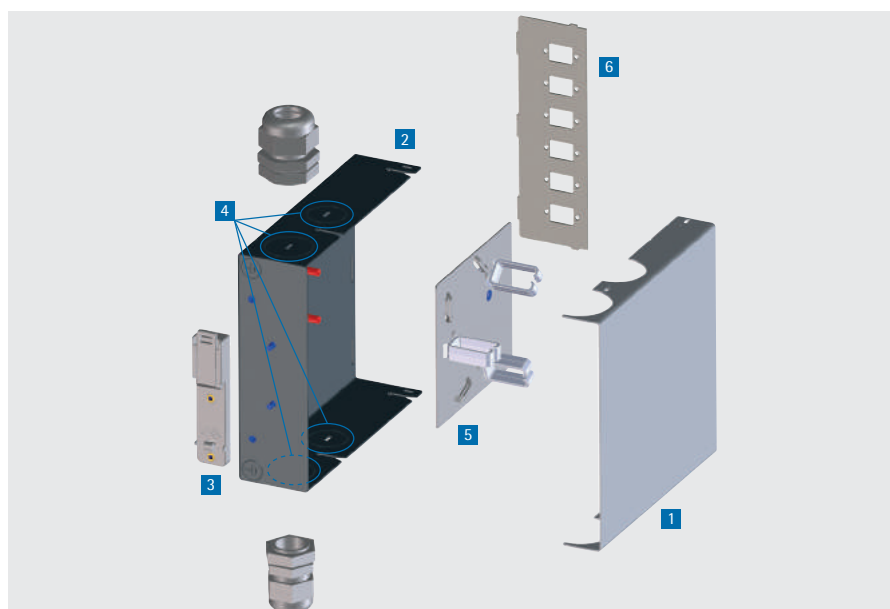
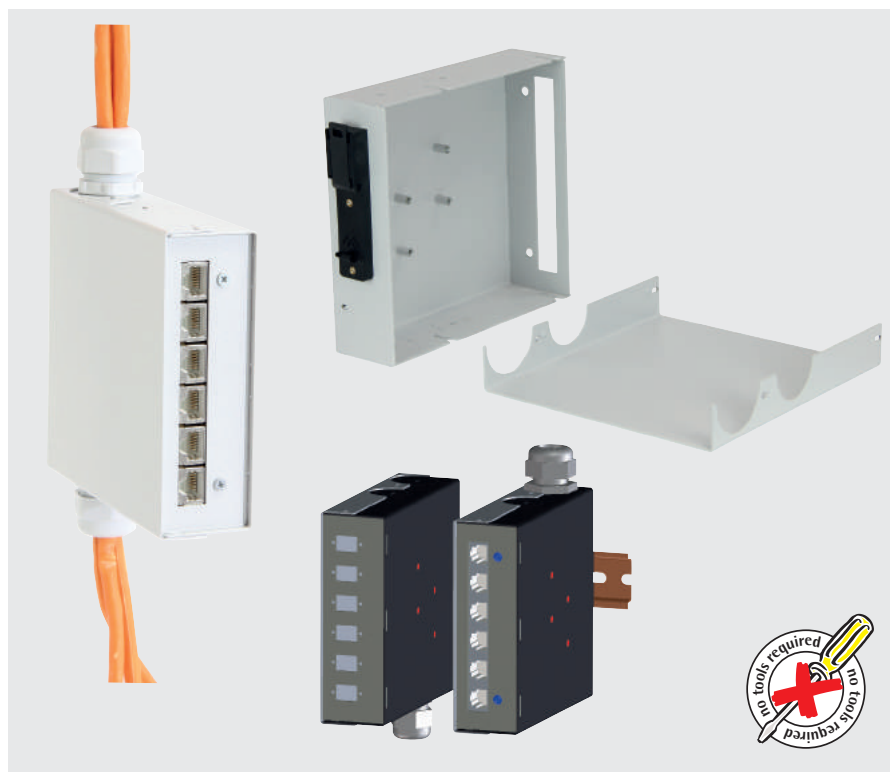
RAL 7035 light grey

