

Network Systems ► Splice & Patch Modules ► Subrack System HD 3HU and 4HU/84WU



General Information

The new modular subrack system HD perfects cable management and provides the prerequisite to achieve maximum port density. In conjunction with the HD compact modules, a port density of 288 x LSH/SC ports or 576 x LC ports can be achieved. The subrack system HD is available as a 3HU version and, including the extendable overlength box, as a 4HU version (3+1) and is suitable for installation in a 19" rack. The intelligent cable management ensures the use of all types of cables as well as the preferred strain relief. The overlength box, which can be inserted on both sides, allows the interception to be realised by means of cable ties, metric glands (for loose tube cables) as well as separable metric glands (for breakout or trunk cables). A wide range of accessories is available for dividing the bundles and fibres as well as for safe and permanent feeding to the compact modules.

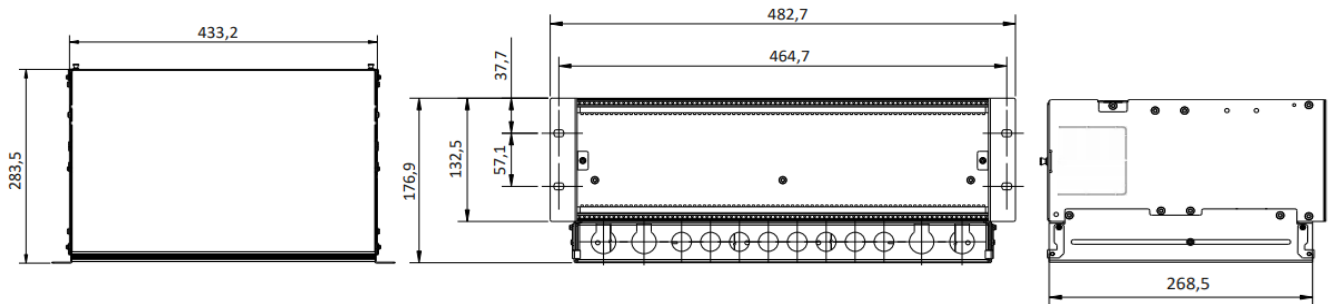
Features

- 3HU or 4HU / 84WU for the accommodation of up to 12 compact modules 7WU/3HU
- Accommodation of up to 576 LC-ports or 288 LSH/SC-ports
- Overlength box extendable in both directions and completely removable to the front and rear for accommodating loose tube overlengths and for storing unused cable reserves

- The overlength box offers different cable inlets depending on the desired rear panel side:
Side A: Up to 12 glands (4 x M25 and 8 x M20) for strain relief of loose tube cables and for cables as well as for breakout or trunk cables (when using of divisible metric glands)
Side B: 2 pre-punched cable inlets (left and right) are preferably suitable for cable ties. For heavy cables, support plates are available as accessories.
- There are many bridge embossments on both sides inside the excess length compartment for intercepting the bundle wires or protective tubes by means of cable ties
- The slightly recessed overlength box allows the selection of manufacturer-independent 1HU cross-connection panels for patch cord routing
- Removable lid, rear panel and base (for 3HU without overlength box).
The optional rear panel avoids protrusion of the bundle wires when they are completely routed inside the subrack.

Technical Data

- Corpus: anodised aluminium
- Front and side panels: color light grey, RAL 7035
- Weight: 2.85 kg (4HU, incl. back wall)
- Dimensions: 482,7 x 283,5 mm (Wide x Depth), 132,5 mm (Height for 3HU), 176,9 mm (Height for 4HU)



Components and Accessories

Article number:

B000-00X-00XZ001	Subrack system HD 19"/3HU (see picture) without top cover, without floor plate, without rear panel	
B000-00X-00XZ002	Subrack system HD 19"/3HU with top cover and with floor plate	
B000-00X-00XZ003	Subrack system HD 19"/4HU with top cover, without rear panel (see picture)	
B000-00X-00XZ004	Subrack system HD 19"/4HU with top cover and rear panel	
DBD-MON-BGTHD	Assembly instructions (German) for subrack system HD: Link	
EBAU-000-00XZ007	Cable fixing plate for the back side of the overlength box, depth at subrack increases by 54 mm	
EZ00-000-PGX0001-001	Cable gland M20 Clamping range Ø 10 mm - 14 mm	
EZ00-000-PGX0002-001	Cable gland M25 Clamping range Ø 13 mm - 18 mm	
Z000-00X-000F032	Tube set 5 m flexible protective tube Ø5 / Ø3.2 mm 1 set is required for a tube guide inside the subrack or 2 sets for outside the subrack (see assembly instructions)	
ZXXX-00X-00XM929	Cable divider set Cable divider for protected feeding of several loose tubes by means of corrugated tube to splice boxes or subracks. Consisting of: 1 x cable catch rail, 6 m corrugated hose, 6 pieces PG16 gland	
EBAU-000-00XZ004	Horizontal cable tray manager 19"/1HU with front cover with 6 plastic brackets and radii limiter, Height 114 mm	
ZXXX-00X-00XZ001	Horizontal cable manager 19"/1HU with 5 plastic brackets, Height 75 mm	

Network Systems ► Installation Cables ► Breakout Cables



Breakout cable with light connector & pigtail protection



Breakout cable with reinforced protection & retraction support



Detail Pigtails with protection & retraction support



General Information

FOC® installation cables have been designed to support alternative cabling technologies for optical network nodes. Pre-assembled breakout cables gain more and more in importance, in particular as solutions in the industrial and FTTX fields. With a single installation the FOC® breakout cable provides a maximum of 24 point-to-point connections. Other advantages over conventional patch cords are lower prices, a better mechanical stability, a larger possible overall length and shorter installation time. FOC® breakout cables are available with up to 24 subunits and different lengths. All common connector standards can be provided, on request also with staggered subunit lengths or pigtail protection or retraction support.

Features

- High mechanical stability
- Big overall possible length

- Shorter installation times
- Cost-efficient
- Individual configuration possible

Standard Variants

- Breakout cable singlemode:
 - 4E9/125/900/2000x7000
 - 12E9/125/900/2000x11600
 - 24E9/125/900/2000x13900
- Breakout cable multimode:
 - 12G50/125/900/2000x11600 OM4
 - 24G50/125/900/2000x13900 OM3

Options

- Staggered cable subunit lengths
- Cable subunits with 1.4 or 2.8 mm outer diameter
- Flexible tube (light protection)
- Reinforced protection with retraction support (on one or both ends)

Specifications Breakout Cable Singlemode¹

Fibre number	max. 4	max. 12	max. 24
Fibre category	E9/125 (OS2)	E9/125 (OS2)	E9/125 (OS2)
Outer cable diameter	7,0 mm	11,6 mm	13,9 mm
Cable whip diameter	2,0 mm	2,0 mm	2,0 mm
Weight	45 kg/km	135 kg/km	170 kg/km
Crush resistance	1000 N/10cm	1500 N/10cm	1500 N/10cm
Min. bending radius (operation)	105 mm	175 mm	210 mm
Max. tensile strength (installation)	800 N	2000 N	2000 N
Temperature range (operation)	- 5°C to 70°C	-20 °C to 60 °C	-20 °C to 60 °C
Fire behaviour	IEC 60332-1-2, IEC 60332-3-22, IEC 60754-1, IEC 60754-2, IEC 61034,	LSZH, IEC 60332-3C, IEC 60754-2, IEC 61034	LSZH, IEC 60332-3C, IEC 60754-2, IEC 61034
Fire load	1,10 MJ/m	2,48 MJ/m	3,21 MJ/m

