# Rosenberger

Data Network Optical Distribution Frame DN-ODF and DN-ODF-C





## Data Network Optical Distribution Frame DN-ODF and DN-ODF-C

Space is the most valuable scarce resource in the data centre and standard cabling racks take up a lot of space.

Over the last 100 years of telecommunications history, the basic principles of the main distribution frame have proven themselves and evolved: The logical next evolutionary step in central cabling solutions for data centres, campuses and buildings are the space-saving Data Network Optical Distribution Frame (DN-ODF) and the Data Network Optical Distribution Frame Closable (DN-ODF-C).

DN-ODF adopts the concept of fibre optic main distribution frames (ODFs). These are regularly used in telecommunications because of their ability to accommodate countless cables, both in the central office, colocation and edge.

## **Properties:**

- Single frame or double frame (DN-ODF only)
- Single frame DN-ODF-C with lockable doors
- Standard ETSI width of 1200 mm
- Flexible mountable cable supports
- Perfectly designed for the use of PreCONNECT® trunk cables
- Can be arranged as back-to-back or side-by-side setups
- Saves space and energy when positioned out of cold aisle containments

## **Applications:**

- Distribution system for telecoms and data centres as:
  - a high-density patch location for fibre optic cables in data centres
  - 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:

- Space-saving due to up to three times the port density per data centre area compared to cabling cabinets
- Efficient operability despite high density
- Use of otherwise unsuitable areas
- Safe even for minimally invasive work without influencing neighbouring connections
- Reliable, market-proven concept



## Areas of application:

DN-ODF and DN-ODF-C, together with the LARO patch panel, serve as

- a high-density patch location for fibre optic cables in data centres and as a transfer point for network transitions (Meet-Me-Room), e.g. in colocation data centres.
- a main distribution enclosure, intermediate distribution enclosure or zone distribution enclosure in accordance with EN50173-3 with extremely high packing density in data centres and IT rooms.

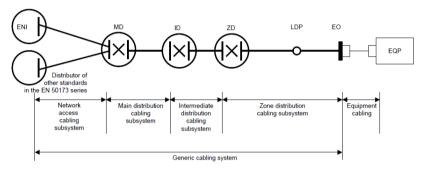


Figure 5 - Cabling subsystem in data center according EN 50173-5

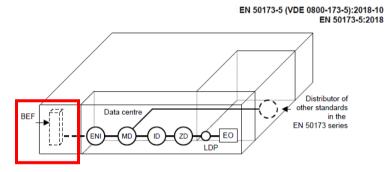


Figure 5 - Example of accommodation of functional elements

## Rosenberger DN-ODF - Data Network Optical Distribution Frame Rosenberger DN-ODF-C - Data Network Optical Distribution Frame - closable

#### The problem:

- Space is the most valuable scarce resource in the data centre
- Wiring racks cost space

## The challenge:

- Use areas that are otherwise unusable.
- Cable distributions in the highest possible density with simultaneous efficient operability

#### The solution:

- Optical distribution frames adapted for the data centre instead of cabling racks
- Equipped with densely packed and flexible LARO patch panels (LAN Access Rackmount Organiser)
- Optional roof cabling



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

#### **DN-ODF** single frame:

Dimensions: 2200x1200x320

Weight 58kg

Aluminium frame with steel mounting plates

Adjustable feet

Bracket for floor and/or wall anchoring

19 pieces cable supports Variable earth connection

For up to 14 LARO patch panels (subrack) With up to 2016 LCD ports per frame

Optional splice subrack

Optional mounting adapters for trunk cables Permissible temperature range

Storage: -25°C to +70°C

Installation: -5°C to +50°C

#### DN-ODF-C

Dimensions: 2183,5x1200x343

Weight 122kg

Steel

4 pieces cable supports
Variable earth connection
For up to 16 LARO patch panels (subrack)
With up to 2304 LCD ports per frame

Optional splice subrack

Optional mounting adapters for trunk cables Optional door locking systems

Permissible temperature range

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



#### **DN-ODF** double frame:

Dimensions: 2200x1200x600

Weight 63kg

Aluminium frame with steel mounting plates

Adjustable feet

Angle for floor anchorage

38 x cable supports

Variable earth connection

For up to 28 LARO patch panels (subracks)

With up to 4032 LCD ports per frame

Optional splice subrack

Optional mounting adapters for trunk cables

Permissible temperature range

■ Storage: -25°C to +70°C

Installation: -5°C to +50°C





Two DN-ODF-C can be arranged back-to-back to represent a double-frame function

DN-ODF and DN-.ODF-C must be fixed to the floor, ceiling or wall.

## Modules and accessories:

## LAN Access Rackmounted Organiser (LARO)

## All the advantages at a glance:

## Space-saving:

Enables solutions with up to three times the port density per data centre area compared to standard panels in standard cabling cabinets

#### 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 cable management

#### Secure:

Modular LARO patch panel allows minimally invasive work without affecting neighbouring connections

#### Technical data:

Up to 144 LCD ports per patch panel
Empty housing made of steel and aluminium
Basic dimensions 530x122x280 mm (WxHxD)
Mounting dimension according to ETSI
Rear mounting level to allow interference-free access to cables
Lateral cable outlet
The modular design concept provides better accessibility to cables and connectors
Individual, forward-sliding and removable modules with up to 12 LCD ports
With telescopic extension to ensure complete operation from the front
Equipped with front door and pull-out guard



In the ODF LARO, PreCONNECT® STANDARD trunks with extended stepped "E-whip length" must be used as described in the PreCONNECT® STANDARD product information.



LC-COMPACT Push-Pull-Boot (LCC-PPB) patch cables with a cable diameter of 2.0 mm or thinner must be used with this enclosure system.



Patch cord order numbers Duplex patch cable Cable type Round I-V(ZN)H						
Cable diameter	Connector	Length	OM4	SM PC 0°	SM APC 8°	
1.6 mm	LC-COMPACT PPB " LC-COMPACT PPB	variable	087A6949OM4	087A6948G657A1	087A6950G657A1	
2.0 mm	LC-COMPACT PPB " LC-COMPACT PPB	variable	087A6737OM4	087A6738G657A1	087A6747G657A1	

## Patch Cassette Panel (PCP) and Splice Cassette Module (SCM)

## All the advantages at a glance:

- Patch or splice connection cleanly separated
- Efficient and flexible in use
  - Full operation and assembly from the front
  - Feeding the cables from the side
  - Integrated fibre management
- Secure



Up to 96 channels per module
Empty housing made of steel and aluminium
Basic dimensions 530x122x280 mm (WxHxD)
Mounting dimension according to ETSI
Rear mounting level to allow interference-free access to cables
Lateral cable outlet
With telescopic extension to ensure complete operation from the front
Equipped with front door and pull-out protection

#### **Accessories on request:**

Cable tray, splice table Yellow fibre optic cable duct







Author: Ronny Mees

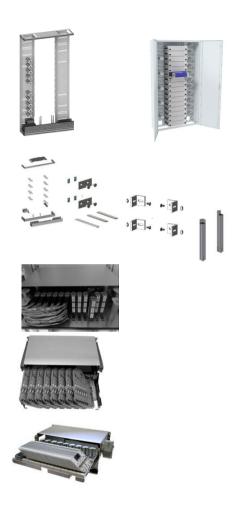
## **Order numbers**

240A0001	ODF single 14
240A0002	ODF double 14
240A0003	ODF-C closed 16

240A0101	Expansion set "single to double" for ODF
240A0102	Side by side connector kit for ODF
240A0103	Wall mount kit for ODF
240A0104	Cable duct connector for ODF

240A0105 Overlength holder, half-round for ODF-C

240A1000 240A1001 240A1002OM3 240A1002OM4 240A1010 240A1011 240A1012OM3	Laro Panel LCQ for SM Laro Panel LCQ for SM APC Laro Panel LCQ for OM3 Laro Panel LCQ for OM4 Patch cassettes panel LCD for SM Patch cassettes panel LCD for SM APC Patch cassettes panel LCD for OM3 Patch cassettes panel LCD for OM3
240A1002OM4 240A1020	Patch cassettes panel LCD for OM4  Splice cassettes module



### **About Rosenberger OSI:**

Since 1991, Rosenberger Optical Solutions & Infrastructure (Rosenberger OSI) has been a recognized expert for fiber-based connectivity, cabling solutions and infrastructure services in the areas of data centers, local area networks, mobile networks and industrial applications. As an integrated solution provider, we have high 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 strong 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. The Rosenberger Group is a leading global provider of high-frequency, high-voltage and fiber optic connectivity solutions with headquarters in Germany. For further information, please visit: <a href="https://www.rosenberger.com/osi">www.rosenberger.com/osi</a>

## Rosenberger

## Rosenberger-OSI GmbH & Co. OHG

Optical Solutions & Infrastructure | Endorferstr. 6 | 86167 Augsburg | Phone: +49 821 24924-0 info-osi@rosenberger.com | www.rosenberger.com/osi

Rosenberger® is a registered trademark of Rosenberger Hochfrequenztechnik GmbH & Co. KG. All rights reserved. © Rosenberger 2021

For technical reasons, we reserve the right to deviate from the illustrations printed in the product information. Passing on to third parties only with the permission of Rosenberger-OSI GmbH & Co. OHG. All rights reserved

Creation date: 14.01.2020 Valid since: 10.06.2021 Revision: 003