Dimensions (H x W x D):

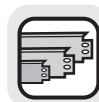
133 x 43 x 135 mm

Delivery:

mounting material included



Description	Order no.
DIN rail housing version "Cu" CAT6 A (6 ports)	213-510-10
DIN rail housing version "Gf" 6x SC-Simplex (6 Ports)	213-510-22
DIN rail housing version "Gf" 6x SC-Simplex (12 Ports)	213-510-25
DIN rail housing version "Gf" 6x ST-Simplex (6 Ports)	213-510-28
Cable gland M20 incl. Locknut	640-115-01
Cable gland M25 incl. Lock nut	640-115-02



19" DIN rail support 3 U

- for a recessed mounting of top hat rail enclosures at 19" levels of cabinets, racks or enclosures
- standard fitted with top hat rail TS 35 (width 425 mm)
- perfect to mount our top hat rail enclosures apraRail
- integrated cable guarding and strain-relief by cable clip bar

Material:

sheet steel 1.5 mm

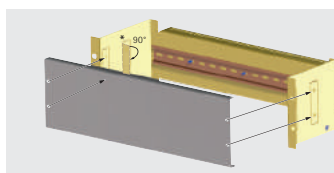
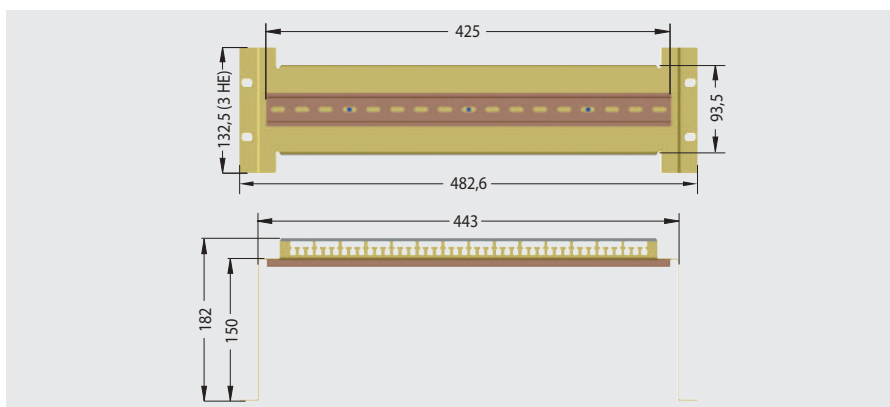
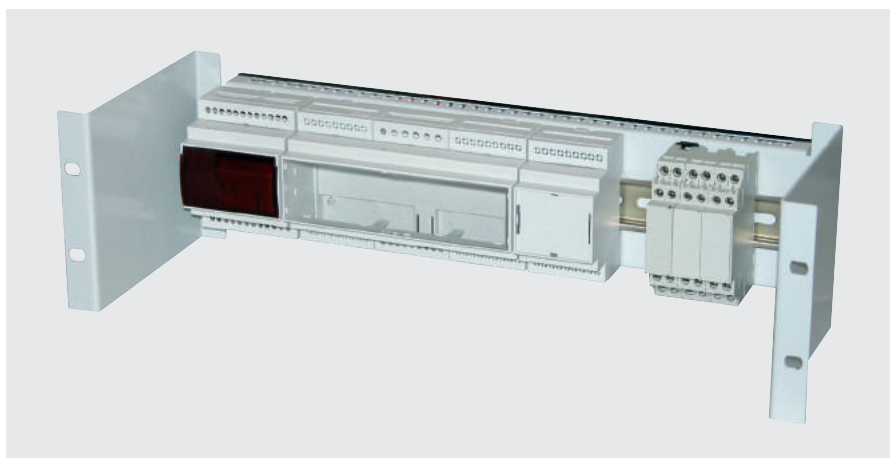
Finish:

galvanised resp.