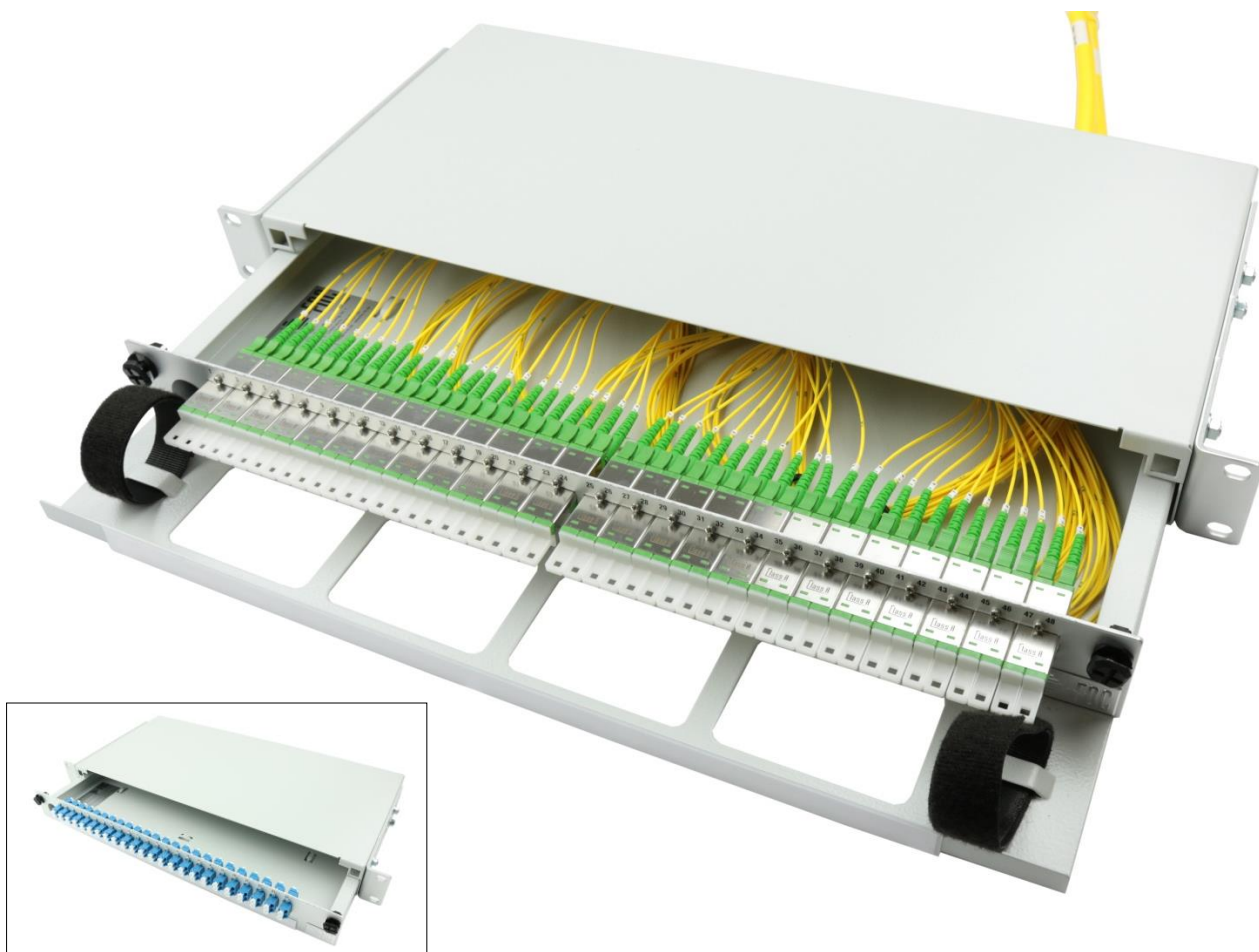
Specifications Breakout Cable Multimode¹

