# Rosenberger

# Patch Location Rack COMFORT





#### Patch Location Rack COMFORT

The demands placed on cabling are constantly growing: space is the most valuable and also the scarcest resource in data centers, and cooled space is the most expensive. That is why it is becoming increasingly important to move as much cabling as possible out of standard server cabinets. In its place, operators are turning to space-saving cabling racks that can be tailored to each specific application. One example of these is the COMFORT Patch Location Rack. This can be installed on data center walls and saves space due to its limited depth. The convenient front access permits secure, efficient working operations. Installation times for modifications and extensions are minimized.

Author: Ronny Mees

#### **Properties:**

- Single rack or double rack
- With lockable doors that take up little space even when open
- Rear mounting level according to ETSI standard
- Flexibly positionable cable supports
- Patch cables in the double rack do not have to be routed (threaded) past door stiles
- Perfectly matched to pre-assembled PreCONNECT® trunk cables
- Can be set up in the patch location as back-to-back or in a row
- Space- and energy-saving installation outside cold aisles

## **Applications:**

- Distribution system for telecoms and data centers as:
  - a high-density patch location for fiber optic cables in data centers
  - transfer point for network transitions (Meet-Me-Room)
  - a main distribution cabinet, intermediate distribution cabinet or zone distribution cabinet according to EN 50173-3

## All the advantages at a glance:

- Significant increase in port density over the same data center surface area compared to conventional 19" cabling racks
- Efficient, convenient operation coupled with high density and doors
- Greater security thanks to lockable panel and folding door
- Makes use of installation spaces outside of the cost-intensive cold aisle
- Secure due to minimally invasive work operations without impacting on neighbouring connections
- Innovative anti-stress cable routing



## Areas of application:

The Patch Location Rack - COMFORT serves as

- a high-density patch location for fiber optic cables in data centers
- and as a larger transfer point for network transitions (meet-me room), e.g. in colocation data centers
- a main distribution rack, intermediate distribution rack or zone distribution rack in accordance with EN 50173-3 with very high packing density in data centers and IT rooms

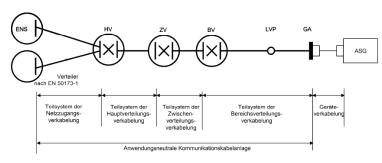
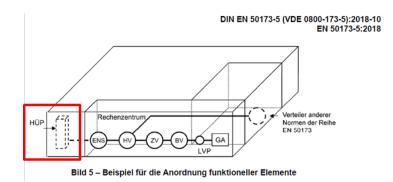


Bild 5 - Teilsysteme der Verkabelung in Rechenzentren nach EN 50173-5



## Rosenberger Patch Location Rack COMFORT

#### The problem:

- Space is the most valuable scarce resource in the data center
- Wiring racks cost space
- Security requirements demand limited and controlled access to the infrastructure

#### The challenge:

- Use areas that are otherwise unusable.
- Cable distributions in as high a density as possible with efficient operability at the same time

#### The solution:

- Convenient patch location racks adapted for the data center in compact ODF-style format, instead of bulky 19-inch cabling racks
- Equipped with densely packed and flexible distribution or hybrid splice housings
- Optional roof cabling

Author: Ronny Mees

## **Technical data and scope of delivery:**



#### Patch Location Rack COMFORT single rack:

Dimensions: 2250x1200x404 (Maximum depth with door open: 1050mm)

80 ETSI height units (25mm each)

Weight 120 kg

Aluminium frame with steel mounting plates

Adjustable feet

Bracket for wall anchorage

Variable earth connection

For up to 16 distribution panels

With up to 2304 LCD ports per rack

Optional hybrid splice panels

Optional mounting adapters for trunk cables

Permissible temperature range

Storage: -25°C to +70°C
Installation: -5°C to +50°C

Order number: 240A1103





#### Patch Location Rack COMFORT double rack:

Dimensions: 2250x2400x404 (Maximum depth with door open: 1050mm)

80 ETSI height units (25mm each)

Weight 232 kg

Aluminium frame with steel mounting plates

Adjustable feet

Bracket for wall anchorage

Variable earth connection

For up to 32 distribution panels

With up to 4608 LCD ports per rack

Optional hybrid splice panels

Optional mounting adapters for trunk cables

Permissible temperature range

■ Storage: -25°C to +70°C

Installation: -5°C to +50°C

Order number: 240A1102



#### **Installation instructions**



The Patch Location Rack COMFORT must be fixed to the floor, ceiling or wall.