RAL 7035 light grey

Delivery:

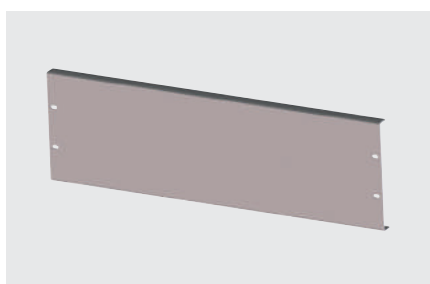
assembled



* To mount the cover, the lateral flaps can be bent up by hand in two different positions.

Other top hat rail types, installation widths, heights or depths available on request!

Cover (protection against contact)



- for 19" top hat rail support 3 U

Finish	Order no.
galvanised	205-420-20
RAL 7035	205-420-25

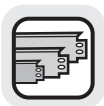
DIN rail fixing clamp (set)

- quick, safe and sturdy fixing of small enclosures, pc boards and components to rails and support rails (TS35)
- can be easily fixed from inside or outside to the rear panel
- 6 versions are available
- set = 10 pieces

Material: PA6 GF 30, black, flammability rating acc. to UL94 V-0



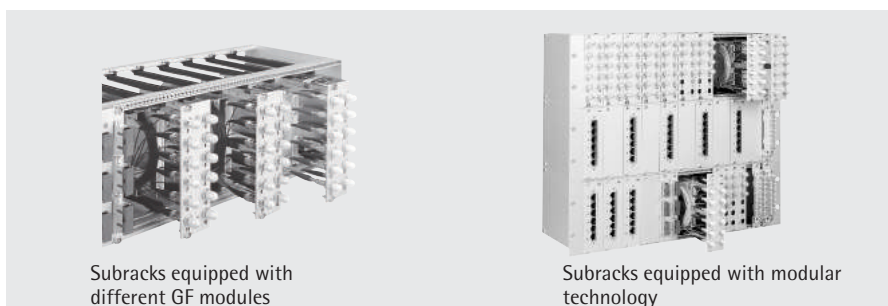
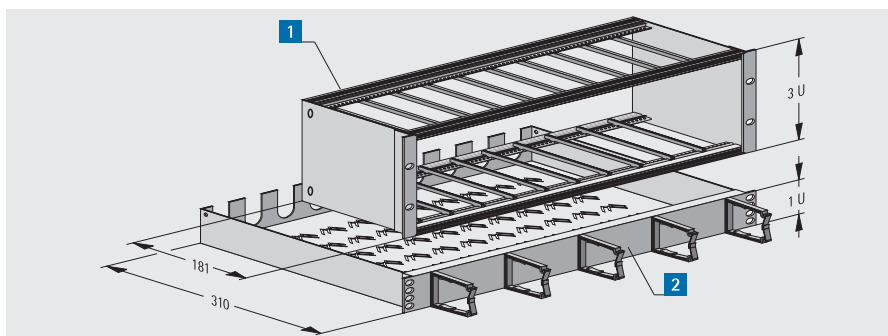
Description	Order no. (1 Set = 10 pieces)
45 mm wide with through hole	442-311-20
45 mm wide with threaded inserts	442-311-25
18 mm wide with through hole	442-311-30
18 mm wide with threaded inserts	442-311-35



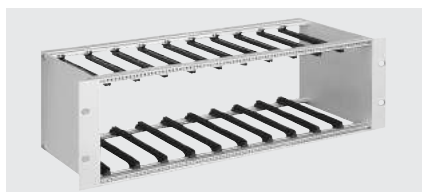
Modular technology

Modular technology

- system for accommodating fibre optics, CAT.6 and telephone modules
- ideal for very high packing densities
- based on a 19" subrack, which can accommodate up to 12 modules (7 HP per module)
- screw-on 19" FO shelf 1 U for secure cable feed through
- 5 front-mounted cable clips for neat horizontal switching
- compact and stable 4U component



1 19" subrack 3 U



- installation width 84 HP
- for the integration of up to 12 modules (with 7 HP module) including 24 plastic card guides
- includes mounting material

Material:

aluminium/plastic

Finish:

anodised/chromated

Dimensions (H x W x D):

132,5 x 482,6 x 181 mm

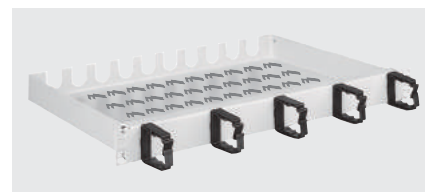
Delivery

Item	pc.	Description
1	2	Front bracket
2	2	Side panels
3	4	Module rails
4	2	Threaded strips M 2.5
5	24	Card guides
6	1	Screw set M 5 x 8 (4x)
7	1	Mounting material

Order no.