Fibre number	max. 12	max. 24
Fibre category	50 µm MM (OM4)	50 µm MM (OM3)
Outer cable diameter	11,6 mm	13,9 mm
Cable whip diameter	2 mm	2 mm
Weight	135 kg/km	170 kg/km
Crush resistance	1500 N/10 cm	1500 N/10 cm
Min. bending radius (operation)	175 mm	210 mm
Max. tensile strength (installation)	2000 N	2000 N
Temperature range (operation)	-20 °C to 60 °C	-20 °C to 60 °C
Fire behaviour	IEC 60332-1-2, IEC 60332-3-24, IEC 60754-1, IEC 60754-2, IEC 61034	IEC 60332-1-2, IEC 60332-3-24, IEC 60754-1, IEC 60754-2, IEC 61034
Fire load	2,48 MJ/m	3,21 MJ/m

¹ Alternatively other cable geometries/types can be used.



Network Systems ► Splice & Patch Modules ► Jumperbox Extendable 19"/ 1HU



General Information

The Jumperbox Extendable 19"/1HU is a patch box for holding up to 48 fibres. The incoming/outgoing jumper cables can be inserted variably from the rear and be supported using cable clamps without any strain on the cables. The Jumperbox Extendable 19"/1HU ensures a secure installation and provides an even better access to the jumper cables for service purposes.

Features

- Universal jumperbox for FOC® installation cables
- Same front panel design as Lightbox, Fiberbox and Variobox
- Variable front panel insert
- Suited for breakout cables, mini breakout cables, micro breakout cables and multifibre loose buffer cables with distribution head

- Adjustable depth
- ETSI or 19" mounting
- Suited for 300mm cabinet systems
- Extendable drawer for even easier access for service purposes

Material

- Enclosure: aluminium, powder-coated
- Front panel, mounting brackets: aluminium anodized