For cabling, 1.6mm patch cables (or thinner) with push-pull boot connectors are recommended.

Trunk cable with whip diameter of 1.6mm should have whip lengths in groups of 930mm, 970mm and 1010mm (tolerance: -100)

Velcro tape should be used to attach the cables to cable management elements.

For the attachment of trunk distribution heads, the special trunk head holders are recommended (see accessories).

To attach accessories to the mounting plates, cage nuts that can be mounted from the front are recommended (see accessories).

The modules can be accommodated in combinations of distribution and splice panels in the racks. Possible combinations are:

#### Single rack:

NUMBER OF DISTRIBUTION PANELS	QUANTITY SPLICE PANELS	NUMBER OF CABLE FIBERS
16	0	4608
14	1	4320
13	2	4320
11	3	4032
10	4	4032
9	5	4032
7	6	3744
6	7	3744
4	8	3456
3	9	3456
2	10	3456
0	11	3168



#### Double rack:

NUMBER OF DIS- TRIBUTION PANELS	QUANTITY SPLICE PANELS	NUMBER OF CABLE FIBERS	NUMBER OF DUPLEX PATCH CABLES
32	0	9216	2304
30	1	8928	2232
28	2	8640	2160
27	3	8640	2160
26	4	8640	2160
25	5	8640	2160
23	6	8352	2088
22	7	8352	2088
20	8	8064	2016
19	9	8064	2016
18	10	8064	2016
16	11	7776	1944
15	12	7776	1944
13	13	7488	1872
12	14	7488	1872
11	15	7488	1872
9	16	7200	1800
8	17	7200	1800
6	18	6912	1728
5	19	6912	1728
4	20	6912	1728
2	21	6624	1656
0	22	6336	1584



#### Modules and accessories:

## Distribution and splice panels for Patch Location Rack COMFORT

### All the advantages at a glance:

#### Space-saving:

Significantly increased port density per data center area compared to classic 19" cabling racks

#### Efficient and flexible in use:

- full operation and assembly from the front. Easy access to all connections and cables
- feeding the cables from the side
- integrated, easily accessible anti-stress cable management

#### Sure:

- the distribution panel allows minimally invasive work without influencing neighbouring connections
- the innovative, partially movable anti-stress cable support reduces cable stress

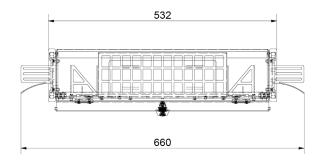


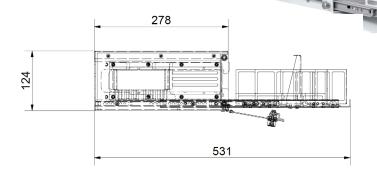
Author: Ronny Mees



#### **Technical data distribution panel:**

- For up to 288 fibres / 144 duplex connections (72xLCQ) or even 576 fibres with MDC or SN adapter (on request)
- For installation height 125mm (5 ETSI-HU corresponds to approx. 3 HU from 19 inch technology)
- Extendable patch level
- Fixable or movable lateral anti-stress cable guides
- Internal cable guides and fastening options for Velcro tape
- Optional lockable lid on request
- Including a pre-assembled coupling carrier, available for 144 LC Compact, 96 E-2000<sup>®</sup> Compact and 288 MDC, others on request
- Weight: 6.5 kg (incl. packaging)
- Dimensions:

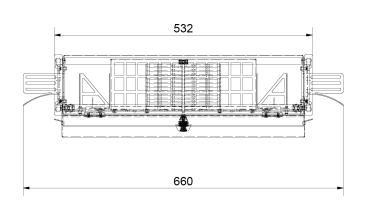


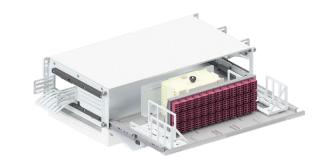


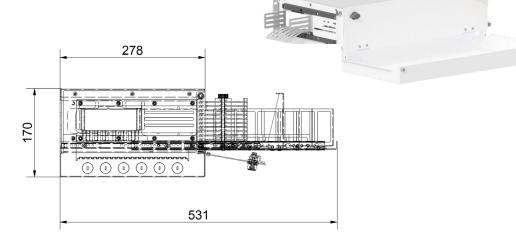
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#### Technical data splice panels:

- For up to 144 duplex connections
- For installation height 175mm (7 ETSI-HU corresponds to approx. 4.5 HU from 19 inch technology)
- Splice patch level extendable
- Cable termination in bottom trough with loose tube guide
- Fixable or movable lateral anti-stress cable guides
- Internal cable guides and fastening options for Velcro tape
- · Optional lockable lid on request
- Including a pre-assembled coupling carrier, available for 144 LC Compact, 96 E-2000<sup>®</sup> Compact and 144 MDC, others on request
- Weight: 6.7 kg (incl. packaging)
- Dimensions:







## Order numbers and options

240A1102	Patch Location Rack COMFORT double	

240A1103 Patch Location Rack COMFORT single

240A1201 Patch Panel FPP, 72 LCQ, SM

240A1202 Patch Panel FPP, 72 LCQ, SM APC

240A1203OM4 Patch Panel FPP, 72 LCQ, OM4

240A1206 Patch Panel FPP, 72 MDC4, SM

240A1209OM4 Patch Panel FPP, 72 MDC4, OM4

240A1212 Patch Panel FPP, 96 E-2000® compact, APC

240A1251 Splice Panel SPP, 72 LCQ, SM

240A1252 Splice Panel SPP, 72 LCQ, SM APC

240A1253OM4 Splice Panel SPP, 72 LCQ, OM4

240A1256 Splice Panel SPP, 36 MDC4, SM

240A1259 Splice Panel SPP, 36 MDC4, OM4

240A0121 Overlength holder

240A0120 Trunk head holder 4-fold (set, 1x each left and right)

240A0122 Trunk head holder 2-fold (set, 1x each left and right)

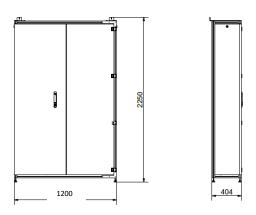
240A0123 19" adapter for mounting 19" panels on ETSI (21") racks.

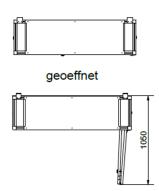
240A0125 Cage nut M6, Set of 100 pcs, mountable from the front



## **Rack dimensions:**

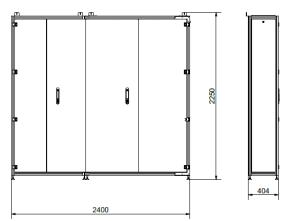


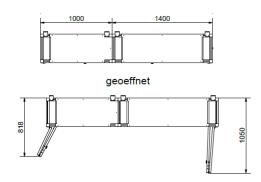




Patch Location Rack COMFORT - single rack







Patch Location Rack COMFORT – double rack

#### About Rosenberger OSI:

Since 1991, Rosenberger **Optical Solutions** & **Infrastructure** (Rosenberger OSI) has been a recognised expert in fibre-based connectivity, cabling solutions and infrastructure services for data centres, local area networks, mobile networks and industrial applications. As an integrated solution provider, we have a high level of expertise in the development and operational excellence in the production of system solutions for communication networks. Our comprehensive services enable the secure and efficient operation of digital infrastructures. This combination, combined with our customer focus, makes us unique and a strong partner in the global market.

Rosenberger OSI has been part of the globally operating Rosenberger Group since 1998, a leading global supplier of high-frequency, high-voltage and fibre optic interconnect solutions headquartered in Germany.

Further information at: www.rosenberger.com/osi

## Rosenberger

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