213-084-00

2 19" shelf 1 U



- for accommodation of wire and cable lengths routed from the rear through slot openings. M 20 screw connections are used in the openings to hold the cables.
- perforated in the bottom area for unhindered air circulation and neat cable arrangements, e.g. with cable ties
- includes mounting material

Finish:

RAL 7035 light grey

Dimensions (H x W x D):

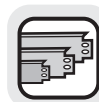
44 x 482,6 x 310 mm

Delivery

Item	pc.	Description
1	2	FO shelf
2	5	Cable conduit
3	1	Mounting material

Order no.

213-085-00



Empty fibre optic modules

The fibre optic modules (3 U, 7/8 HP) are ideal when high packing densities are required in professional distribution systems.

- an extended-length compartment is integrated on the opposite side of the splice cassette for accommodating spare wire lengths in the support panel.
- the front panel may be fitted with up to 12 numbered ST or SC couplings.
- wire pigtails are routed from the front panel to the extended-length compartment and from there via openings into the splice cassette.
- approx. 1 m of the colour-coded wires is deposited and stored here.
- a whole range of feed-through and retainer options are available in the extended-length compartment and splice cassette

Material:

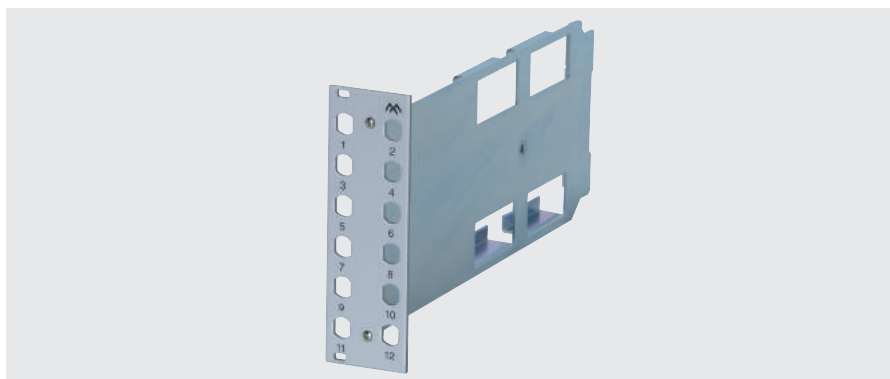
front panel: aluminium, anodised

support panel: sheet metal, galvanised

Dimensions (H x W x D):

3 U x 7/8 HP x 240 mm

Other module variants on request!



Delivery

Item	pc.	Description
1	1	Front panel with screw holder and neck collar screws M 2.5
2	1	Support panel with integrated extendedlength compartment
3	1	Splice cassette
4	1	Splice cassette cover
5	1	Mounting material

HP	Description	Order no.
8	12 x ST	213-120-10
8	12 x SC (6 x SC-duplex)	213-120-11
8	12 x E2000 (6 x duplex)	213-120-12
7	12 x SC (6 x duplex)	213-120-13
7	12 x E2000 (6 x duplex)	213-120-14
7	12 x E2000 (SC-simplex)	213-120-17