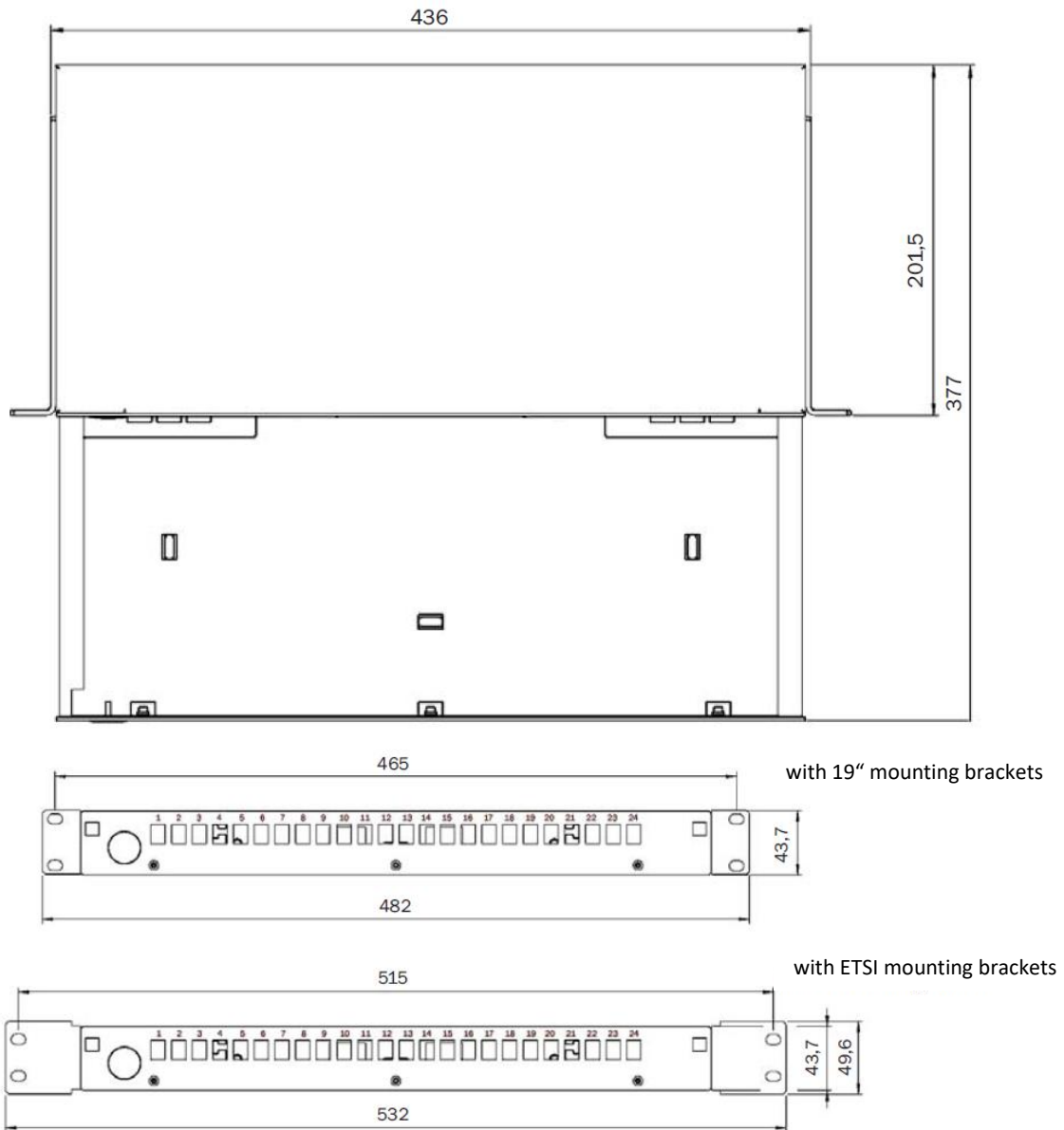
Colour

- RAL 7035

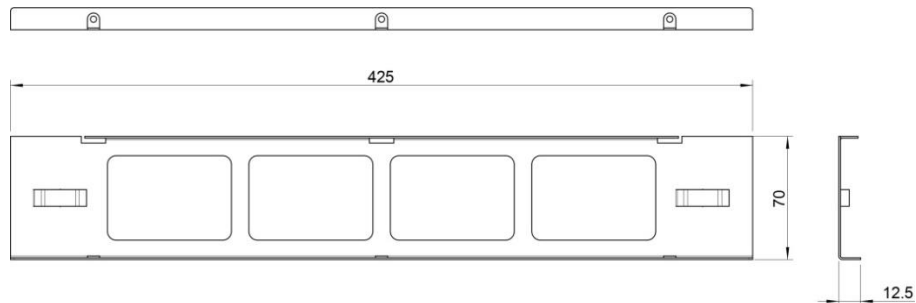
Optional

- ETSI mounting brackets
- Patch cord tray

Dimensions



Cable Management Tray



Network Systems ► Splice & Patch Modules

Swivel Box 19"/ 2 HU lockable



General Information

The Swivel Box 19"/2HU lockable is an innovative splice and patch box for holding up to 24 or 48 fibres (LC connector system).

The optical cables can be entered variably into the rear entries and be retained tightly using cable fasteners or metric threaded glands. The installation of a safety lock half length is possible, to protect against unauthorized access.

Features

- 19"/ 2HU splice and patch box, holding up to 48 or 96 fibres
- 19" mounting brackets depth adjustable up to 35 mm
- Front panel for LSH (Class A), SC (Class A), LC (Class A) simplex or duplex connectors (other connector types on request)

- Left (standard) or right opening (optional)
- Cable entries (2 x on the rear)
- Including splice cassettes with cover, splice holder and mounting material
- Swivel Boxes are delivered ready for splicing (adapters installed, pigtails stripped, inserted, marked in telecom standard colours for SM)

Material

- Enclosure: Aluminium, powder-coated
- Front panel, mounting brackets: Aluminium, anodized

Colour

- RAL 7035

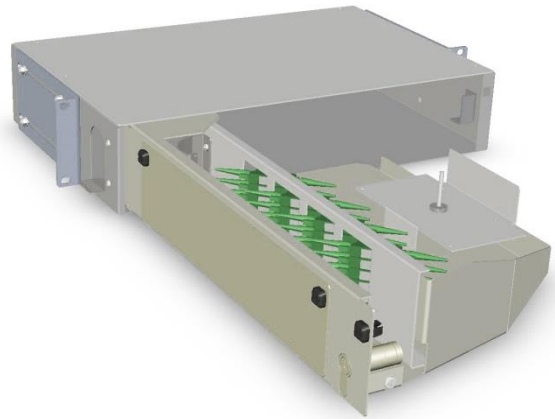
Optional

- ETSI mounting brackets

Standard Version

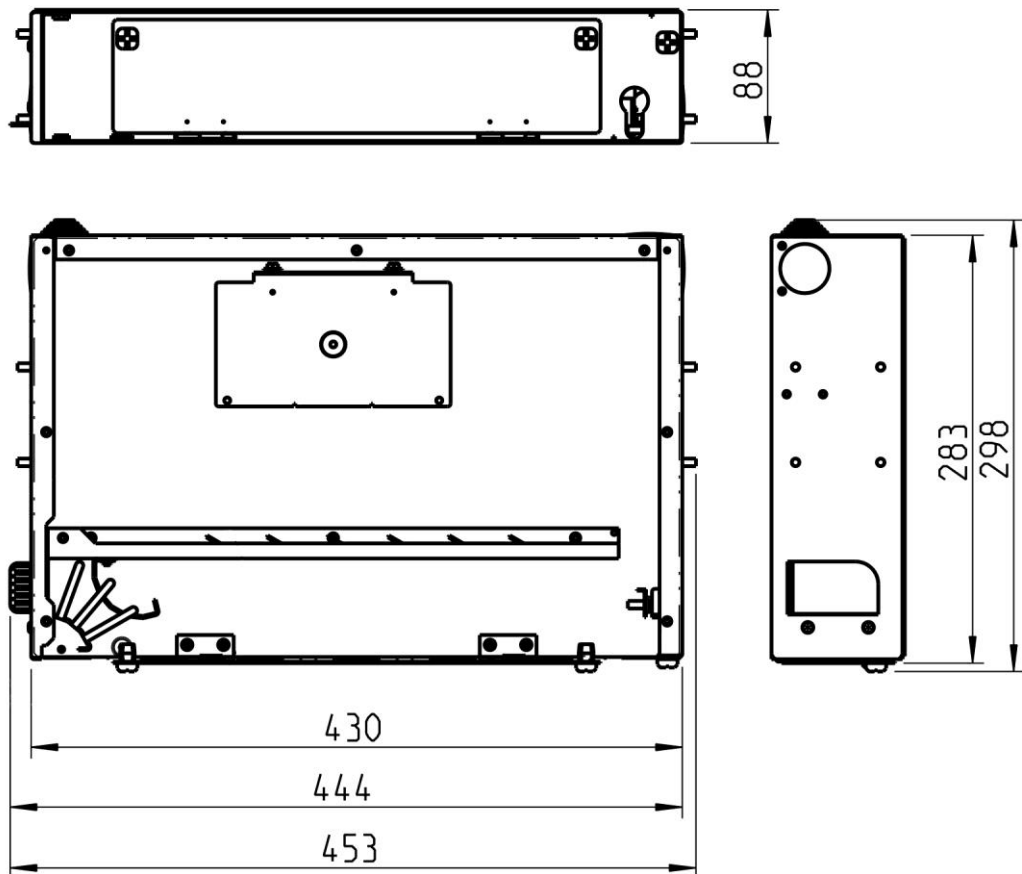


Picture 1: Standard Version (45° left) closed

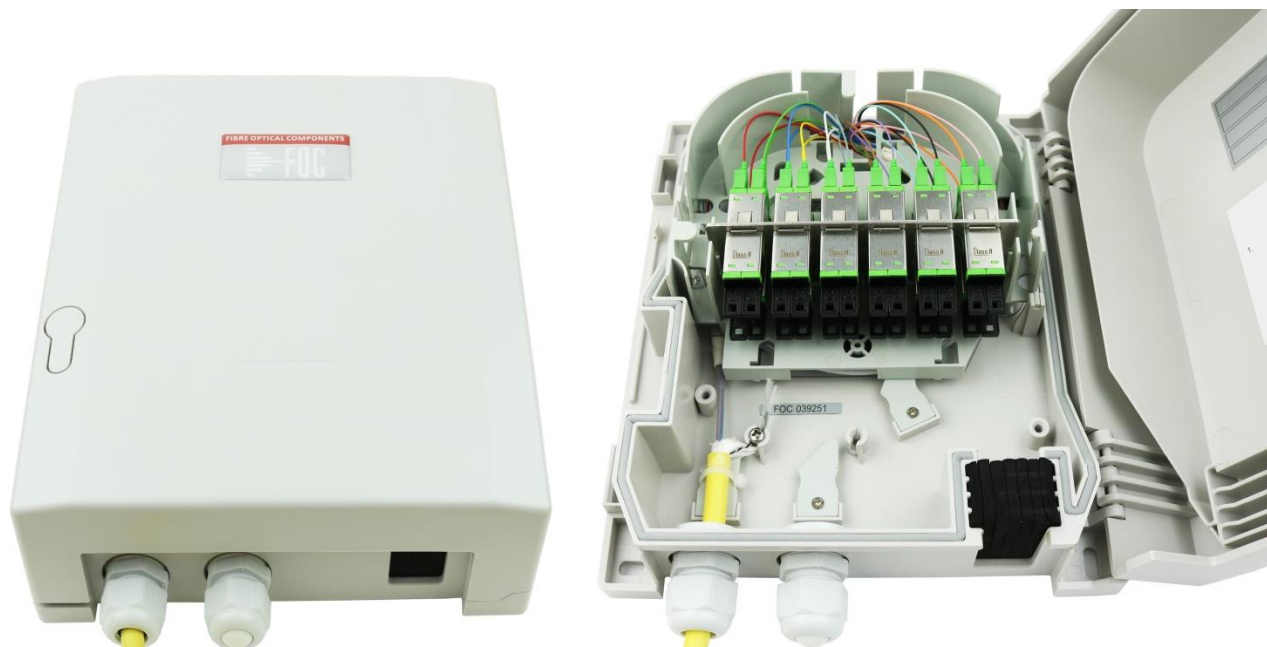


Picture 2: Standard Version (45° left) open

Dimensions



Network Systems ► Wall-mounted Distributor ► Wall-mounted Distributor ODB/24-C



General Information

The ODB/24-C is a compact wall-mounted distributor for outdoor applications. It can hold up to 24 ports and up to 24 splices in a hinged cassette. Moreover it is possible to accommodate power splitters and wavelength division multiplexers for WWDM-, CWDM- or DWDM-solutions for FTTH. The housing enables an easy and quick installation as well as the installation of a safety lock half length.

Features

- Wall-mounted distributor for outdoor applications
- Robust and high-quality plastic housing
- Adapter plate for up to 24 ports of the type LSH (Class A), SC (Class A) or LC (Class A) (other connector standards on request)
- Splice storage system for the accommodation of up to 24 splices or couplers/filters
- Integrated patch cable entry for a large number of cords
- Patch cable output with flexible slat seal

- Integration of a gas stopper is possible
- Available also with installed lead-in connectors and pigtails, ready for splicing (on request)
- Possibility to install a safety lock half length
- Standard M20 cable glands (up to max. 11 mm cable diameter)
- Optional M25 cable glands (up to max. 17 mm cable diameter)

Dimensions

- 200 x 235 x 67 mm

Material

- ASA, structured

Colour

- RAL 7035

IP Rating

- IP 54

Dimensions