CAT.6A patch panel 6-way/12-way

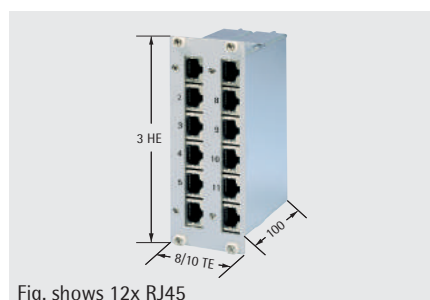


Fig. shows 12x RJ45

- shielded CAT.6 distribution panel
- 6-way RJ 45 (3 U / 8 HP) or 12-way RJ 45 (3 U / 10 HP)
- metal enclosure with large lowimpedance galvanised surfaces
- LSA Plus connecting system
- labelled aluminium front panel

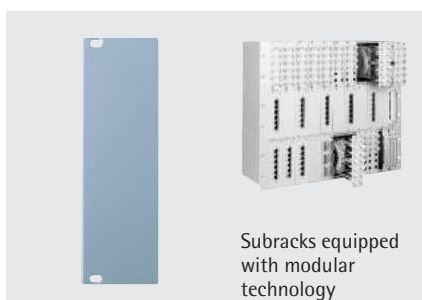
Finish:

front panel: anodised

enclosure: galvanised

Description	Order no.
6-way distribution panel	213-503-10
12-way distribution panel	213-503-30

Blind/partial front panels 3 U



- for fitting non-reserved pitches (HP) in the subrack

Material:

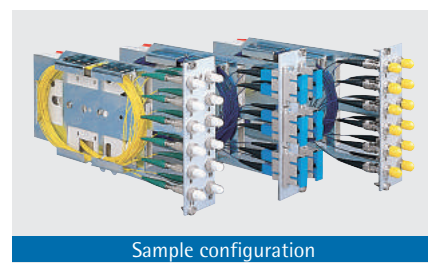
Aluminium 2,5 mm

Finish:

anodised/chromated

Feature	Order no.
Blindplatte 4 HP	243-304-00
Blindplatte 7 HP	243-307-00
Blindplatte 8 HP	243-308-00

Fibre optic modules pre-assembled



Sample configuration

Pre-assembly means:

- mounting of the coupling on the front panel and fixing of the pigtail
- secure laying of wires from the front panel to the splice cassette with sufficient
- wire lengths of approx. 1.5 m
- deposit of an additional approx. 1 m wire in the splice cassette
- storing of the coloured fibres in the splice cassette

We are also happy to offer you pre-made goods in the areas of "Fiberglass Modules" and "Splice Boxes".

Ask us, we will gladly advise you!



19" FO splice box 1 U

19" FO splice box 1 U

- ease of use and installation for structured cabling using fibre optics
- modular construction allows you to choose between an extractable or built-in box with different front panels
- installation of the front panels either recessed or flush with the 19" level
- also available pre-assembled

Dimensions (H x W x D):

44 x 482,6 x 260 mm

(built-in)

44 x 482,6 x 313 mm

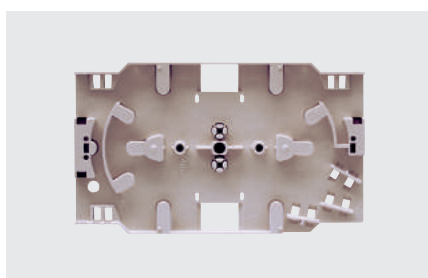
(extractable)

* These boxes are also suitable for the integration of an E2000 simplex mid-section. • FO splice boxes for other plug-in connectors on request!

Delivery

Item	pc.	Description
1	1	Drawer
2	1	Cover
3	1	Front panel

FO splice cassette/cover

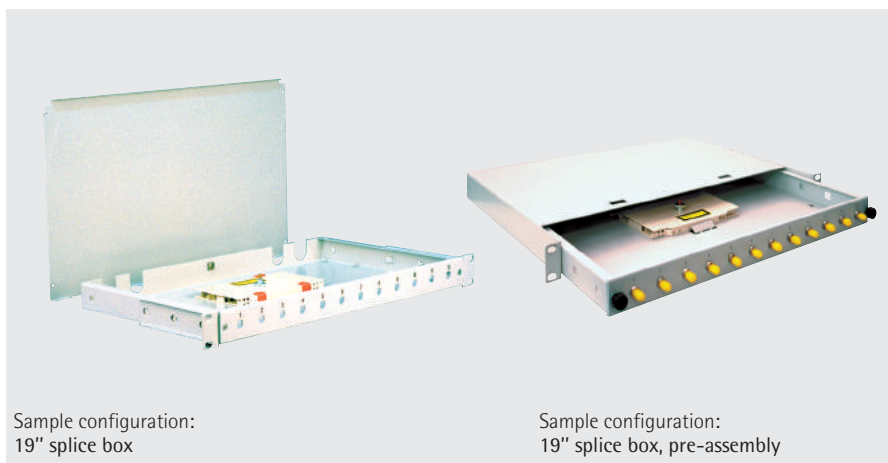


- FO splice cassette with 4 cabling and wire entry areas
- one angled entry area is designed with 3 retention options
- fibre hold-down devices are integrated in the splice cassette area for the fibre lengths

Material:

ABS

Description	Order no.
Splice cassette	640-400-01
Splice cassette cover	640-400-02
Splice protective sleeve	640-400-05



Sample configuration:
19" splice box

Sample configuration:
19" splice box, pre-assembly

Description	Feature	Order no.
12 x ST	19" FO splice box (built-in)	213-301-12
24 x ST	19" FO splice box (built-in)	213-301-24
6 x SC Duplex (12 Ports)	19" FO splice box (built-in)	213-302-12
12 x SC Duplex (24 Ports)	19" FO splice box (built-in)	213-302-24
12 x SC* simplex	19" FO splice box (built-in)	213-303-12
24 x SC* simplex	19" FO splice box (built-in)	213-303-24
12 x ST	19" FO splice box (extractable)	213-311-12
24 x ST	19" FO splice box (extractable)	213-311-24
6 x SC Duplex (12 Ports)	19" FO splice box (extractable)	213-312-12
12 x SC Duplex (24 Ports)	19" FO splice box (extractable)	213-312-24
12 x SC* simplex	19" FO splice box (extractable)	213-313-12
24 x SC* simplex	19" FO splice box (extractable)	213-313-24

Pre-assembly for 19" splice box 1 U

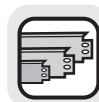
Of course, we also offer this box pre-assembled with fibre optics. This saves you time-consuming and costly on-site assembly.

Pre-assembly means:

- mounting of the coupling on the front panel and fixing of the pigtail
- secure laying of wires from the front panel to the splice cassette with sufficient wire lengths of approx. 1.5 m
- deposit of an additional approx. 1 m wire in the splice cassette
- storing of the coloured fibres in the splice cassette

Description	Order no.
1 x ST 50/125	214-321-01
1 x ST 62, 5/125	214-331-01
1 x ST 9/125	214-341-01
1 x SC 50/125	214-322-01
1 x SC 62, 5/125	214-332-01
1 x SC 9/125	214-342-01

Please order FO splice box and accessories separately!



19" copper distribution panels 1 U CAT.3/CAT.6A

- suitable for data transfers with transfer rates of up to 500 Mhz
- supports industrial use in accordance with EN 50081-2 and 50082-2 (only shielded models)
- connection of the wires via coloured LSA Plus IDC termination (in accordance with EIA/TIA 568A)
- large shield contact area on the shielded models directly on the circuit board using cable clips included, without the need for any additional twisting of the screen netting (with CAT.6 panel)
- distance between connecting terminals and shield contact on the circuit board eliminates any danger of short circuiting between screen netting and connecting wires
- cable strain relief with supplied cable ties without screws or any special tools
- consecutive front panel imprint

Material:

enclosure: sheet metal

shielding cap for shielded models:

stainless steel

Finish:

Front: RAL 7035 light grey

Other FO products available on request!

The components meet the requirements in accordance with ISO/IEC 11801 (Draft 2001) in class Channel E.

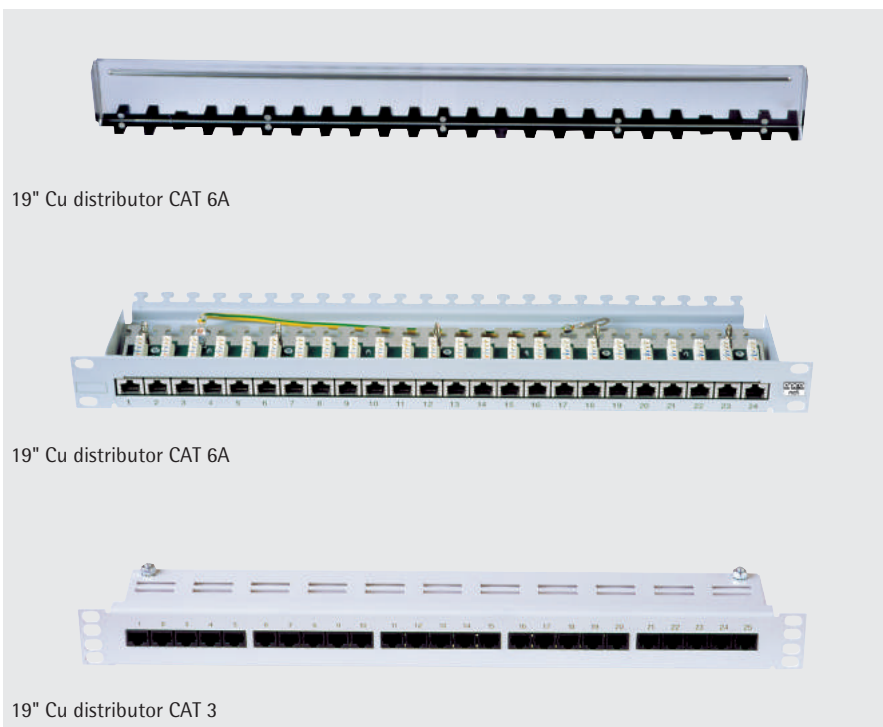
CAT.6A patch panel 6-way/12-way

- suitable for accommodation in a 19" subrack (see page XY) or in the LAN small distribution unit (see page XY)
- shielded CAT.6A distribution panel
- 6-way RJ 45 (3 U / 8 HP) or 12-way RJ 45 (3 U / 10 HP)
- metal enclosure with large lowimpedance galvanised surfaces
- LSA Plus connecting system
- labelled aluminium front panel

Finish:

front panel: anodised

enclosure: galvanised



Description	Order no.
25-way CAT.3, unshielded	213-504-10
24-way CAT.6, shielded	213-506-25

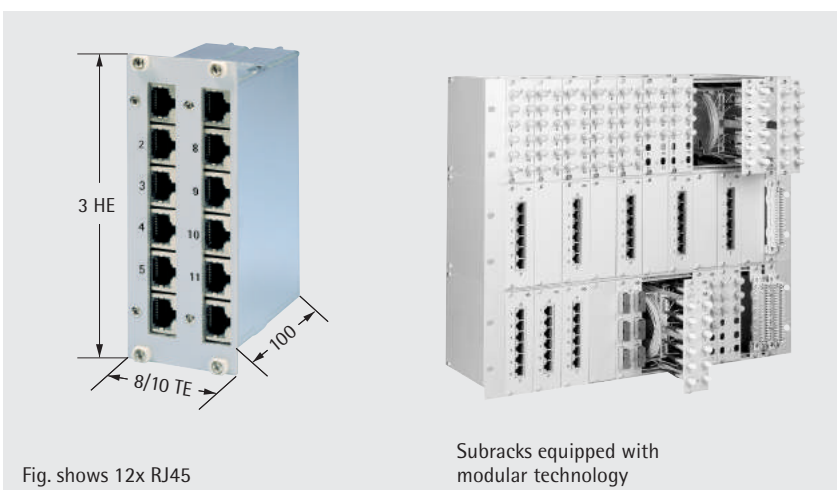


Fig. shows 12x RJ45

Subracks equipped with modular technology

Description	Order no.
6-way distribution panel	213-503-10
12-way distribution panel	213-503-30



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Questions for the sales team: