



A PREFORMED LINE PRODUCTS COMPANY



20 21

# PRODUCT CATALOGUE



OPTICAL DISTRIBUTION BOXES



DATA CABINETS

micostelcom.com





# WIDE RANGE OF PRODUCT PORTFOLIO

FROM HIGH STANDARD TO ORIGINAL CLIENT SOLUTIONS

**MICOS Telcom** based in Czech Republic focuses on development and production of solutions for telecommunications and data networks. As of April 1st, 2019 MICOS Telcom partenered with **Preformed Line Products** (**PLP**), a worldwide designer, manufacturer and supplier of fiber optic and copper splice closures, high-speed cross-connect devices and high-quality cable anchoring/control hardware, established in 1947. Together the combined forces of PLP and MICOS Telcom have strengthened their position as one of the worlds leading suppliers of passive elements for optical networks and critical infrastructure. Our global team **now operates facilities in 19 different countries**, **supporting customers in over 140 different countries**.

The following MICOS Telcom portfolio contains **more than 1000 items**, each developed and produced in the EU. We strive to fully optimize solutions to meet the high standards our global telecommunications and power distribution customers expect. Look for future catalogues which will contain the combined product offering of our expanded product line. For product details online, visit www.micostelcom.com or www.preformed.com







MICOS TELCOM offers a convenient connection of integrated solutions with a wide range of compatible products for builders and operators of data and telecommunications networks.

#### MICOS TELCOM PRODUCT PORTFOLIO

- Optical distribution boxes
- Street cabinets
- ODF's & ODB's
- Optical closures
- Overground pillars
- High density cabinets
- Racks and data cabinets
- Optical mini sockets & modules
- Optical accessories (glands, splice trays, splitters etc.)



### INNOVATIONS, DEVELOPMENT, MANUFACTURING, SERVICES

An important benefit for our customers is a concentration of research and development located together with our own production facility. We are able to offer special and completely new technical solutions according to customer's requirements, from product development and prototyping to testing and putting into operation.

Our production facility exploits modern technological equipment for metal and plastics processing, as well as long-standing expertise of skilled workers.

Not only manufacturing of the boxes can be offered but the range of services can be extended by assembling optical distributors i.e. mounting of optical connectors with pigtails and fiber optic bundling.



### WHAT WE OFFER? WHY TO COOPERATE?

- Completing your portfolio of products and gain competitive advantage with MICOS unique and fully certified products.
- Direct cooperation with a renowned producer, which has its own development department.
- Production capacity for manufacturing of all production range parts and unit production of prototypes and samples.
- Flexibility to solve specific requirements and possibility to develop completely new tailor-made products exactly according to given specifications.
- Know-how, technical consultation, assistance and support for project of any scope.

### MICOS EXAMPLES OF PRODUCTS USAGE IN A METROPOLITAN NETWORK





- 1. ORSM 4 Module ODF
- 2. ORSM 2
  High density cabinet
- 3. ORU 1 MUC
  Underground chamber

- 4. MUC 315
  Underground chamber large
- 5. ORU 8 SDF SIS
  Fiber distribution Hub (FDH)
- 6. ORM 16 SDF SIS Fiber distribution pillar

- ORU 3 SIS
   Fiber distribution pillar
- 8. URM SH 48S

  Wall mounted optical distribution
- 9. MUC 250 SL 24 S Underground chamber medium

04

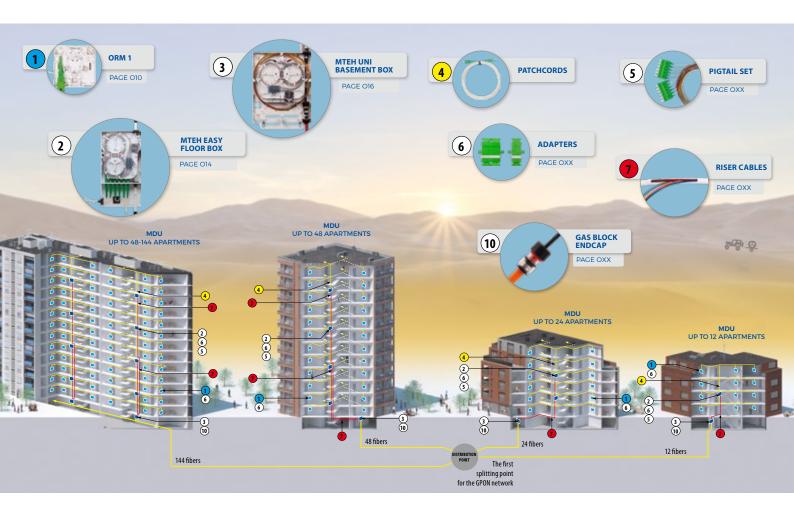
# MICOS OPTICAL DISTRIBUTION BOXES

| DISTRIBUTION BOX  | INDOOR USE       | OUTDOOR USE | MAX. CAPACITY OF OPTICAL SPLICES | MAX. CAPACITY OF OPTI-<br>CAL CONNECTORS SC/LC | PAGE         |
|---|------------------|-------------|----------------------------------|--|--------------|
| ▶ OPTICAL DISTRIBUTION BOXES FOR INDOOR OR OUTDOOR  | USE              |             |                                  |  | 0 10-0 xx    |
| DRM 1   | •                |             | 4                                | 2/4  | 0 10         |
| ORM 2   | •                |             | 6                                | 2/4  | 0 11         |
| COYOTE® FTP   | •                |             | 4                                | 2/4  | 0 11         |
| MTeH MINI   | •                |             | 14<br>24                         | 10/20  | 0 12<br>0 14 |
| MTeH EASY<br>MTeH UNI   |                  |             | 48                               | 12/24<br>24/48                                 | 0 14         |
| ORM 3 FA  |                  | •           | 12/24/36                         | 24/40  | 0 20         |
| ORM 3 L/2 / ORM 3 L/4   | ě                | •           | 12/12                            | 2/4 / 4/4                                      | 0 21         |
| ORM 3 SL 12S / ORM 3 SH 24S   | •                | •           | 12/24                            | 2/1/1/1  | 0 21         |
| RISER KABEL   | •                | •           |                                  |  | 0 23         |
| ORM 4 / ORM 8   | •                | •           | 6/12                             | 4/4 / 8/8                                      | 0 24         |
| ORM 5   | •                | •           | 12                               | 4/8  | 0 25         |
| COYOTE ® STP – JR   |                  |             |                                  |  | 0 26         |
| COYOTE® STP — MD  | •                |             | 12/12                            | 12/12  | 0 27         |
| JRM SL 12C / URM SL 12C M   | •                | •           | 12/12                            | 12/12  | 0 28         |
| JRM SH 24C / URM SH 24C M<br>JRM SH 48S   |                  |             | 12<br>24/48                      | 12   | 0 29<br>0 29 |
| JRM LL 24C M  | ·                | •           | 12/24                            | 12/24  | 0 29         |
| JRM LL 48S  | •                | •           | 48/96/144                        | 12/27  | 0 29         |
| JRM LH 48C M  | •                | •           | 24/48/72                         | 24/48  | 030          |
| JRM LH 48C UNI  | •                | •           | 24/48/72                         | 24/48  | 030          |
| JRM LH 16 SDF   | •                | •           | 24                               | 16/16  | 0 30         |
| JRM LH 96S  | •                | •           | 48/96/144                        |  | 031          |
| JRM LH 144S   | •                | •           | 48/96/144                        |  | 0 31         |
| ORM 16 SDF / ORM 16 SDF SIS   | •                | •           | 24                               | 18/18  | 0 32         |
| NM 48 SIS / SNM 72 VS SIS / SNM 144 VS SIS  | •                | •           | 48/72/144                        |  | 0 33         |
| MDP 0Z 144/288/432S   |                  | •           | 144/288/432                      |  | 034          |
| MDP OZ 24/48, MDP OZ 48/96, MDP OZ 72/144   |                  | •           | 96/192/288                       | 24/48/96 / 72/144                              | 0 35         |
| DRM 96/144 F  | •                | •           | 144                              | 96/144   | 036          |
| MDB FA 144/192/288S   | •                | •           | 144/192/288                      | 24/40 / 40/06 / 72/144                         | 0 37         |
| MDB FA 24/48, MDB FA 48/96, MDB FA 72/144   | •                | •           | 48/96/144                        | 24/48 / 48/96 / 72/144                         | 038          |
| AODB 48   | •                |             | 48<br>48                         | 48<br>24/48                                    | 0 39<br>0 39 |
| POR 48<br>DRU 1, 2, 3 / ORU 1, 2, 3 SIS   |                  | •           | 144 / 576 / 864                  | 24/40  | 0 40         |
| ORU 1 SDF SIS / ORU 5 SDF SIS   |                  |             | 128/384                          | 64/288   | 0 40         |
| ORU 9 SDF SIS   | ·                | ě           | 288                              | 144/288  | 0 42         |
| RU 9D SDF SIS   | •                | •           | 600                              | 300/612  | 0 43         |
| ORU 8 SDF SIS   | •                | •           | 504/1008                         | 480/960  | 0 44         |
| DH 288 / FDH 288 SIS  | •                | •           | 624                              | 312/624  | 0 45         |
| IBREGUARD™  |                  |             |                                  |  | 0 46         |
| SAFeTNET  |                  |             |                                  |  | 0 47         |
| MUC 160 / MUC 250   |                  | •           | 12 / 24                          |  | 0 50         |
| MUC 315B  |                  | •           | 96                               | 18/36  | 0 51         |
| MUC 425B  |                  | •           | 192                              |  | 0 52         |
| MUC 600B  |                  | •           | 384                              |  | 0 52         |
| ACCESSORIES FOR UNDERGROUND CHAMBER   |                  |             |                                  |  | 0 53         |
| MUC CUBE 320<br>MUC 400   |                  |             |                                  |  | 0 54         |
| MUC600  |                  | •           |                                  |  | 0 55<br>0 56 |
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| OPTICAL DISTRIBUTION BOXES FOR DATA CABINETS  | •                |             | 24/48                            | 24/48  | 0 57 – 0 62  |
| DRMP 1U/2U<br>DRSM 4/6  |                  |             | 72/144 / 36/72                   | 72/144   | 0 58         |
| plitter panel 1U/2U   | ·                |             | 1 L   TT   JU    L               | 37/65  | 0 59         |
| PMPV 1U/2U/3U   | •                |             | 36/96                            | 31/03  | 0 60         |
| DRMPM 3U/144  | •                |             | 144                              | 144/ —   | 0 61         |
| CCESSORIES for ORMPM  |                  |             |                                  |  | 0 62         |
| HIGH-CAPACITY OPTICAL DISTRIBUTION BOXES  |                  |             |                                  |  | 0 63-0 70    |
| DRSM 1 / ORSM 2   | •                |             | 864                              | 864/1728                                       | 0 63         |
| DRS 1/300 / ORS 1/600   | •                |             | 1920                             | 1920/ –  | 0 64         |
| ORS 2/300 / ORS 2/600   | •                |             | 960                              | 960/1920                                       | 0 64         |
| CCESSORIES for ORS  | -                |             | 7.00                             | ,        | 0 66         |
| PRSL EE   | •                |             | 3168                             | 2112/3168                                      | 0 67         |
| DRSL AP 300 / ORSL AP 600   | •                |             |                                  |  | 0 68         |
| MNORS   | •                | •           | 480/672                          | 480/672  | 0 69         |
| DSLAM 450M / rDSLAM 900D  |                  | •           |                                  |  | 0 70         |
| MICRO DUCT SYSTEM   |                  |             |                                  |  | 0 71         |
| CUSTOMER SOLUTIONS  |                  |             |                                  |  | 0 72         |
| ► ACCESSORIES   ► FIBEROAD   ► UNIVERSAL ACCESSORIES  | S   > ACCESSORIE | S FOR ORM 1 |                                  |  | 073-085      |
| PREVIOUS GENERATION OF MICOS BOXES  |                  |             |                                  |  | 086-089      |
| PREVIOUS GENERALIUM DE MILLIS BUZES   |                  |             |                                  |  | 086          |
|   |                  |             |                                  |  |              |
| RM 24   ORM 24 VS   ORM 12(24) SIS, ORM 24 VS SIS   ORU 1 MUC   |                  |             |                                  |  | Λ 07         |
| ORM 24   ORM 24 VS   ORM 12(24) SIS, ORM 24 VS SIS   ORU 1 MUC<br>OP 36 VS   ORU 6 MRS   POR 12   ORMPTR 1.5U/2U  |                  |             |                                  |  | 0 87         |
| ORM 24   ORM 24 VS   ORM 12(24) SIS, ORM 24 VS SIS   ORU 1 MUC<br>50P 36 VS   ORU 6 MRS   POR 12   ORMPTR 1.5U/2U<br>ORM SNP 4U   ORM 32 SDF, ORM 32 SDF SIS   SOP 12 (24)   MEDIA BOX  | M 288 VS SIS     |             |                                  |  | 0 88         |
| ORM 24   ORM 24 VS   ORM 12(24) SIS, ORM 24 VS SIS   ORU 1 MUC<br>50P 36 VS   ORU 6 MRS   POR 12  ORMPTR 1.5U/2U<br>ORM SNP 4U   ORM 32 SDF, ORM 32 SDF SIS   SOP 12 (24)   MEDIA BOX<br>HDC 480/864   ORM 48/72/96 VSR, ORM 48/72/96 VSR SIS   SNM 288 VS, SNN | M 288 VS SIS     |             |                                  |  | 0 88<br>0 89 |
| ORM 24   ORM 24 VS   ORM 12(24) SIS, ORM 24 VS SIS   ORU 1 MUC<br>SOP 36 VS   ORU 6 MRS   POR 12   ORMPTR 1.5U/2U<br>ORM SNP 4U   ORM 32 SDF, ORM 32 SDF SIS   SOP 12 (24)   MEDIA BOX  | M 288 VS SIS     |             |                                  |  | 0 88         |

# FTTH RISER SOLUTION WITH FLOOR BOX INDOOR SOLUTION

Using the Riser cable as a vertical distribution in the buildings is nowadays one of the most popular ways of constructing FTTH, and namely due to its easy installation. It is that simple cutting out working windows on the cable in the places where necessary and then pulling out the fibers.

In FTTH RISER solution based on floor distribution boxes, after installing one cable to 12 apartments, 12 fibers are terminated on SC/APC adapters. Connecting customers then goes very quickly, without the necessity of splicing, just by mere placing a patchcord between the floor box and the customer's premises.



#### ▶ PRODUCTS IN THE SOLUTION

| Name                              | Catalog page |
|-----------------------------------|--------------|
| ORM 1                             | Page 010     |
| MTeH EASY                         | Page 014     |
| MTeH UNI                          | Page 016     |
| Patchcords, pigtails and adapters | Page Oxx     |
| Riser cable                       | Page Oxx     |
| Gas block                         | Page Oxx     |

#### > YOU CAN SEE DETAIL SOLUTION IN THE WEBSITE

https://www.micostelcom.com/micos-ftth-riser-solution-with-floor-box



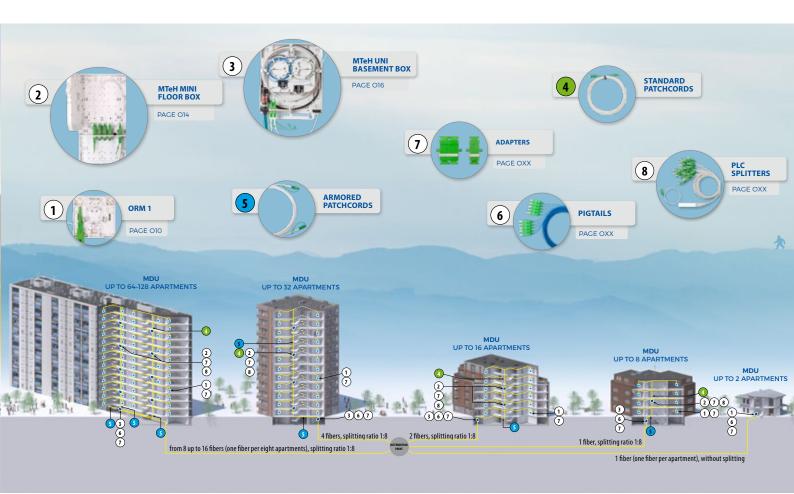
INTERACTIVE PDF

O 6 FTTX SOLUTIONS

# FTTH GPON SPLICELESS SOLUTION INDOOR SOLUTION

GPON is one on the most used technologies in FTTH networks, it is so due to the effective use of fibers and ports of the active equipment. GPON networks today allow achieving the splitter ratio of 1:128 and splitting in two, sometimes in three points of the network.

FTTH GPON spliceless solution from MICOS gives an idea of designing the inbuilding distribution network structure by means of floor boxes without the necessity to splice the fibers. The inbuilding optical distribution network can be built without the need of the qualified labour force and the expensive equipment



#### ▶ PRODUCTS IN THE SOLUTION

| Name                            | Catalog page |
|---------------------------------|--------------|
| ORM 1                           | Page 010     |
| MTeH MINI                       | Page 014     |
| MTeH UNI                        | Page 016     |
| Pintails adapters and solitters | Page Ovy     |

#### > YOU CAN SEE DETAIL SOLUTION IN THE WEBSITE

▶ https://www.micostelcom.com/micos-ftth-gpon-spliceless-solutions



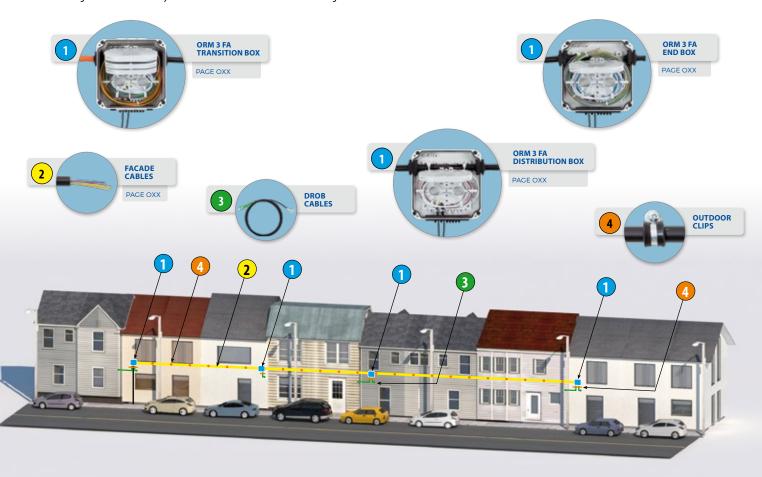
INTERACTIVE PDF

FTTX SOLUTIONS O7

### FTTH FACADE SOLUTION OUTDOOR SOLUTION

FTTH facade solution offers a way of a simple installation of the optical infrastructure which fully eliminates construction works inside the buildings. The solution is suitable especially for two-storey houses.

ORM 3 FA can be used both for splicing the feeder cable and gradual connecting the subscribers. The horizontal cable distribution is being installed on the facade by using cable clips. This cable is being worked the same way like a standard riser cable inside the buildings.



#### ▶ PRODUCTS IN THE SOLUTION

| Name          | Catalog page |  |
|---------------|--------------|--|
| ORM 3 FA      | Page Oxx     |  |
| Facade cables | Page Oxx     |  |

#### YOU CAN SEE DETAIL SOLUTION IN THE WEBSITE

https://www.micostelcom.com/micos-ftth-facade-solution

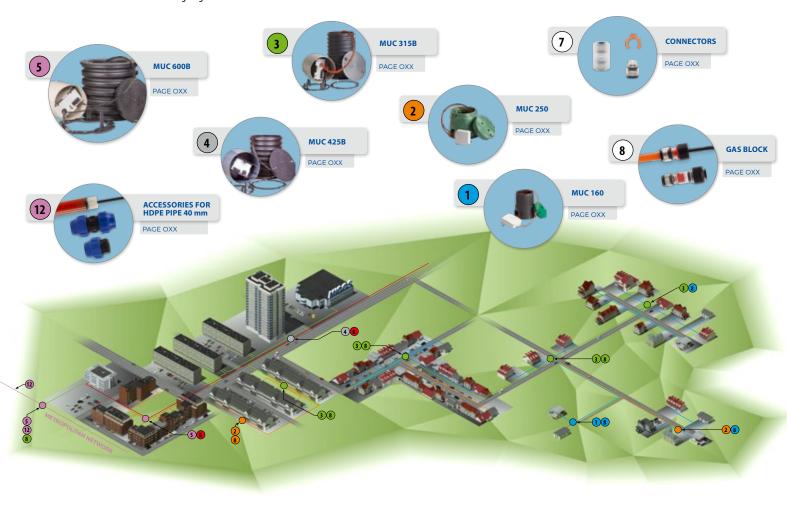


INTERACTIVE PDF

O8 FTTX SOLUTIONS

The installation of the network under the ground is among the most widely used solutions in the construction of FTTx networks, especially for its durability and invisibility. Duct systems are used for the construction as they facilitate the construction itself and the subsequent installation of cables. The blowing of the cables can be performed gradually and modified according to the network requirements with no additional costs of ground work. At the network distribution points, there are ground chambers installed with boxes allowing connection of fibres in various configurations.

Micos FTTx underground solution offers a comprehensive approach to the mutual compatibility of all elements in the network. It shows the use of the chambers, ducts and cables on actual examples of the connection of the central office from the metropolitan network, to large housing units or family houses. The solution is intended for operators, installers and designers who can use it as a model when designing a network.



#### ▶ PRODUCTS IN THE SOLUTION

| Name                                  | Catalog page |
|---------------------------------------|--------------|
| MUC 600 B                             | Page 010     |
| MUC 425 B                             | Page 014     |
| MUC 315 B                             | Page 016     |
| MUC 250                               | Page Oxx     |
| MUC 160                               | Page Oxx     |
| Gas block, connectors and accessories | Page Oxx     |

#### YOU CAN SEE DETAIL SOLUTION IN THE WEBSITE

▶ https://www.micostelcom.com/micos-fttx-undergound-solutions



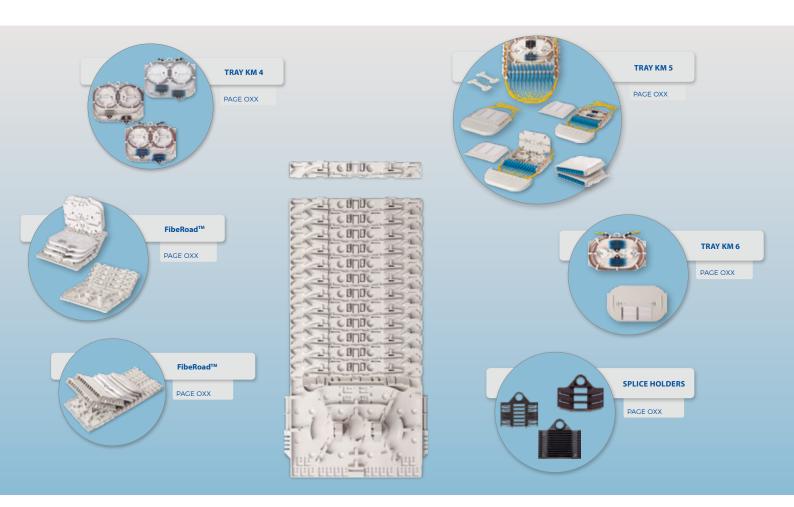
INTERACTIVE PDF

FTTX SOLUTIONS O9

# FibeRoad<sup>TM</sup> SOLUTION | SOLUTION FOR OPTICAL FIBER NETWORKS OF ALL TYPE

FibeRoad system is designed for optical fiber networks of all types. For the use in distribution boxes, street cabinets or high capacity cabinets. It allows for all configurations of fiber distribution and direct atching within the stacking system. Ideal for GPON networks.

The FibeRoad solution provides the review of all items of the system and products, in which it is installed. The solution shall serve as directions to product descriptions with detailed information.



#### ▶ PRODUCTS IN THE SOLUTION

| Name           | Catalog page |
|----------------|--------------|
| FibeRoad™      | Page Oxx     |
| Tray KM 4      | Page Oxx     |
| Tray KM 5      | Page Oxx     |
| Tray KM 6      | Page Oxx     |
| Splice holders | Page Ovy     |

#### YOU CAN SEE DETAIL SOLUTION IN THE WEBSITE

https://www.micostelcom.com/micos-fiberoad-solution



INTERACTIVE PDF

O10 FTTX SOLUTIONS

### ORM 1 FTTH OUTLET

The optical socket ORM1 is designed for termination of an optical network via 2–4 optical fibers in a customer terminal point. It can be connected to a PC, different peripheral equipment or to another equipment via optical patchcords. It is designed for indoor wall mounting.

- ► Capacity of 4 optical connectors
- ▶ Connector holder SC simplex or LC duplex
- Maximum capacity is 4 optical splices, heat shrink, RECORD splice, Fiberlock
- Attractive design for indoor usage
- Installing on a surface or flush-mounting box
- ▶ Simple optical management
- Direct fiber termination by a connector
- Standard socket dimensions
- Input possibility of fiber with connector
- ▶ Use for fibers G.657
- Possibility of pre-assembled ftth socket to minimize installation time at the customer (cable FLAT DROP 2 × 3.1 mm)

#### TECHNICAL SPECIFICATIONS

| Inputs          | From all sides or from the bottom part, diameter up to 6 mm                                   |
|-----------------|---|
| Outputs         | From the front for 2 pcs of SC or LC adapters   |
| Coverage degree | IP 30 or IP 54 (with rubber enclosure) to EN 60529  |
| Colour          | White RAL 9003  |
| Material        | ABS   |
| Dimensions      | $81 \times 81 \times 25$ mm with short cover $81 \times 116 \times 25$ mm with extended cover |
| Weight          | 0,08 kg (short and extended cover)  |

#### ► RECOMMENDED ACCESSORIES

Other accessories on the pages 074

#### ORDER CODES

| Order Code    | Name                                  |
|---------------|---------------------------------------|
| 85H4.00/0000F | ORM 1 (with short and extended cover) |
| On request    | FTTH ORM 1 Pre-assembled              |

For other variants, please, contact our sales department. Pre-installed versions available upon request.















#### TECHNICAL SPECIFICATIONS CABLE

| Dimensions                          | 2 mm × 3.1 mm                     |
|-------------------------------------|-----------------------------------|
|                                     |                                   |
| Strength member                     | Steel/FRP/KFRP                    |
|                                     |                                   |
| Material                            | Flame retardant polyethylene      |
| ¢.1                                 | WILLS.                            |
| Color                               | White                             |
| Maximum pulling tension (IEC794-1)  | Long time 30N , Short time 60N    |
| maximum pulling tension (IEC/ 34-1) | Long time Jon , Jilort time oon   |
| Crush resistence (IEC794-1)         | Long time 300N , Short time 1000N |
| · · ·                               | ,                                 |
| Temperature operation and storage   | -20°C to +60 °C                   |
| Wataka                              | 0.1/1                             |
| Weight                              | 8 kg/km                           |



FTTX SOLUTIONS O11

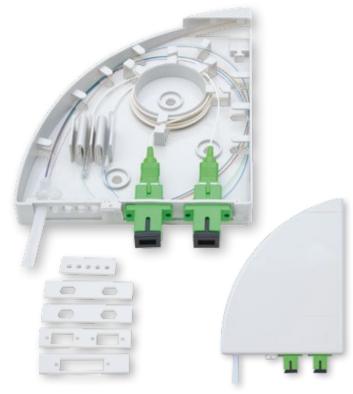
### ORM 2 FITH OUTLET

The ORM 2 is designed for the termination of 2 to 4 optical fibers in a customer terminal point or for interconnection of optical cables. It can be connected to a PC, different peripheral equipment or to another equipment via optical patchcords. The distributor is designed for indoor wall mounting. Inputs and outputs can vary by used panels.

- ► Capacity 4 optical connectors
- Connector holder SC simplex, SC duplex, ST, FC, E2000, LC
- Maximum capacity is 6 optical splices
- Direct fiber termination by a connector
- ▶ Easy assembly
- ▶ Wall-mounted
- ► Coverage degree IP 20
- ▶ Use for fibers G.652d, G.657

#### TECHNICAL SPECIFICATIONS

| Inputs                   | Micro duct ø 5 mm<br>Micro duct ø 3 mm<br>Optical cable maximum ø 5 mm |
|--------------------------|--|
| Outputs                  | Adapters SC simplex, SC duplex, ST, FC, E2000, LC                      |
| Coverage degree          | IP 20 to EN 60529  |
| Impact protection degree | IK 04 to EN 50102  |
| Colour                   | Light grey RAL 7035  |
| Material                 | ABS  |
| Dimensions               | 140 × 109 × 23 mm  |
| Weight                   | 0.1 kg   |



#### ORDER CODES

| Order Code                                   | Name  |
|--|-------|
| 8523.20/0000F                                | ORM 2 |
| Pre-installed versions available upon reques | t.    |

## COYOTE® FTP | FTTH OUTLET

NEW

The Fiber-Optic Terminal Point - FTP is designed for protecting and accommodating internal fiber optic splices in homes, offices or apartments. The FTP is designed for indoor wall-mounting and it is easily installed on walls without the use of special tools.

- ▶ Capacity of 2 adapters for subscriber output and 5 drop wire inputs
- ► Capacity of 2 splices in tray (by mechanical or fusion)
- Designed for pre-connectorized system to store fiber jumper
- Fiber inputs ports through the back of the base
- ▶ Can be easily installed on any flat vertical wall
- ▶ The tray design allows for perfect routing and control of fibers
- Use for fibers G.652d, G.657

#### ► TECHNICAL SPECIFICATIONS

| Inputs     | 3× max. 5 mm          |
|------------|-----------------------|
| Outputs    | 2× SC or LCD adapters |
| Colour     | White                 |
| Material   | ABS                   |
| Dimensions | 108 × 80 × 28 mm      |
| Weight     | 0.09 kg               |

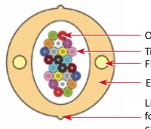
| Order Code | Name |
|------------|------|
| On request | FTP  |





### RISER CABLE INDOOR OPTICAL CABLE

Riser cable is installed in vertical shafts inside buildings with multiple floors. Window cut on the riser cable is needed on each floor. Take out requested fiber from the cable and then pull the fiber through the transportation tube 5/3,5 with the rope directly to customer premises when service is required.



Optical fiber
Tight buffer
FRP rods

External jacket

Lines show place for opening of the cable



#### TECHNICAL SPECIFICATIONS

| Fiber counts (G.657A2)     | 12F                      | 24F                |
|----------------------------|--------------------------|--------------------|
| Cable diameter (LSZH)      | $8,5 \pm 0,5 \text{ mm}$ | $10 \pm 0.5$ mm    |
| Cable weight               | Cca 75.0 kg/km           | Cca 95.0 kg/km     |
| Min. bend radius (load)    | 5× cable diameter        | 5× cable diameter  |
| Min. bend radius (no load) | 10× cable diameter       | 10× cable diameter |
| Tensile strength           | 500N                     | 500N               |
| Crush resistance           | 1000 N/100 mm            | 1000 N/100 mm      |
| Temperature - storage      | -40 °C to +70 °C         | -40 °C to +70 °C   |
| Temperature - installation | 0 °C to +75 °C           | 0 °C to +75 °C     |
| Temperature - operation    | -45 °C to +60 °C         | -45 °C to +60 °C   |
|                            |                          |                    |

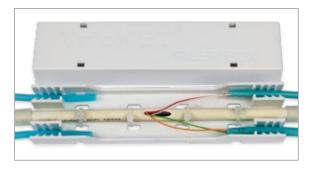
#### ORDER CODES

| Order Code    | Name              |  |
|---------------|-------------------|--|
| HT0001        | Riser cable 12F   |  |
| HT0002        | Riser cable 24F   |  |
| 852W.00/000BF | Riser box – white |  |

### RISER BOX

It is used for branching individual fibers from the riser cable into customer drop microducts 5/3.5 mm ending in the FTTH mini socket.

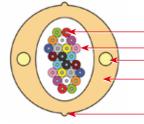
- Max. number of outgoing microducts 8 pcs
- Fixation of cable and microducts using electrician cable ties
- ▶ The size of the branch window in the riser box max 10 cm
- Riser box is designed for indoor use only
- ▶ Dimensions  $180 \times 41 \times 20 \text{ mm}$



### RISER CABLE

### OUTDOOR OPTICAL CABLE

Riser outdoor cable is to be installed on the building facades with cable clips. This cable is being worked the same way like a standard riser cable inside the buildings. Black colour (UV stable)



Optical fiber Tight buffer FRP rods

External jacket

Lines show place for opening of the cable



### TECHNICAL SPECIFICATIONS

| Fiber counts (G.657A2)     | 24F                                   |
|----------------------------|---------------------------------------|
| Cable diameter (LSZH)      | $10.5\pm0.4\mathrm{mm}$               |
| Cable weight               | 91.3 kg/km                            |
| Min. bend radius (load)    | 5× cable diameter EN 60794-1-21-E11a  |
| Min. bend radius (no load) | 10× cable diameter EN 60794-1-21-E11b |
| Tensile strength           | 400N to EN 60794-1-21-E1              |
| Crush resistance           | 80N to EN 60794-1-21-E3               |
| Temperature – storage      | -30 °C to +50 °C EN 60794-1-22-F1     |
| Temperature – installation | -30 °C to +50 °C EN 60794-1-22-F1     |
| Temperature – operation    | -50 °C to +50 °C EN 60794-1-22-F1     |

### ORDER CODES

| Order Code    | Name                       |
|---------------|----------------------------|
| 710342        | Riser cable outdoor 24F    |
| 85BX.00/0100F | ORM 3 FA 12S               |
| 85BX.05/0000F | ORM 3 FA Extension set 12S |

### ORM 3 FA

ORM 3 FA is an outdoor box designed for facades. The in-line solution with divisible grommets allows riser cable pass-through installation any time.

- Maximum capacity up to 36 splices
- $\blacktriangleright$  Express port 2×7–9 mm and 9×2–5 mm
- ► Coverage degree IP54 to EN 60529
- ▶ Impact protection degree IK10 to EN 50102



### MTeh MINI INDOOR DISTRIBUTION BOX





MTeH MINI is a simple optical distribution box for the installation inside the buildings. Suitable as a floor box in larger buildings or as the main distribution box in buildings with no more than 8 flats. Vertical riser cable can be installed inside the box. Suitable for Gpon networks with pre-installed splitter. Box has separated section with hinged cover for individual access to adapters.

- Possibility to use for splicing or patching
- Capacity up to 10 SC simplex or SC duplex in a separate section
- Holder for 2 splices in the bottom of the box
- Possibility to place a TS 12 holder for 12 splices (max. 14 splices)
- Premoulded holes in the bottom for routing the cable through the wall
- Separate section for connecting customers
- Inputs for drop cables with the diameter up to 5mm from all sides
- Possibility to install vertical mid-span cable
- Possibility to use PLC splitters 1:8 or 2× 1:4 (small format)
- Screw lock
- Suitable solution for GPON networks
- For fiber G.657



- MTeH MINI is a compact size distribution box for the inner premises on the wall or for placing in the technical channels in multi-storey buldings. Connecting customers by less experience technician with limited access to inner splicing section.
- ▶ The user entries are on sides of the box and are designed to accommodate ducts or cables with max. of 5 mm diameter. An additional fixation by means of cable ties. Left entry points of the box are suitable for riser cable going through and standard cables.
- ▶ The box contains the holder for two heat-shrinks, suitable for splicing the splitter input. Extra splice holder for 12 splices can be additional placed into dedicated area.
- > Premoulded breakouts at bottom of the box can be used for duct which is going through the wall.
- The box depth of 40 mm makes it suitable for internal vertical distibution in laths size 40×40 mm.
- The box contains plugs for the user outputs which can be broken off by segments as needed.





#### **TECHNICAL SPECIFICATIONS**

| TECHNICAE SI ECH ICATIONS            |                                  |
|--------------------------------------|----------------------------------|
| Inputs Main cable                    | 2×1–14 mm                        |
| Outputs User cables                  | 16×1–5 mm                        |
| Coverage degree                      | IP 20 to EN 60529                |
| Impact protection degree             | IK 08 to EN 50102                |
| Self-extinguishing degree            | V0 according UL 94               |
| Material                             | PC/ABS                           |
| Color                                | White RAL 9003                   |
| Dimensions ( $H \times W \times D$ ) | $150\times140\times40~\text{mm}$ |
| Weight                               | 0.2 kg                           |

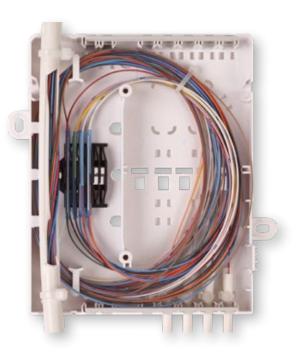
# MTeh MINI INDOOR DISTRIBUTION BOX

NEW





Solution with the riser cable (8 fibers terminated)



Solution with riser cable (splicing only)



 $Combination \ of entry \ through \ the \ wall \ and \ connection \ the \ customers$ 



Splice less solution with PLC splitter 1:8 (splitter input goes into left adapter)

### MTeh EASY INDOOR DISTRIBUTION BOX

#### GPON READY

MTeH EASY is designed as a simple distribution box for indoor installation. Is destined especially for FTTH networks. MTeH EASY can be used for storage of pre-connectorized cable or blown cable which can be spliced after request of the customer. It could be used as distribution point in small building facility, or as floor box.

- ▶ Easy installation
- ▶ Wide portfolio of accessories
- ▶ Flat base with mounting holes
- > Space for cable reserve before connecting customer
- Possibility to use the box for splicing or patching
- ▶ Two positions for adaptor plate
- ▶ Capacity up to 6× SC duplex, or 6× LC quad
- ▶ Graduated rubber bushing for cable Ø 3–10 mm (on each side)
- ▶ Breakable outputs on back side (connection through the wall directly to customer)
- ▶ Possibility to use loop-through cable
- ▶ Splice tray KM 4 (max. capacity 24 splices)
- ▶ 4× splice tray KM 3 (max. capacity 48 splices for fibres G.657)
- ▶ Possibility to place PLC splitter

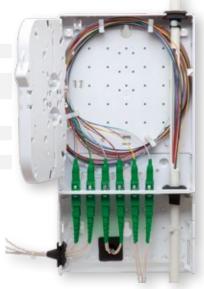


Slack box



#### TECHNICAL SPECIFICATIONS

| Bushings                  | Graduated bushing (3–10 mm)              |
|---------------------------|--|
| Coverage degree           | IP20 to EN 60529                         |
| Self-extinguishing degree | V2 to UL 94                              |
| Impact protection degree  | IK 5 to EN 50102                         |
| Material                  | ABS – Halogen free, flame retardant (V2) |
| Colour                    | White, RAL 9003                          |
| Dimensions                | 205 × 157 × 60 mm                        |
| Weight                    | 0.350 kg                                 |

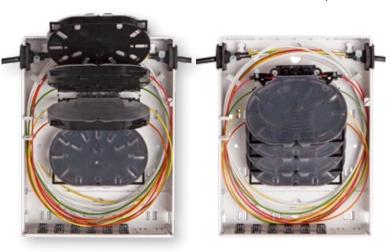




You Tube

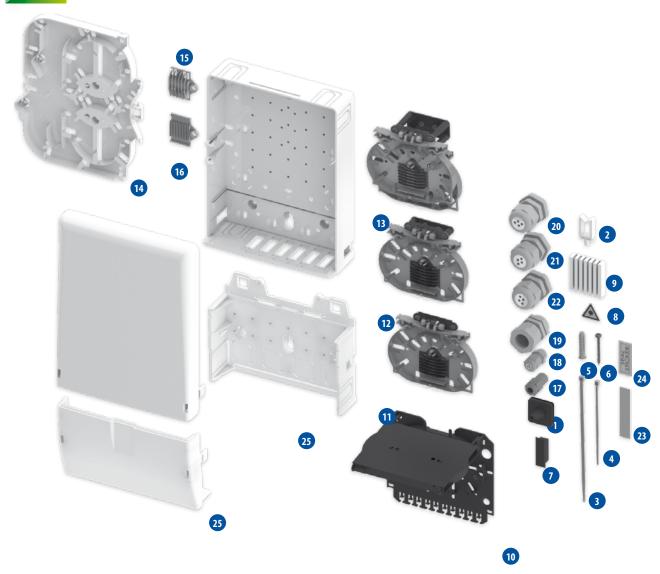


MTeH EASY 24S/12C with adapter cover



MTeH EASY 48S

### GPON READY



#### **OPTIONAL ACCESSORIES**

| Order Code    | Name                                      | Position |
|---------------|---|----------|
| 85SP.02/1000  | Graduated bushing (3—10 mm)               | 1        |
| 325800        | Cable holder                              | 2        |
| 018400        | Cable tie PVC $3.6 \times 150$            | 3        |
| 490594        | Cable tie PVC $2.5 \times 100$            | 4        |
| 490903        | Dowel 6 mm                                | 5        |
| 490904        | Screw 4 × 30                              | 6        |
| CN0061        | Plug duplex                               | 7        |
| 276900        | Laser sticker                             | 8        |
| 8541.35/BALOF | Rubber splice holder CTS12                | 9        |
| 85BV.31/0000F | KM 2 + management                         | 10       |
| 85BV.29/0010F | Splice tray KM 3 with hinge               | 11       |
| 85BV.29/001RF | Splice tray KM 3 with hinge and reduction | 12       |
| 85BV.29/002RF | Splice tray KM 3 with hinge and reduction | 13       |
|               |   |          |

| Order Code    | Name  | Position |
|---------------|---|----------|
| 85BV.32/0000F | Splice tray KM 4 with lid                   | 14       |
| 85M9.16/0000  | Splice holder TS 12                         | 15       |
| 85M9.17/0000  | Splice holder K 12                          | 16       |
| 85BV.25/000TF | PG7 (2.5-6.5 mm)                            | 17       |
| 85BV.25/0MVLF | PG 7, (3×1.6–2.6mm)                         | 18       |
| 301100        | PG 16 (8-16 mm)                             | 19       |
| 8580.67/000MF | PG 16 HI/SEZ (2 × 3 mm)                     | 20       |
| 8580.68/000MF | PG 16 HI/SEZ (4 × 3 mm)                     | 21       |
| 8580.66/000MF | PG 16 HI/SEZ (4 × 5 mm)                     | 22       |
| 492779        | Double-sided tape $60 \times 12 \text{ mm}$ | 23       |
| 85AX.06/0000  | Seal sticker $40 \times 15 \text{ mm}$      | 24       |
| 85AX.15/0000F | Base and adapters cover                     | 25       |

For other variants, please, contact our sales department.

| Order Code  | Name                  |
|---|-----------------------|
| 85AX.00/0000F   | MTeH EASY — Slack box |
| 85AX.00/0002F   | MTeH EASY 24S/12C     |
| 85AX.00/0003F   | MTEH EASY 48S         |
| For other variants, please, contact our sales department. |                       |

# MTeH UNI INDOOR DISTRIBUTION BOX

#### GPON READY

MTeH UNI is designed to be very versatile optical distribution box, which can realize a wide range of configurations and interconnect the fibers in many ways. Wall box is suitable primarily as a distribution point in FTTH networks. Box includes two types of connector panel and two large splice trays KM 4.

- ▶ Easy installation
- ▶ Removable cover
- Cable reserves brackets
- ▶ Cable management
- ▶ Ability to spice in the bottom of the box
- Optional splicing or splitter boxes
- Possibility to use the box for splicing or patching
- Removable connector panel for 12×SC simplex, 12×SC duplex, 12×LCD or 12×LCQ
- ▶ Connector plate protected with a cover
- ▶ Gradual bushing ø 3−14 mm
- ▶ Input for 12 microducts up to ø 7 mm
- ▶ Preparation for the side entrance of Wall rails
- > Optional wall through installation
- ▶ Mid-span access
- ▶ 2× splice tray KM 4 total capacity 48 splices
- Maximum capacity 72 splices using splice section in the bottom of the box
- Duplex adapter point to connect PLC splitter
- ► Coverage degree IP 20
- For outdoor version see page 030 (URM LH 48C UNI)







EN 1

EN 2



#### TECHNICAL SPECIFICATIONS

| Bushings                  | Graduated bushing (3—14 mm)              |
|---------------------------|--|
| Coverage degree           | IP20 to ČSN EN 60529                     |
| Self-extinguishing degree | V2 to UL 94                              |
| Impact protection degree  | IK 7 to EN 50102                         |
| Material                  | ABS – Halogen free, flame retardant (V2) |
| Colour                    | White, RAL 9003                          |
| Dimensions                | $340 \times 235 \times 60 \text{ mm}$    |
| Weight                    | 0.8 kg                                   |

# MTeH UNI INDOOR DISTRIBUTION BOX



Examples of installation

MTeH UNI 12×SC

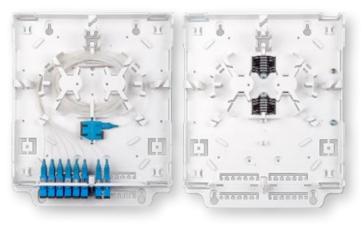


Box for splicing



MTeH UNI 48× LC





Example of PLC splittter installation Příklad instalace PLC splitteru

Example of extra splice tray holder Příklad s extra držáky svárů

#### OPTIONAL ACCESSORIES

| · · · · · · · · · · · · · · · · · · ·            |                             |
|--|-----------------------------|
| Order Code                                       | Name                        |
| 85M9.16/0000                                     | Splice holder TS 12         |
| 85M9.17/0000                                     | Splice holder K 12          |
| 85SP.02/0000                                     | Graduated bushing (3–14 mm) |
| For other variants, please, contact our sales of | department.                 |

| Order Code  | Name     |
|---|----------|
| 85AV.00/0001F   | MTeH UNI |
| For other variants, please, contact our sales department. |          |

### ORM 3 line OPTICAL DISTRIBUTION BOX

The ORM 3 line of distribution boxes is designed for the placement of optical connectors and splices both indoors and outdoors. The distribution box may be complemented by a simple bracket, which enables it to be post-mounted. To increase the capacity the extension frame and second tray for splices can be used.

- Easy assembly
- ▶ Wall-mounted or post-mounted
- ▶ Use for fibers G.657
- ► Fixation of input/output cables
- ▶ Lid is fixed with screws





#### TECHNICAL SPECIFICATIONS

| Coverage degree           | IP 54 to EN 60529 / IEC 529 |
|---------------------------|-----------------------------|
| Self-extinguishing degree | V0 to UL 94                 |
| Impact protection degree  | IK10 to EN 50102            |
| Solar radiation (UV)      | EN 60068-2-5                |
| Colour                    | Light grey RAL 7035         |
| Material                  | PC/ABS                      |
| Material bushings         | PA6, TPV / ENSOFT           |
| Dimensions                |                             |
| - ORM 3 L/2(4)            | 136 × 136 × 46 mm           |
| – ORM 3 SL 12S            | 136 × 136 × 46 mm           |
| - ORM 3 SH 24S            | 136 × 136 × 64 mm           |
| – ORM 3 FA                | 136 × 136 × 46 / 64 / 84 mm |
| Weight                    | 0.4 kg / 0.6 kg             |



#### ORDER CODES ACCESSORIES

| Order Code    | Name          |   |
|---------------|---------------|---|
| 85K3.11/BAL0F | Post Brackets | 1 |
| 85BV.16/0000F | Mnx frame-set | 2 |

### **ORM 3 FA**



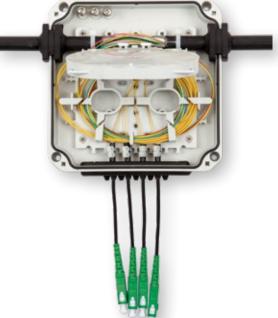
5G READY

ORM 3 FA is designed for facades. The in-line solution permits the passage of an outdoor riser cable that runs along the façade. The necessary fibers are pulled out of the cable, as is the case with conventional riser cables inside the building. For drop cables there is a separate bushing for up to 11 cable entries. The box contains fiber management and a splice tray for 12 splices. If necessary, the box can be expanded by an extension frame and additional second trays to increase the splicing capacity to 36.

- ▶ Capacity of 12/24/36 optical splices
- Possibility to place PLC splitter
- ▶ In-line solution for outdoor riser cable 2× Dividable rubber bushing (10−13 mm)
- $\blacktriangleright$  Express port (2×7–9 mm) and (9×2–5 mm)
- Possible overcoated

| Order Code    | Name                       |  |
|---------------|----------------------------|--|
| 85BX.00/0100F | ORM 3 FA 12S               |  |
| 85BX.05/0000F | ORM 3 FA FXTENSION SET 12S |  |









### **ORM 3 L/2 ORM 3 L/4**

GPON READY 5G READY

- ► Capacity of 2 / 4 optical connectors
- ► Connector holder SC simplex/duplex
- ▶ Bushings  $1 \times PG7$  (3–6.5 mm),  $2 \times Dividable$  rubber bushing ( $2 \times 1$ –3 mm)
- Placement of optical fiber reserve, length 1 m



#### ORDER CODES

| Order Code    | Name     |
|---------------|----------|
| 85K3.40/0000F | ORM 3L/2 |
| 85K3.50/0000F | ORM 3L/4 |

### **ORM 3 SL 12S ORM 3 SH 24S**

GPON READY 5G READY

- ► Capacity of 12/24 optical splices
- ► Integrated fibre management
- ▶ 1×/2× KM 3 splice tray for the placement of optical splices
- ▶ Bushings Express port ( $2 \times 7 9$  mm) and ( $9 \times 2 5$  mm)
- Placement of optical fiber reserve, length 3 m
- ▶ Possibility of PLC splitter placement
- ▶ 1 × universal rubber bushing (for express port and individual inputs/outputs)
- $\triangleright$  2×ø to 10 mm and 8×ø to 5 mm

| Order Code    | Name         |
|---------------|--------------|
| 85K3.60/0000F | ORM 3 SL 12S |
| 85K3.70/0000F | ORM 3 SH 24S |



## **ORM 4** ORM 8 OPTICAL DISTRIBUTION BOX

GPON READY 5G READY

The ORM 4(8) optical distribution box is designed for the placement of 4 optical (duplex) connectors both indoors and outdoors. The distribution box may be complemented by a simple bracket, which enables it to be post-mounted.

- ► Capacity of 4/8 optical connectors
- Connector holder SC simplex, ST, FC, E2000, LC/LC duplex, E2000 compact, SC duplex
- ▶ Placement of optical fiber reserve, length 1 m
- PG bushings
- ▶ Lockable lid
- Easy assembly
- ▶ Wall-mounted, post-mounted
- ► Coverage degree IP 54



#### TECHNICAL SPECIFICATIONS

| Bushings                       | 2× PG16 (2/4×3 mm); 1× PG9 (4–8 mm)      |
|--------------------------------|--|
| Coverage degree                | IP 54 to EN 60529                        |
| Self-extinguishing degree      | V0 to UL 94                              |
| Impact protection degree       | IK 10 to EN 50102                        |
| Solar radiation (UV)           | EN 60068-2-5                             |
| Change of temperature          | -40 °C/+70 °C according to EN 60068-2-14 |
| Colour                         | Light grey RAL 7035                      |
| Material – distribution<br>box | PC/ABS                                   |
| Material – bushings            | PA6                                      |
| Material – metallic parts      | Aluminium                                |
| Material – pillar              | Stainless steel                          |
| Dimensions                     | $185\times103\times73~\text{mm}$         |
| Weight                         | 0.6 kg                                   |

### ► RECOMMENDED ACCESSORIES

Post Brackets page 066 Base plate with a cover Other accessories on the pages 067–075  $\,$ 

#### **▶** ORDER CODES

| Order Code           | Name                          |
|----------------------|-------------------------------|
| 8520.00/0000NBQ0125P | ORM 4 holder 4× E2000, SC     |
| 8520.20/0000NBQ0125P | ORM 8 holder 4× LC duplex     |
| 8520.20/0000NBQ1425P | ORM 8 holder 4× SC duplex     |
| 8520.20/0000NBQ1525P | ORM 8 holder 4× E2000 compact |
| 8545.00/0000F        | Base plate and cover          |
| 8170.71/0000F        | Post bracket                  |

For other variants, please, contact our sales department. Pre-installed versions available upon request.





POST BRACKET

### ORM 5 OPTICAL DISTRIBUTION BOX

GPON READY 5G READY

Lockable optical distribution box ORM 5 is designed for indoor/outdoor wall installation at the customers' premises or as a separate pillar. The box is suitable mainly in FTTH network to terminate optical fibres on the internal/outdoor walls of the buildings mainly in suburban areas with lower household density (family houses, low household count residential buildings or offices).

Additionally, the box can play the role of the floor distribution box in multidwelling units.

- ▶ Simple wall installation
- ▶ Easy access due to hinged removable cover
- ► Lockable cover (optional)
- Coverage degree IP 54
- Gradual cable gland located in the lower wall for the cables with the outside diameters between 3 and 14 mm
- Gradual cable gland located in the bottom for the cables with the outside diameters between 3 and 10 mm (for the wall through installations)
- ▶ Pre-fabricated holes in the bottom for the wall through patchcord installation
- 4 prefabricted holes for dividable bushing capable to seal up to 2 patchcords or heavy duty subscriber cables
- ► Can accommodate up to 4× SC or 2× E2000, eventually 8× LC connectors and pigtails
- Splice cassette supporting up to 12 heat-shrink or crimp fusion splice protective sleeves or mechanical splices (up to 4 pieces).
- ▶ Ready to accommodate Gas block for the microtubes with various outside diameters (5, 7, 10, 12 and 14 mm) at the input of the box



#### TECHNICAL SPECIFICATIONS

| Bushings – right part               | 1× Gradual bushing (3–14 mm) for incoming cable   |
|-------------------------------------|---|
| Bushings – left part                | $4\times$ Dividable rubber bushing ( $2\times1-3$ mm) or $4\times$ Gradual bushing ( $3-14$ mm) |
| Bushings — bottom<br>(wall through) | Gradual bushing (3–10 mm) for incoming cable  |
| Coverage degree                     | IP 54 to EN 60529   |
| Impact protection degree            | IK 10 to EN 50102   |
| Solar radiation (UV)                | EN 60068-2-5  |
| Change of temperature               | -40 °C/+70 °C according to EN 60068-2-14  |
| Color                               | Light grey RAL 7035   |
| Material                            | PC+ABS  |
| Material – pillar                   | Stainless steel   |
| Dimensions                          | 235 × 156 × 45 mm   |
| Weight                              | 0.5 kg  |

| Order Code   | Name                   |  |
|--|------------------------|--|
| 85SP.00/0000F  | ORM 5                  |  |
| 85BV.01/0000F  | Lock for ORM 5         |  |
| 85E0.97/00R5F  | Post Bracket for ORM 5 |  |
| For other variants, please, contact our sales department. Pre-installed versions available upon request. |                        |  |







POST BRACKET FOR ORM 5

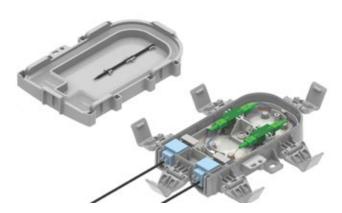
### COYOTE® STP – JR OPTICAL SPLICE CLOSURE

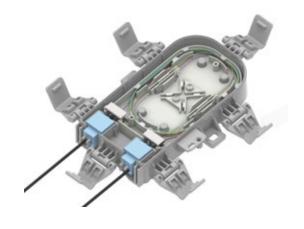
NEW GPON READY 5G READY

The COYOTE® STP-JR (Service Termination Point) is a small closure which provides an alternative to traditional network interface devices, while offering much greater application flexibility. The robust latch system, paired with an integrated overmolded cover, allows for quick re-entry and creates a secure seal over a wide range of cable profiles. The closure could be installed indoors or outdoors on a pedestral, wall or pole.

- ► Maximum capacity 4 drop cables
- ► Maximum capacity 12 splices
- ▶ Maximum capacity of adapter is 2× SC
- Possibility of PLC splitter placement (max. lenght 40 mm)
- Applications below grade, direct buried, pole/wall mount, and pedestral mount
- ▶ Supports up to 2 single or multi-hole bushings covering a cable ø 2.4 mm−14 mm
- ▶ Re-enterable and reusable
- ▶ Designed to the TELCORDIA GR-771-CORE standard
- ▶ Constructed with UV stabilized, flame retardant material







#### > STP-JR BUSHINGS

|    | Solid / Plug                   |
|----|--------------------------------|
| •  | 4.3–5.6 mm Round Cable         |
|    | 5.6.—6.9 mm Round Cable        |
|    | 6.9–5.1 mm Round Cable         |
|    | 8.1–9.4 mm Round Cable         |
|    | 9.4— 10.7 mm Round Cable       |
|    | 10.7–11.9 mm Round Cable       |
|    | 11.9–14.0 mm Round Cable       |
| :: | 4× 2.4–3.2 mm Round Drop Cable |
| 20 | 4×3.8 mm Round Drop Cable      |

#### TECHNICAL SPECIFICATIONS

| TECHNICAL SI ECH ICATIONS |                         |
|---------------------------|-------------------------|
| Bushings                  | 2× Multi-Hole           |
| Coverage degree           | IP 68                   |
| Self-extinguishing degree | V0 to UL 94 – 5VA Rated |
| Solar radiation (UV)      | EN 60068-2-5            |
| Colour                    | Grey                    |
| Material                  | Polycarbonate           |
| Dimensions                | 200 × 125 × 49 mm       |

### COYOTE® STP - MD | SERVICE TERMINATION POINT

NEW GPON READY 5G READY

The COYOTE® STP-MD is a compact splice closure which supports straight splice, splice to drop/branch and internal connectivity applications. Ideal for applications in the FTTX distribution network for splice applications 24 fibers or less and connectivity sollutions. Ideal product for blown fiber cable and microtube cable applications. Also supports use of traditional buffer tube cables.

- ► Maximum capacity 8 drop cables
- Maximum capacity 24 splices
- ▶ Maximum capacity of adapter is 4× SC
- Possibility of PLC splitter placement (max. lenght 40 mm)
- ▶ If splitter installed, splice count drops to 21 single fusion splices
- > Applications below grade, direct buried, pole/wall mount, and pedestral mount
- ▶ Supports up to 4 single or multi-hole bushings covering a cable ø 2.4−14 mm
- ▶ Re-enterable and reusable
- ▶ Designed to the TELCORDIA GR-771-CORE standard
- ▶ Constructed with UV stabilized, flame retardant material

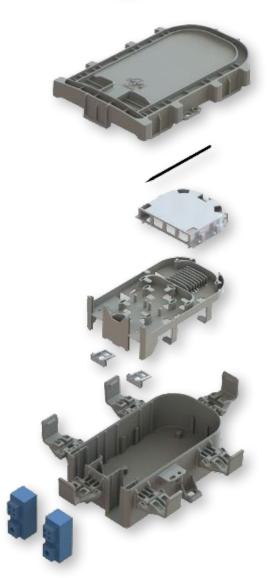


#### > STP-JR BUSHINGS

|    | Solid / Plug                   |
|----|--------------------------------|
| •  | 4.3–5.6 mm Round Cable         |
|    | 5.6.—6.9 mm Round Cable        |
|    | 6.9–5.1 mm Round Cable         |
|    | 8.1–9.4 mm Round Cable         |
|    | 9.4– 10.7 mm Round Cable       |
|    | 10.7–11.9 mm Round Cable       |
|    | 11.9—14.0 mm Round Cable       |
| :: | 4× 2.4–3.2 mm Round Drop Cable |
| 00 | 4×3.8 mm Round Drop Cable      |

#### TECHNICAL SPECIFICATIONS

| Bushings                  | 4× single or multi-hole for cable with ø 2.4–14 mm |
|---------------------------|--|
| Coverage degree           | IP 68  |
| Self-extinguishing degree | V0 to UL 94 – 5VA Rated                            |
| Solar radiation (UV)      | EN 60068-2-5                                       |
| Colour                    | Grey   |
| Material                  | Polycarbonate                                      |
| Dimensions                | 200 × 125 × 70 mm                                  |



### URM line OPTICAL DISTRIBUTION BOX

The URM line optical distribution boxes are suitable both for internal and external application and could be wall or polemounted. The URM line consist of four box sizes (SL, SH, LL, LH). The boxes can be configured with a range of fiber organizer systems to support splice, distributed splitter and drop applications using traditional cable, blown fiber cable, pushable drop cable technology or micro-tube cable.

- Splicing capacity up to 144 heat shrink splices
- ▶ Cross-connect capacity up to 48 optical connectors
- ▶ Hinged lockable door
- > 4 different sizes SL, SH, LL and LH
- ► Robust plastic design (IK10)
- Water and dust protected (IP54)

#### TECHNICAL SPECIFICATIONS

| Coverage degree           | IP 54 to EN 60529                        |
|---------------------------|--|
| Self-extinguishing degree | V0 to UL 94                              |
| Impact protection degree  | IK 10 to EN 50102                        |
| Solar radiation (UV)      | EN 60068-2-5                             |
| Change of temperature     | -40 °C/+70 °C according to EN 60068-2-14 |
| Colour                    | Light grey RAL 7035                      |
| Material                  | PC/ABS                                   |
| Dimensions                |  |
| – URM SL                  | 216 × 154 × 68 mm                        |
| – URM SH                  | 216 × 154 × 90 mm                        |
| - URM LL                  | 350 × 250 × 68 mm                        |
| – URM LH                  | $350\times250\times90~\text{mm}$         |

#### ORDER CODES

| Order Code    | Name          |
|---------------|---------------|
| 85E0.97/0000F | Post Brackets |





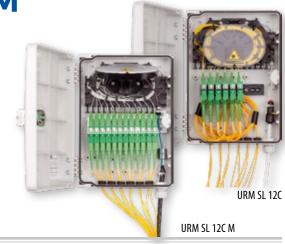
POST BRACKETS

### URM SL 12C / URM SL 12C M

- ▶ Maximum capacity is 12× LC (plastic holder) or possibility to install an aluminium adapter holder for 12× SC simplex
- Integrated fibre management  $+ 1 \times KM 3$  splice tray for the placement of optical splices
- Bushings  $1 \times PG9$  (5–8.5 mm),  $6 \times Dividable$  rubber bushing ( $2 \times 1$ –3 mm)
- Use for fibers G.657

#### ORDER CODES

| Order Code    | Name         |  |
|---------------|--------------|--|
| 85RP.00/0000F | URM SL 12C   |  |
| 85RP.20/0000F | URM SL 12C M |  |



### **URM SL 24S**

#### GPON READY 5G READY

- Maximum capacity is 24 optical splices
- Integrated fibre management + 2x KM 3 splice tray for the placement of optical splices
- Bushings  $4 \times PG9 (5-8.5 \text{ mm})$
- Possibility of PLC splitter placement
- Fixation of input/output cables
- Use for fibers G.657

| Order Code    | Name       |
|---------------|------------|
| 85RN.00/0000F | URM SL 24S |



URM SH 24C / URM SH 24C M

#### 5G READY

- ▶ Maximum capacity of adapters is 12× SC/DX /6× LC quad
- ▶ Integrated fiber management  $+2 \times KM$  3 splice tray for the placement of optical splices
- ▶ Bushings  $1 \times PG13.5$  (8–12 mm);  $12 \times Dividable rubber bushing (<math>2 \times 1-3 \text{ mm}$ )
- ▶ Possibility of PLC splitter placement
- ▶ Use for fibers G.657

#### ORDER CODES

| Order Code    | Name         |
|---------------|--------------|
| 85RP.10/0000F | URM SH 24C   |
| 85RP.45/0000F | URM SH 24C M |



### **URM SH 48S**





- ▶ Maximum capacity is 48 optical splices
- ▶ Integrated fibre management + 4x KM 3 splice tray for the placement of optical splices
- $\blacktriangleright$  Bushings 4× PG9 (5–8.5 mm)
- ▶ Possibility of PLC splitter placement
- ► Fixation of input/output cables
- ▶ Use for fibers G.657

#### ORDER CODES

| Order Code    | Name       |
|---------------|------------|
| 85RN.10/0000F | URM SH 48S |



### URM LL 24C M GPON READY 56 READY





- ▶ Maximum capacity of adapters is 12× LC duplex, 12× SC duplex or 24 SC simplex
- > 2× KM 1 splice tray for the placement of optical splices
- ▶ Bushings  $2 \times PG13.5$  (8–12 mm);  $12 \times Dividable$  rubber bushing ( $2 \times 1-3$  mm)
- ▶ Possibility of PLC splitter placement
- ▶ Use for fibers G.652d and G.657

#### ▶ ORDER CODES

| Order Code    | Name         |
|---------------|--------------|
| 85RR.05/0000F | URM LL 24C M |



### URM LL 485 CPON READY 56 READY



- Maximum capacity is 48 optical splices
- ▶ Integrated fibre management + 4× KM 3 splice tray for the placement of optical splices
- $\blacktriangleright$  Bushings 4× PG13.5 (8–12 mm)
- Possibility of PLC splitter placement
- ► Fixation of input/output cables
- ▶ 4× cable eye for placement of cable reserves
- ▶ Holders of tension element
- Use for fibers G.657

| Order Code    | Name       |
|---------------|------------|
| 85RQ.00/0000F | URM LL 48S |



### **URM LH 48C M**

#### **5G** READY

- Maximum capacity of adapters is 48x SC simplex
- > 2× EC2 splice tray for the placement of optical splices
- Bushings  $2 \times PG16$  (8–16 mm);  $2 \times PG29$  (24×3 mm)
- ▶ Possibility of PLC splitter placement
- Use for fibers G.652d and G.657

#### **ORDER CODES**

Order Code Name 852L.30/0000F URM LH 48C M



### **URM LH 48C UNI**

GPON READY 5G READY

- ▶ Maximum capacity of adapters is 12×SC simplex or 12×SC duplex or 12×LC duplex or 12×LC QUAD
- > 2× KM 4 splice tray for the placement of optical splices
- ▶ Bushings  $2 \times PG13.5$  (8–12 mm);  $24 \times Dividable$  rubber bushing ( $2 \times 1-3$  mm)
- Possibility of PLC splitter placement
- Use for fibers G.652d and G.657



#### > ORDER CODES

Order Code Name 85FR.55/0000F URM LH 48C UNI

### **URM LH 16 SDF**

GPON READY 5G READY

The optical distribution box URM LH 16 SDF is designed for splicing, connectors connection and placing the splitter 1:8, 1:16. The box is ideal for FTTx applications.

- ► Capacity of 16 optical connectors
- ► Connector holder LC duplex, SC duplex
- Extra 2 optional adapter positions for connecting the input optical cable with splitter, or for measurement over one fiber outgoing from the splitter
- ▶ 1–2 KM 1 optical splice trays for splices placing
- > 2× space for routing of incoming and outgoing fibers
- Express port
- Use for fibers G.652d and G.657



| Order Code    | Name          |
|---------------|---------------|
| 85DE.00/0000F | URM LH 16 SDF |

### **URM LH 96S**

GPON READY 5G READY

- Maximum capacity is 96 optical splices
- ▶ Integrated fibre management  $+ 8 \times$  KM 3 splice tray for the placement of optical splices
- ▶ Bushings 4× PG13.5 (8−12 mm)
- ▶ Possibility of PLC splitter placement
- ► Fixation of input/output cables
- ▶ 4× cable eye for placement of cable reserves
- ▶ Holders of tension element
- ▶ Use for fibers G.657

### **▶** ORDER CODES

| Order Code    | Name       |
|---------------|------------|
| 85RQ.10/0000F | URM LH 96S |



### **URM LH 144S**



- Maximum capacity is 144 optical splices
- ▶ 6× EC2 splice tray for the placement of optical splices
- $\blacktriangleright$  Bushings 4× PG16 (8–16 mm)
- ▶ Possibility of PLC splitter placement
- ► Fixation of input/output cables
- ▶ 4× cable eye for placement of cable reserves
- ▶ Holders of tension element
- ▶ Use for fibers G.652d and G.657

| Order Code    | Name        |
|---------------|-------------|
| 85RQ.20/0000F | URM LH 144S |



### **ORM 16 SDF** ORM 16 SDF SIS OPTICAL DISTRIBUTION BOX/PILLAR

GPON READY 5G READY

The optical distribution box ORM 16 SDF / 16 SDF SIS is designed for splicing, connectors connection and placing the splitter 1:8, 1:16. The box is ideal for FTTx ap-

- ► Capacity of 16 optical connectors
- ▶ Connector holder SC simplex, SC duplex
- Possibility of pillar version or on the pole
- Extra 2 optional adapter positions for connecting the input optical cable with splitter, or for measurement over one fiber outgoing from the splitter.
- ▶ 1–2 KM 1 optical splice trays for splices placing
- > 2× space for routing of incoming and outgoing fibers
- Optical connector holder  $8 \times SC/DX + 1 \times SC/SX$









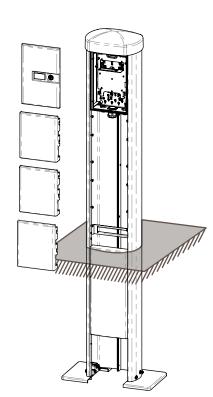


#### TECHNICAL SPECIFICATIONS

| Bushings                    | 2× PG13.5 (8–12 mm); 1× PG29 (24×3 mm)                              |
|-----------------------------|---|
| Coverage degree             | IP 54 to EN 60529   |
| Self-extinguishing degree   | V0 to UL 94   |
| Impact protection degree    | IK 10 to EN 50102   |
| Solar radiation (UV)        | EN 60068-2-5  |
| Change of temperature       | -40 °C/+70 °C according to EN 60068-2-14                            |
| Colour                      | Light grey RAL 7035   |
| Material – distribution box | PVC, PC/ABS   |
| Material – bushings         | PA6, TPE-S  |
| Material – metallic parts   | Aluminium   |
| Dimensions                  | $319 \times 205 \times 118 / 1747 \times 290 \times 209 \text{ mm}$ |
| Weight                      | 2/11 kg   |

| KECOMIMENDED ACCESSORIES               |  |
|--|--|
| Splice trays                           |  |
| Splice holders                         |  |
| Post Brackets                          |  |
| Other accessories on the pages 066–075 |  |

| Order Code   | Name   |
|--|--|
| 8588.70/0000F  | ORM 16 SDF with optical connector holder $8\times SC/DX + 1\times SC/SX$     |
| 8588.80/SI00F  | ORM 16 SDF SIS with optical connector holder $8\times SC/DX + 1\times SC/SX$ |
| 8286.10/2000F  | Post Brackets  |
| For other variants, please, contact our sales department. Pre-installed versions available upon request. |  |





# SNM 48 SIS, SNM 72 VS SIS SNM 144 VS SIS OPTICAL PILLAR CLOSURE

GPON READY 5G READY

Optical overground closure SNM 48 SIS / 72 VS SIS / 144 VS SIS is designed for the termination of 48/72/144 optical splices outdoors. The distribution box is to be installed in an open space in trench. The plastic corpus of pillar is staffed by one SNM 48/72 distributor or by two SNM 72 distributors.

- ▶ Maximum capacity is 48/72/144 optical splices
- ▶ Plastic corpus
- ▶ Installation separate pillar
- ▶ Possibility of shortened pillar version
- ▶ Placement of optical fiber reserve, length 2 m
- Cable holders
- Management rings
- PG Bushings



SNM 72 VS SIS





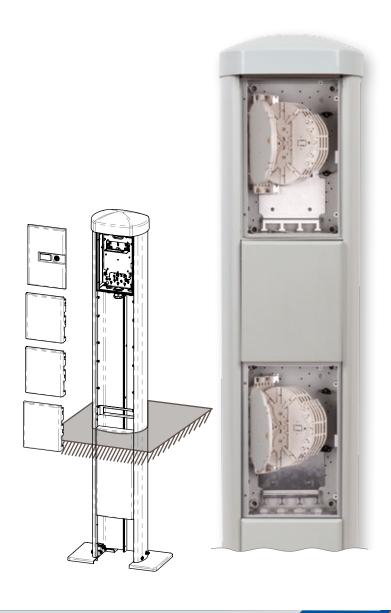
#### TECHNICAL SPECIFICATIONS

| Bushings                    | 4× PG 13.5 (8–12 mm)    |
|-----------------------------|-------------------------|
| Coverage degree             | IP 54 to EN 60529       |
| Self-extinguishing degree   | V0 to UL 94             |
| Impact protection degree    | IK 10 to EN 50102       |
| Solar radiation (UV)        | EN 60068-2-5            |
| Colour                      | Light grey RAL 7035     |
| Material – distribution box | PVC, PC/ABS             |
| Material – bushings         | PA6                     |
| Material – metallic parts   | Painted steel/aluminium |
| Dimensions                  | 1747 × 290 × 209 mm     |
| Weight                      | 11 kg                   |
|                             |                         |

#### **▶** RECOMMENDED ACCESSORIES

Splice trays Splice holders Other accessories on the pages 067–075

| Order Code  | Name          |  |
|---|---------------|--|
| 85F0.10/0000F   | SNM 48 SIS    |  |
| 85HC.20/0000F   | SNM 72 VS SIS |  |
| <b>85LG.10/0000F</b> SNM 144 VS SIS                       |               |  |
| For other variants, please, contact our sales department. |               |  |



# MDP OZ 144/288/432S OPTICAL PILLAR CLOSURE

NEW GPON READY 5G READY FibeRoad

Optical pillar closure MDP OZ 144/288/432S is designed for the placement of 144/288/432 optical splices outdoors. The pillar is to be installed in open space in trench. The cabinet is supplied without the splice trays. The solution is recommended for spliced GPON networks.

- ► Compact solution (footprint 264 × 245 mm)
- Modular pillar height based on the maximum capacity
- ▶ Three-point lock door
- > Duct holder in the basement
- ► Cable rings for placing cable reserves
- ▶ Hingeable/detachable splicing plate
- ▶ FibeRoad system
- Possibility of adding trays as your network grows
- ▶ Possibility of placing PLC splitters in the management (outside the trays)
- ▶ Suitable for spliced GPON networks
- ▶ Tray KM 4 or KM 6 for 24 splices
- Optional ribbon splice holders
- Possibility of loop cable



KM 4





FibeRoad system



MDP 0Z 144S



MDP 0Z 288S





MDP 0Z 432S

#### TECHNICAL SPECIFICATIONS

| Entry                                    | $2\times$ Express port ( $2\times3-11$ mm) and ( $16\times5$ mm) |
|--|--|
| Coverage degree                          | IP54 to EN 60529   |
| Impact protection degree                 | IK 10 to EN 50102  |
| Material                                 | Polyester + glass fibre  |
| Color                                    | RAL 7035   |
| Dimensions ( $H \times W \times D$ )     | 1300/1500/1700 × 245 × 264 mm                                    |
| Height above the ground                  | 700/900/1100 mm  |
| Height above the ground incl. cable base | 950/1150/1350 mm   |
| Weight                                   | 14/17/20 kg  |
|  |  |

| ONDEN CODES                            |   |
|--|---|
| Order Code                             | Name  |
| 85GB.00/0000F                          | MDP OZ 144S                                     |
| 85GB.20/0000F                          | MDP OZ 288S                                     |
| 85GB.40/0000F                          | MDP 0Z 432S                                     |
| 495630                                 | Cable base (extension leg pillar)               |
| 85AV.04/0000                           | Tray KM 4                                       |
| 85AV.05/0000                           | Lid tray KM 4                                   |
| 495535                                 | Tray KM 6                                       |
| 495536                                 | Lid tray KM 6                                   |
| 85M9.16/0000                           | TS 12 splice holder (2 pcs needed for one KM 4) |
| 495241                                 | TS 12 splice holder (2 pcs needed for one KM 4) |
| 495241                                 | RIB 3 holder 3× ribbon or splitter 4× 4 mm      |
| 470241                                 | (2 pcs needed for one KM 4)                     |
| For other configurations will you plea | ase contact our sales department.               |

# MDP OZ 24/48, MDP OZ 48/96, MDP OZ 72/144 OPTICAL DISTRIBUTION PILLAR

NEW GPON READY 5G READY FibeRoad

Optical pillar MDP OZ 24/48, 48/96, 72/144 is designed for the placement of 24/48/72 SC connectors or 48/96/144 LC connectors outdoors. The pillar is to be installed in open space in trench. The cabinet is supplied without the splice trays. The solution is recommended for spliced GPON networks.

- ► Compact solution (footprint 264 × 245 mm)
- Modular pillar height based on the maximum capacity
- ▶ Three-point lock door
- > Duct holder in the basement
- ► Cable rings for placing cable reserves
- Hingeable/detachable splicing/patching plate
- ▶ FibeRoad system
- Possibility of adding trays as your network grows
- Possibility of placing PLC splitters in the management (outside the trays)
- Possibility to combine trays KM 4, KM 5, KM 6
- ▶ Tray KM 5 for 12 SC or 24 LC connectors
- ▶ Optional ribbon splice holders
- Possibility of loop cable
- Max. 4 pcs PLC Splitters ABS











| TECHNICAL SPECIFICATIONS                 |  |
|--|--|
| Entry                                    | $2\times$ Express port ( $2\times3-11$ mm) and ( $16\times5$ mm) |
| Coverage degree                          | IP54 to EN 60529   |
| Impact protection degree                 | IK 10 to EN 50102  |
| Material                                 | Polyester + glass fibre  |
| Color                                    | RAL 7035   |
| Dimensions ( $H \times W \times D$ )     | 1300/1500/1700 × 245 × 264 mm                                    |
| Height above the ground                  | 700/900/1100 mm  |
| Height above the ground incl. cable base | 950/1150/1350 mm   |
| Weight                                   | 14/17/20 kg  |





| Order Code                              | Name  |
|---|---|
| 85GB.10/0000F                           | MDP 0Z 24/48                                    |
| 85GB.30/0000F                           | MDP 0Z 48/96                                    |
| 85GB.50/0000F                           | MDP 0Z 72/144                                   |
| 495630                                  | Cable base (extension leg pillar)               |
| 85AV.04/0000                            | Tray KM 4                                       |
| 85AV.05/0000                            | Lid tray KM 4                                   |
| 495535                                  | Tray KM 6                                       |
| 495536                                  | Lid tray KM 6                                   |
| 85M9.16/0000                            | TS 12 splice holder (2 pcs needed for one KM 4) |
| 495241                                  | RIB 3 holder 3× ribbon or splitter 4× 4 mm      |
| 493241                                  | (2 pcs needed for one KM 4)                     |
| 85AV.94/0000F                           | Tray KM 5 complete                              |
| On request                              | PLC Splitter ABS                                |
| For other configurations will you pleas | e contact our sales denartment                  |

### MDP EL 96/192, MDP EL 144/288 OPTICAL PILLAR BOX

NEW GPON READY 5G READY FibeRoad

Optical pillar box MDP EL 96/192, 144/288 is designed for the placement of 96/144 SC connectors or 192/288 LC connectors outdoors. The pillar is to be installed in open space in trench. The cabinet is supplied without the splice trays. The solution is recommended for spliced GPON networks. Very robust design (reinforced thick walls).

- Very robust design (increased wall width)
- ► Three-point lock door
- Duct holder in the basement
- ▶ Cable rings for placing cable reserves
- Hingeable/detachable splicing/patching plate
- ▶ FibeRoad system
- Possibility of adding trays as your network grows
- Possibility of placing PLC splitters in the management (outside the trays)
- Possibility to combine trays KM 4, KM 5, KM 6
- ▶ Trays KM 4 and KM 6 for 24 splices
- ▶ Tray KM 5 for 12 SC or 24 LC connectors
- > Optional ribbon splice holders
- Possibility of loop cable
- Max. 6 pcs PLC Splitters ABS for MDP EL 96/192 a 144/288



FibeRoad systém listovací















# MDP EL 96/192, MDP EL 144/288 | OPTICAL PILLAR BOX

NEW GPON READY 5G READY FibeRoad









### TECHNICAL SPECIFICATIONS

| Entries  | 2× Express port II and 4× Express port I<br>(4×3–13 mm, 8×3–9 mm, 54×2–5 mm) |
|--|--|
| Coverage degree                                  | IP 54 to EN 60529  |
| Impact protection degree                         | IK 10 to EN 50102  |
| Solar radiation (UV)                             | EN 60068-2-14  |
| Material   | Polyester + glass fibre  |
| Color  | RAL 7035   |
| Dimensions MDP EL 96/192 H $\times$ W $\times$ D | 1300 × 390 × 350 mm  |
| Dimensions MDP EL 144/288 $H \times W \times D$  | 1500 × 390 × 350 mm  |
| Weight   | 50 / 55 kg   |
|  |  |

| Order Code                            | Name   |
|---------------------------------------|--|
| 85FY.30/0000F                         | MDP EL 96/192  |
| 85FY.00/0000F                         | MDP EL 144/288   |
| 85AV.94/0000F                         | Tray KM 5 complete   |
| 85AV.04/0000                          | Tray KM4   |
| 85AV.05/0000                          | Lid tray KM4   |
| 495535                                | Tray KM6   |
| 495536                                | Lid tray KM6   |
| 85M9.16/0000                          | TS 12 splice holder (2 pcs needed for one KM4 or KM 6)     |
| 495241                                | RIB 3 holder $3 \times$ ribbon or splitter $4 \times 4$ mm |
|                                       | (2 pcs needed for one KM4)                                 |
| On request                            | PLC Splitter ABS   |
| For other configurations will you ple | ase contact our sales department.                          |

# ORM 96/144 F WALL-MOUNTED OPTICAL DISTRIBUTION BOX

GPON READY 5G READY

The ORM 96/144 F optical distribution box is designed for the placement of 96 SC or 144 LC optical connectors indoors and outdoors.

- ▶ 4× EC2 splice tray on hinges for 24 splices (total 96 splices)
- ► Maximum capacity is 192 splices (8× EC2)
- Adaptor plate for 96 SC simplex or 36 SC duplex/LC quad
- Possibility of splitter holder (optional accessories)
- Possibillity of lock (optional accessories)
- Plastic rings
- ▶ Holder of tension element



PLC splitter placement





#### TECHNICAL SPECIFICATIONS

| Bushings                  | 3× PG16 (8–16 mm); 4× PG29 (24×3 mm) |
|---------------------------|--------------------------------------|
| Coverage degree           | IP65 according to ČSN EN 60529       |
| Self-extinguishing degree | HB according to UL 94                |
| Impact protection degree  | IK 08 according to ČSN EN 50102      |
| Material                  | ABS                                  |
| Color                     | Light Gray RAL 7035                  |
| Dimensions                | 500 × 400 × 175 mm                   |
| Weight                    | 9 kg                                 |

#### **▶** RECOMMENDED ACCESSORIES

Splice trays (EC2) page 071 PG 29/24×3 PAGE 072 Other accessories on the pages 067, 071, 072, 073, 075, 076

#### ▶ ORDER CODES

| Order Code    | Name   |
|---------------|--|
| 85FX.00/0000F | ORM 96/144 F                                   |
| 85FX.06/0000F | Splitter holder                                |
| On request    | Splitter ABS                                   |
| 495405        | Lock (optional accessories, 2 pieces required) |
|               |  |

For other variants, please, contact our sales department.

## MDB FA 144/192/288S OPTICAL SPLICE CLOSURE

NEW GPON READY 5G READY FibeRoad

Optical distribution box MDB FA 144/192/288S is designed for the placement of 144/192/288 optical splices indoors and outdoor. The distribution box can be extended by a pole holder. A very suitable solution for spliced GPON networks.

- Maximum capacity of 144/192/288 splices
- ▶ Cable rings
- ▶ Placement of a large slack inside the cable management
- ▶ Removable splicing part
- ▶ FibeRoad system
- Modular capacity increase
- Possibility of placing PLC splitters inside the management (outside the trays)
- ► KM 4 trays for 24 splices
- Possibility of using ribbon fibers



MDB FA 192S





#### TECHNICAL SPECIFICATIONS

| Inputs   | 6× PG16 (8–16 mm)   |
|--|---------------------|
| Coverage degree                                  | IP 65 to EN 60529   |
| Impact protection degree                         | IK 08 to EN 50102   |
| Self-extinguishing degree                        | HB to UL 94         |
| Material   | ABS                 |
| Color  | Light grey RAL 7035 |
| Dimensions MDB FA 144S (H $\times$ W $\times$ D) | 400 × 300 × 165 mm  |
| Dimensions MDB FA 192S (H $\times$ W $\times$ D) | 500 × 400 × 175 mm  |
| Dimensions MDB FA 288S (H $\times$ W $\times$ D) | 600 × 400 × 200 mm  |
| Weight   | 4 / 5.5 / 6.5 kg    |
|  |                     |

#### ORDER CODES

|  | Order Code    | Name   |  |
|--|---------------|--|--|
|  | 85TA.00/0000F | MDB FA 144S  |  |
|  | 85TA.10/0000F | MDB FA 192S  |  |
|  | 85TA.20/0000F | MDB FA 288S  |  |
|  | 495405        | Key lock (2 pcs needed for one box)                          |  |
|  | 85AV.04/0000  | Tray KM 4  |  |
|  | 85AV.05/0000  | Lid for KM 4   |  |
|  | 495535        | Tray KM 6  |  |
|  | 495536        | Lid tray KM 6  |  |
|  | 85M9.16/0000  | Splice holder TS12 (2 pcs needed for one KM 4)               |  |
|  | 495241        | Holder $3 \times$ ribbon or splitter $4 \times 4$ mm RIB $3$ |  |
|  |               |  |  |

KM 6



KM 4



FibeRoad stackable



# MDB FA 24/48, MDB FA 48/96, MDB FA 72/144 OPTICAL DISTRIBUTION BOX

NEW 5G READY FibeRoad

Optical distribution box MDB FA 24/48, 48/96, 72/144 is designed for the termination of 24/48/72 fibers to SC connectors or 48/96/144 fibers to LC connectors indoors and outdoors. The distribution box can be enhanced by the pole holder and it can store large cable/patchcords

- Maximum capacity 24/48/72 SC or 48/96/144 LC
- Ranging rings
- Possibility of storing large cable/patchcord reserves inside the distribution box
- Removable splicing/patching part
- ▶ FibeRoad system
- Possibility of modular increasing of the capacity
- Possibility of placing PLC splittera in the management section (outside the tray)
- ▶ Trays KM 5 for 24 splices and 12 SC simplex or LC duplex
- ▶ Hinging KM 5 tray for a better handling
- Possibility of ribbon fibers







MDB FA 24/48

#### TECHNICAL SPECIFICATIONS

| Terminates terminates                              |                                      |  |  |
|--|--------------------------------------|--|--|
| Inputs MDB FA 24/48                                | 3× PG16 (8–16 mm), 2× PG29 (24×3 mm) |  |  |
| Inputs MDB FA 48/96                                | 4× PG16 (8–16 mm), 4× PG29 (24×3 mm) |  |  |
| Inputs MDB FA 72/144                               | 4×PG16 (8–16 mm), 6× PG29 (24×3 mm)  |  |  |
| Coverage degree                                    | IP 65 to EN 60529                    |  |  |
| Impact protection degree                           | IK 08 to EN 50102                    |  |  |
| Self-extinguishing degree                          | HB to UL 94                          |  |  |
| Material   | ABS                                  |  |  |
| Color  | Light grey RAL 7035                  |  |  |
| Dimensions MDB FA 24/48 (H $\times$ W $\times$ D)  | 400×300×165 mm                       |  |  |
| Dimensions MDB FA 48/96 (H $\times$ W $\times$ D)  | 500 × 400 × 175 mm                   |  |  |
| Dimensions MDB FA 72/144 (H $\times$ W $\times$ D) | 600×400×200 mm                       |  |  |
| Weight   | 4/5.5/6.5 kg                         |  |  |



| Order Code    | Name   |
|---------------|--|
| 85TA.50/0000F | MDB FA 24/48   |
| 85TA.60/0000F | MDB FA 48/96   |
| 85TA.70/0000F | MDB FA 72/144  |
| 495405        | Key lock (set of 2 pcs needed)                                 |
| 85AV.04/0000  | Tray KM 4  |
| 85AV.05/0000  | Lid for KM 4   |
| 85M9.16/0000F | Tray KM 5  |
| 495241        | Ribbon holder 3× or splitter 4×4 mm RIB 3 (2 pcs for one KM 5) |





### MODB 48 INDOOR MULTIOPERATING BOX

GPON READY 5G READY

The MODB distribution box is designed to the multioperating solutions optical distributions in housing. It enables installation of any indoor technology of optical network. It consists of the area of termination of residential distribution, and of the area of common access operators to the residential distribution. The distribution boxes can be installed closely over each other. It has lockable indoor part with saved splices or splitters. There is a possibility of gradual addition of capacity of distribution box and of installing PLC splitters. The box enables to use splicing technology or technology of mechanical connectors. It is designed for indoor wall-mounting.

- ► Capacity of 48 optical connectors
- ▶ Connector holder SC simplex
- ▶ Ideal solution for developer construction
- > Separate party of provider from the residential distribution
- ▶ Common access operators to the residential distribution
- ▶ Fully compatible with PON or Point-to-Point architecture
- Possibility of installing any technology of residential distribution (EasyBend cables, riser cables, micro ducts, ribbon and loose tube cables)
- Possibility of placing splitters up to 3 pcs
- ▶ Easy and fast installation
- Stackability



| Material   | Steel sheet                |
|------------|----------------------------|
| Colour     | Ligh grey RAL 7035         |
| Dimensions | $441\times172\times113~mm$ |
|            |                            |

Weight 3.1 kg

#### RECOMMENDED ACCESSORIES

Other accessories on the pages 067–076





#### **ORDER CODES**

| Order Code  | Name    |
|---|---------|
| 85MV.00/000CF   | MODB 48 |
| For other variants, please, contact our sales department. |         |

### POR 48 INDOOR OPTICAL DISTRIBUTION BOX

Wall mounted fiber optical box is designed for the placement of up to 48 optical connectors indoor. Optical cables can be lead in/out from upsite or downsite. Adapters plate is selectable and splicing tray is removable and suitable for field operation and maintenance of up to 24 splices (heat shrink or crimp).

- Maximum capacity 24 SC or 48 LC connectors
- ▶ Optional splice tray EC2 or KM 1
- ▶ Placement of optical fibre reserves-2 ranging eyes
- Cable holders
- Rubber bushings
- ▶ Two lockable doors two different locks
- Outdoor version available upon request
- Differrent capacities on request

#### TECHNICAL SPECIFICATIONS

| Material   | Steel sheet         |
|------------|---------------------|
| Colour     | Light gray RAL 7035 |
| Dimensions | 421 × 316 × 64 mm   |
| Weight     | 4 ka                |

#### ► RECOMMENDED ACCESSORIES

Other accessories on the pages 067–075

| Order Code  | Name   |  |
|---|--------|--|
| 85CR.00/0000F   | POR 48 |  |
| For other variants, please, contact our sales department. |        |  |







## **ORU 1, 2, 3** ORU 1, 2, 3 SIS OPTICAL DISTRIBUTION BOX/PILLAR

GPON READY SAFETNET SAFETNET

The optical distribution box ORU 1, 2, 3 / SIS is designed as a multi-purposed distributor with hinged rack for assembly up to 4, 16, 24 splice modules SAFeTNET for terminating or connecting of optical cables in micro-ducts or HDPE protecting pipes. Its construction enables using indoors and outdoors as well. With a simple holder it could be mounted on a pillar. The ORU 1, 2, 3 SIS are installed in an open area in trench.

- Maximum capacity 144, 576, 864 optical splices
- Maximum connected capacity 48, 192, 288 subscribers (2 fibers for a subscriber)
- Maximum number of splice modules SAFeTNET 4, 16, 24 pcs.
- Placement of optical fiber reserve, length 2.15 m, 3 m, 4 m
- ▶ Possibility of connector panel installation for measurement
- Possibility of oval bushing installation for undivided cable (so-called "OMEGA")
- Diff erent versions of the basement, high 300, 500, 600, 700, 900 mm
- ▶ Removable roof





#### TECHNICAL SPECIFICATIONS

| TECHNICAL SPECIFICATIONS  |  |   |   |  |
|---|--|---|---|--|
|   | ORU 1/SIS  | ORU 2/SIS   | ORU 3/SIS                                 |  |
| Bushings  | 4× rubber bushing ø 30 mm<br>3× rubber bushing ø 50 mm | 3× rubber bushing ø 30 mm<br>5× rubber bushing ø 50 mm<br>1× PG29 (12×3 mm);<br>3× PG13.5 (8–12 mm) | 12× rubber bushing<br>ø 50 mm             |  |
| Coverage degree   | IP 54 to EN 60529                                      |   |   |  |
| Self-extinguishing degree V0 to UL94 Impact protection degree IK 10 to EN 50102 |  | V0 to UL94  |   |  |
|   |  |   |   |  |
| Solar radiation (UV)  | EN 60068-2-5   |   |   |  |
| Colour  | Light grey RAL 7035                                    |   |   |  |
| Material – distribution<br>box  |  | Glass reinforced polyester SMC  |   |  |
| Material – bushings   | PA6/PVC  |   |   |  |
| Material – metallic parts Aluminium   |  |   |   |  |
| Dimensions  | 500 × 390 × 350 mm<br>1200 × 390 × 350 mm              | 500 × 550 × 350 mm<br>1200 × 550 × 350 mm   | 900 × 550 × 350 mm<br>1600 × 550 × 350 mm |  |
| Weight  | 14 kg/39 kg  | 20 kg / 45 kg   | 23 kg / 53 kg                             |  |

| ONDER CODES                            |                     |  |
|--|---------------------|--|
| Order Code                             | Name                |  |
| 8507.00/000NF                          | ORU 1               |  |
| 8507.00/000SF                          | ORU 1 SIS           |  |
| 8508.00/000NF                          | ORU 2               |  |
| 8508.00/000SF                          | ORU 2 SIS           |  |
| 8509.00/000NF                          | ORU 3               |  |
| 8509.00/000SF                          | ORU 3 SIS           |  |
| 8521.08/BAL0F                          | Post Brackets       |  |
| For other variants, please, contact ou | r sales department. |  |



POST BRACKETS



**UNDERGROUND BASE** 

### **ORU 1 SDF SIS** ORU 5 SDF SIS / ABS OPTICAL DISTRIBUTION BOX/PILLAR

GPON READY SAFETNET SAFETNET

ORU 1 SDF SIS / ORU 5 SDF SIS is designed as splitter concentrator pillar distributor with hinged rack for assembly up to 4/12 splice modules SE for terminating or connecting of optical cables in micro-ducts or HDPE protecting pipes. Its construction enables using outdoors as well. It is installed in an open space in

- Maximum capacity 144/432 optical splices
- Maximum connected capacity 64/288 optical fibers
- ▶ Maximum number of splice modules SAFeTNET 4/12 pcs.
- ► Capacity of splitters 2/5 pcs
- Placement of optical fiber reserve, length 4 m
- Diff erent versions of the basement, high 300, 500, 600, 700, 900 mm
- ▶ Removable roof
- ▶ Possibility of placing ABS splitter









| Bushings                    | 3/5× PG48 (36–44 mm); 2/6× PG13.5 (8–12 mm);<br>2× PG29 (15–25 mm); 1× PG9 (5–8.5 mm) |
|-----------------------------|---|
| Coverage degree             | IP 54 to EN 60529   |
| Solar radiation (UV)        | EN 60068-2-5  |
| Colour                      | Light grey RAL 7035   |
| Material – distribution box | Glass reinforced polyester SMC  |
| Material – bushings         | PA6/PVC   |
| Material – metallic parts   | Aluminium   |
| Dimensions                  | $1200 \times 390 \times 350 \text{ mm} / 1600 \times 550 \times 350 \text{ mm}$       |
| Weight                      | 44.5 kg / 53 kg   |

| Order Code  | Name                                 |  |
|---|--------------------------------------|--|
| 8508.60/5000F   | ORU 1 SDF SIS (with rubber bushings) |  |
| 8508.28/0000F   | ORU 5 SDF SIS                        |  |
| 85MF.05/000HF   | LGX module for splitter              |  |
| 8508.A3/0SESF   | Connector plate splitter assembly    |  |
| 8508.A4/0000F   | Modul for ABS splitter               |  |
| For other variants, please, contact our sales department. |                                      |  |



ORU 1 SDF SIS



ORU 5 SDF SIS



ORU 5 SDF SIS ABS



UNDERGROUND BASE

### ORU 9 SDF SIS OPTICAL DISTRIBUTION BOX/PILLAR





Optical distribution box ORU 9 SDF SIS is a new generation of street cabinets for PON-type optical network. The cabinet is freestanding, dustproof with the ruggedized structure against damage. Perfectly accessible and flexible. At the same time offers high-quality integrated modular optical management for terminating or connecting of optical cables in micro-ducts or HDPE protecting pipes. The construction of the cabinet allows its using in outdoor environments. The cabinet is installed in an open area in trench.

- Number of modules 12
- ► Capacity of modules 12× SC/E2000/SX or 12× LC/duplex adapters
- ▶ Capacity of max. 144/288 optical splices
- Maximum connected capacity of subscribers 144 in SC or 288 in LC connec-

#### tors

- Number of splitters 6
- Placement of optical fiber reserve, length 5 m
- ▶ Basement high 600 mm
- ▶ Rubber bushing 6× ø 50 mm
- ► Three-point lock of front door
- ▶ Use for fibers G652D, G657A
- Modular concept
- ▶ Easy assembly and disassemly
- ▶ Safe fixation of micro ducts or HDPE tubes
- Secure compliance of the prescribed minimum bending radius of optical

#### fibers

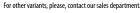
Removable roof



#### TECHNICAL SPECIFICATIONS

| Bushings                        | 6× rubber bushing ø 50 mm      |
|---------------------------------|--------------------------------|
| Coverage degree                 | IP 54 to EN 60529              |
| Self-extinguishing degree       | V0 to UL94                     |
| Impact protection degree        | IK 10 to EN 50102              |
| Solar radiation ( UV )          | EN 60068-2-5                   |
| Change of temperature           | -40 °C/+70 °C to EN 60068-2-14 |
| Colour                          | Light grey RAL 7035            |
| Material – cabinet              | Glass reinforced polyester SMC |
| Material – metallic parts       | Aluminium                      |
| Dimensions – cabinet + basement | 1600×550×350 mm                |
| Dimensions – base               | 700 × 550 × 350 mm             |
| Weight                          | 53 kg                          |

| Order Code    | Name                           |  |
|---------------|--------------------------------|--|
| 85CP.00/0000F | ORU 9 SDF SIS                  |  |
| 85CP.00/00SPF | ORU 9 SDF SIS for ABS splitter |  |
| 85MF.05/000HF | LGX module for splitter        |  |
| 8508.A4/0000F | Modul for ABS splitter         |  |
| 85CP.11/0000  | Panel for splitters 4U         |  |
| 85CP.07/0000F | LGX splitter panel             |  |
|               |                                |  |















## ORU 9D SDF SIS OPTICAL DISTRIBUTION BOX/PILLAR

GPON READY 5G READY



Optical distribution box ORU 9 D SDF SIS is a new generation of street cabinets for PON-type optical network. The cabinet is freestanding, dustproof with the ruggedized structure against damage. Perfectly accessible and flexible. At the same time offers high-quality integrated modular optical management for terminating or connecting of optical cables in micro-ducts or HDPE protecting pipes. The construction of the cabinet allows its using in outdoor environments. The cabinet is installed in an open area in trench

- Number of modules 24
- ► Capacity of modules 12× SC/SX or 12× LC/duplex adapters
- ▶ Capacity of max. 536 optical splices
- Maximum connected capacity of subscribers 512 in LC connectors
- Number of splitters 8
- Placement of optical fiber reserve, length 5 m
- ▶ Basement high 700 mm
- ▶ Rubber bushing 12× ø 50 mm
- ▶ Three-point lock of front door
- ▶ Use for fibers G652D, G657A
- Modular concept
- Easy assembly and disassemly
- ▶ Safe fixation of micro ducts or HDPE tubes





#### TECHNICAL SPECIFICATIONS

| Bushings                        | 12× rubber bushing ø 50 mm     |
|---------------------------------|--------------------------------|
| Coverage degree                 | IP 54 to EN 60529              |
| Impact protection degree        | IK 10 to EN 50102              |
| Self-extinguishing degree       | V0 to UL94                     |
| Solar radiation (UV)            | EN 60068-2-5                   |
| Change of temperature           | -40 °C/+70 °C to EN 60068-2-14 |
| Colour                          | Light grey RAL 7035            |
| Material – cabinet              | Glass reinforced polyester SMC |
| Material – metallic parts       | Aluminium                      |
| Dimensions – cabinet + basement | 1600×1100×350 mm               |
| Dimensions – base               | 600×1100×350 mm                |
| Weight                          | 90 kg                          |

#### ORDER CODES

| Order Code    | Name                                |
|---------------|-------------------------------------|
| On request    | ORU 9D SDF SIS                      |
| 85T2.48/0SALF | Modul ORSM 1 SC/APC — 12F           |
| 85T2.48/0LALF | Modul ORSM 1 LC/APC – 24F           |
| 85T2.48/POCEF | Splicing module ORSM 1              |
| 85MF.05/000HF | LGX module for splitter             |
| 8508.A4/0000F | Modul for ABS splitter              |
| 85CP.07/0000F | LGX splitter panel                  |
| 85CP.12/0000F | Panel for 2× ABS modules            |
| 85CP.41/0002F | Rack 1U, 18", 12×SC, 1×LGX module   |
| 85CP.42/0000F | Rack 1U, 18", 12× SC, 1× ABS module |



**DOUBLE UNDERGROUND BASE** 

## ORU 8 SDF SIS OPTICAL DISTRIBUTION BOX/PILLAR

GPON READY 5G READY



ORU 8 SDF SIS is a new generation of street cabinets for PON-type optical network. The cabinet is freestanding with the ruggedized structure against damage. Perfectly accessible and flexible. At the same time offers high-quality integrated modular optical management for terminating or connecting of optical cables in micro-ducts or HDPE protecting pipes. The construction of the cabinet allows its using in outdoor environments. The cabinet is installed in an open area in trench.

- Number of modules 42
- ► Capacity of modules 12× SC/E2000/SX or 12× LC/duplex adapters
- ► Capacity of 504/1008 optical splices
- ▶ Maximum connected capacity subscribers 480 in SC or 960 in LC connectors
- Maximal PLC splitter capacity 16 splitters (LGX type)
- ▶ Placement of optical fiber reserve, length 5 m
- ► Three-point lock
- ▶ Sophisticated holder for microducts or HDPE tubes













#### TECHNICAL SPECIFICATIONS

| Bushings                        | 12× rubber bushings ø 50 mm    |
|---------------------------------|--------------------------------|
| Coverage degree                 | IP 54 to EN 60529              |
| Impact protection degree        | IK 10 to EN 50102              |
| Solar radiation (UV)            | EN 60068-2-5                   |
| Change of temperature           | -40 °C/+70 °C to EN 60068-2-14 |
| Colour                          | Light grey RAL 7035            |
| Material – cabinet              | Glass reinforced polyester SMC |
| Material – metallic parts       | Aluminium                      |
| Dimensions – cabinet + basement | 1525 × 1090 × 450 mm           |
| Dimensions – base               | 600 mm                         |
| Weight                          | 90 kg                          |
|                                 |                                |

#### ORDER CODES

| Order Code    | Name                     |
|---------------|--------------------------|
| 85AD.00/0000F | ORU 8 SDF SIS            |
| 85MF.10/000HF | Module for splitters 142 |



### **FDH 288** FDH 288 SIS OPTICAL DISTRIBUTION BOX/PILLAR

GPON READY 5G READY



Optical distribution box/pillar for PON type optical networks. It allows connection of up to 288 participants in 24 modules with 12 SC adapters. For the backbone cable, there are two additional modules at the top. All the modules can be mounted in a hinged frame. Cabinet includes integrated holder for 11 PLC splitters in ABS housing, management for patchcords and parking element for unused connectors. The cabinet — pillar version is installed in an open area in trench.

- Number of modules 26 pieces, possibility of gradual expansion
- Capacity of 12× SC-SX or 12× LC/duplex adapters
- Maximum capacity is 288/576 + 24/48 SC/LC ports
- Maximum capacity for subscribers is 288/352 for SC/LC (max. 11 PLC splitters)
- ▶ Maximum capacity of 624 splices
- ▶ Integrated holder for 11 PLC splitters in ABS housing (max. splitter 1:32)
- Patchcord management
- ▶ Folding frame for comfortable installation
- Wall, pole and pillar application
- ▶ The possibility of direct mounting into a trench without the need of concrete base



Connector parking element





#### TECHNICAL SPECIFICATIONS

| Bushings                  | 6× PG16 (4×5 mm); 2× PG16 (10–14 mm)                             |
|---------------------------|--|
| Coverage degree           | IP66 to ČSN EN 60529   |
| Self-extinguishing degree | V0 to UL 94  |
| Impact protection degree  | IK 10  |
| Solar radiation           | ČSN EN 60068-2-5   |
| Material                  | Glass reinforced polyester SMC + painting                        |
| Color                     | Light Gray RAL 7035  |
| Dimension                 | $816 \times 616 \times 323$ mm / $1800 \times 616 \times 323$ mm |
| Weight                    | 40 kg / 60 kg  |

| Order Code                          | Name   |
|-------------------------------------|--|
| 85FD.50/0000F                       | FDH 288  |
| 85FD.00/0000F                       | FDH 288 SIS                                    |
| 495295                              | Set of wall brackets                           |
| 495299                              | Set of pole brackets                           |
| 85H2.05/BAL0F                       | Cable splitter 6×5/3.5 mm                      |
| On request                          | Tube 5/3.5 mm                                  |
| 852X.90/000XF                       | Mounting shelf                                 |
| 85T2.48/0000F                       | Module empty                                   |
| On request /                        | Module complete pre-installed, different types |
| For other variants, please, contact | our sales department.                          |





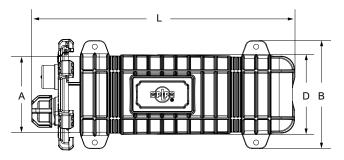


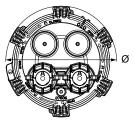
Cable/duct management view

GPON READY 5G READY

FIBREGUARD™ Closure, is a reliable and competitive solution for data, voice and video transmission. It is designed for all types of cables: ADSS, OPGW and underground, providing users with professional versatility. The FIBREGUARD™ closure can be used in many types of installations: towers, wooden or concrete poles, aerial strand, manholes, and directly buried. For all installations the appropriate fittings are available as a separately purchased kit.

- Will accommodate fusion, mechanical and ribbon splicing
- Many applications: Head end, splice box, node, cable termination point, and terminal and branch splice application
- Easy and quick installation, taking less than 10 seconds to be re-entered
- Rubber bushings single or multiple entries, which are selected according to cable diameter
- Air and water tightness
- ▶ There is a strength member and cable fastening system for each cable entry port





#### DIMENSIONAL CHARACTERISTICS

| Towns Cim.      |               | Cinala nauta | L   | Ø   | D    | Α   | В   |
|-----------------|---------------|--------------|-----|-----|------|-----|-----|
| Туре            | Express ports | Single ports |     |     | (mm) |     |     |
| FIBREGUARD™ 500 | 2x1.8/25mm    | 2x1.8/25mm   | 515 | 209 | 147  | 134 | 206 |
| FIBREGUARD™ 650 | 2x1.8/25mm    | 3x1.8/25mm   | 622 | 241 | 184  | 167 | 234 |
| FIBREGUARD™ 800 | 2x1.8/25mm    | 5x1.8/25mm   | 664 | 279 | 222  | 205 | 273 |
| FIBREGUARD™800S | 2x1.8/25mm    | 5x1.8/25mm   | 460 | 279 | 222  | 205 | 273 |

They have also been designed to host different fiber management systems, and in this way they accept:

- ▶ Slide & lock splice trays (also known as book type);
- SAFEtNET® Fiber Management system for single circuit/single element applications (only FIBREGUARD™ 800 splice closures)
- ► Stackable COYOTE® splice trays applications (only FIBREGUARD™ 650 and FIBREGUARD™ 800 splice closures)

#### Slide & lock splice trays

The SLIDE & LOCK® Splice trays offer a simple and craft-friendly design, which allows entrance into any tray independently of its position inside the closure, as you do not have to move the trays that are immediately above. For this purpose, every tray has flip tray devices, which enable to pull up the above trays holding them in position. Simply push the tray back and pull them up until they remain in place. Then you can reach the tray you want with no risk of fibers. Additionally, the block of trays may be turned either on the right or on the left, so you can work in the fibers, not being disturbed by the holding stud. Every tray can host up to 12 or 24 fusion splices, and even upo to 72 splices with several entries, which will allow you to make different operations like splicing, expressing fibers, segregating and storing dark fibers.

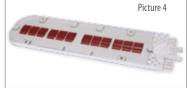


| Picture | No. of splices | Number of splice trays per closure |         |          |         |
|---------|----------------|------------------------------------|---------|----------|---------|
| ricture | No. of splices | FBG-500                            | FBG-650 | FBG-800S | FBG-800 |
| 1       | 18             | 4                                  | 5       | 8        | 9       |
| 2       | 36             | 4                                  | 5       | 8        | 9       |
| 3       | 24             | X                                  | 5       | 8        | 9       |
| 4       | 72             | Χ                                  | 4       | X        | 8       |















#### RANGE OF STANDARD EXISTING GROMMETS

| Туре | Range of application | Cable entries |
|------|----------------------|---------------|
| Α    | 10 – 15 mm           | 1             |
| В    | 15 – 21 mm           | 1             |
| C    | 21 – 25 mm           | 1             |
| 2-H  | 7 – 11 mm            | 2             |
| 3-H  | 7 – 11 mm            | 3             |
| 4-H  | 3 – 7 mm             | 4             |
| 8-H  | 3 – 7 mm             | 8             |
| 8-H  | 4 – 8 mm             | 8             |
| 12-H | 3.5 – 4.5 mm         | 12            |
| 24-H | 1.8 – 2.5 mm         | 24            |
|      |                      |               |

### FIBREGUARD<sup>TM</sup> SAFeTNET OPTICAL SPLICE CLOSURES

NEW GPON READY 5G READY SAFETNET

#### **SAFeTNET® Fiber management system**

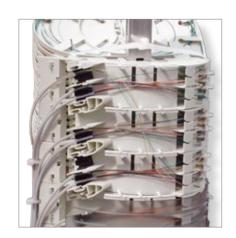
The FIBREGUARD™ Closure have also been designed to host different fiber management systems, and in this way they accept SAFeTNET® Fiber Management system for single circuit/single element applications.

This fiber management allows the operator to have the flexibility to manage their fiber network in many different ways. It can adapted expressing fibers either individually (Single Circuit), by the element or even fibers from different tubes.

The SAFeTNET® Fiber management system is based on just three main components:

- ▶ The buffer tube storage area
- ▶ The fiber Distribution Module
- ▶ Single Element (SE) or Single Circuit (SC) splice trays
- ▶ Controlled fiber bend management throughout the whole module stack
- No retubing of fibers







#### CAPACITIES OF THE SPLICE CLOSURES FIBREGUARD ™ 800 USING SAFETNET® FIBER MANAGEMENT SYSTEM

| Type              | SE  | 8-count SE | SC      |
|-------------------|-----|------------|---------|
| FIBREGUARD ™ 800  | 432 | 576        | 144/288 |
| FIBREGUARD ™ 800S | 216 | 288        | 72/144  |







| Order Code   | Name                                  | Position |
|--|---------------------------------------|----------|
| 490376   | Subscriber unit kit SC for 36 splices | 1        |
| 490375   | Element unit kit SE for 36 splices    | 2        |
| 8506.59/0000F  | SS splice trays module                | 3        |
| For other version of COYOTE Closures please see PLP catalogue or visit www.preformed.com |                                       |          |

### **MUC 160 MUC 250** UNDERGROUND CHAMBER WITH AN OPTICAL DISTRIBUTION BOX

GPON READY 5G READY

The MUC 160 / MUC250 underground chamber offers a cost effective solution for connecting fibres in FTTx networks. It is installed exclusively on the customer's land and is used for the installation and protection of spares and the subsequent connection of fibres. The chamber is designed for micro duct systems.

- ▶ Easy installation
- Load-free chamber for use on the customer's land (MUC 160)
- ▶ Without lock / Screw lock
- ▶ The ORM 3 distribution box is fixed to a stainless steel holder under the lid
- ► Capacity of 12/24 optical splices
- Integrated fibre management
- ▶ Possibility of the installation 1:4 or 1:8 PLC splitter
- ▶ Used for fibres G.657 a,b
- ▶ Possible express port or PG bushings
- $\triangleright$  PG 7 bushings  $3\times \emptyset$  2.5–6.5 mm
- ▶ Optional 6× PG bushings (MUC 250)
- ▶ Maximum capacity of 9/18 cables Ø 1.6–2.6 mm





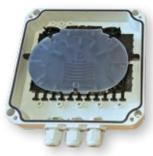


**MUC 160** 





MUC 250









ORM 3 SH 24 S

#### TECHNICAL SPECIFICATIONS

| , <del></del>          |   |   |
|------------------------|---|---|
|                        | MUC 160                                 | MUC 250   |
| MUC input              | Open bottom, side openings              | Open bottom, side openings  |
| MUC dimensions         | Lower Ø 205, Upper Ø 160, Height 235 mm | Lower Ø 335, Upper Ø 250, Height 265 mm                                     |
| ORM 3 dimensions       | $136 \times 136 \times 46 \text{ mm}$   | $136 \times 136 \times 46 \text{ mm} / 136 \times 136 \times 64 \text{ mm}$ |
| MUC material           | PP/PC, stainless steel / PP/PC          | HDPE, stainless steel   |
| ORM 3 matrial          | PC/ABS, ENSOFT                          | PC/ABS, ENSOFT  |
| Colour                 | Green, grey, black                      | Green, grey   |
| ORM 3 protection class | IP67 according to ČSN EN 60529          | IP67 according to ČSN EN 60529  |
| Weight / Hmotnost      | 1.5 kg                                  | 2.5 kg  |

### **▶** RECOMMENDED ACCESSORIES

| 85BV.25/0000F | PG7 (3-6.5 mm) bushing                                 |
|---------------|--|
| 494117        | Sealing insert for PG7 $3 \times \emptyset$ 1.6–2.6 mm |
| 347800        | Silicone plug Ø 1.59–3.17 mm                           |

| Order Code  | Name              |  |
|---|-------------------|--|
| 85BD.10/0000F   | MUC 160 SL 12S PG |  |
| 85BE.16/0000F   | MUC 250 SH 24S PG |  |
| For other variants, please, contact our sales department. |                   |  |

### MUC line UNDERGROUND CHAMBER WITH AN OPTICAL DISTRIBUTION BOX

The MUC underground chambers offer a comprehensive fibre junction solution in the distribution points in FTTx networks. The boxes are placed in diving bell in the chamber to prevent the access of underground water into the boxes.

- Lid for load of up to 12.5t/m² (Optional accessory)
- Screw lock
- Quick opening and closing of the optical distribution box without the loss IP 68 protection
- ▶ Management of cable reserve
- Inputs: Open bottom or according to chamber base
- Material polypropylene, stainless steel
- Colour black, grey
- ▶ Coverage degree IPX8 according to ČSN EN 60529

#### **▶** RECOMMENDED ACCESSORIES

Other accessories on the page 047



### **MUC 315B**

#### GPON READY 5G READY

- ▶ Designed for micro duct systems up to Ø 12 mm
- ▶ 4× duct holders in the lower part
- ► Chamber base with 2 or 4 entries for cable protection tube Ø 110 mm (Optional accessory)
- Maximum capacity 96 splices with box F-BOX 96S
- ► Maximum capacity 18× SC adapters and 48 splices with box F-BOX 48S 18SC
- Dimensions: Inside Ø 315, outside Ø 400, height 580 mm, height with base 720 mm
- Weight 8 kg





Boxes can be modify upon a request.



F-BOX 48S 18SC



F-BOX 96S



You Tube

EN 1 EN 2

#### ORDER CODES

| Order Code    | Name                    |  |
|---------------|-------------------------|--|
| 85BF.30/0000F | MUC 315B F-BOX 96S      |  |
| 85BF.31/0000F | MUC 315B F-BOX 48S 18SC |  |

### **MUC 425B**

### GPON READY 5G READY

- Designed for micro duct systems up to ø 16 mm
- ▶ 4× duct holders in the lower part
- ▶ Chamber base with 2 or 4 entries for cable protection tube ø 110 mm (Optional accessory)
- Maximum capacity 192 splices with box F-BOX 192S
- ▶ Dimensions: Inside Ø 425, outside Ø 480, height 600 mm, height with base 800 mm
- ▶ Weight 12 kg





F-BOX 192S







#### **▶** ORDER CODES

| Order Code                                      | Name                |
|---|---------------------|
| 85BG.40/0000F                                   | MUC 425B F-BOX 192S |
| For other variants, please, contact our sales d | enartment           |

### **MUC 600B**



- ► Chamber base for the cable protection tube Ø 160 mm (Optional accessory)
- Maximum capacity 336 splices with box F-BOX 336S
- ▶ Dimensions: Inside Ø 600, outside Ø 700, height 650 mm, height with chamber base 870mm
- ▶ Weight 18 kg

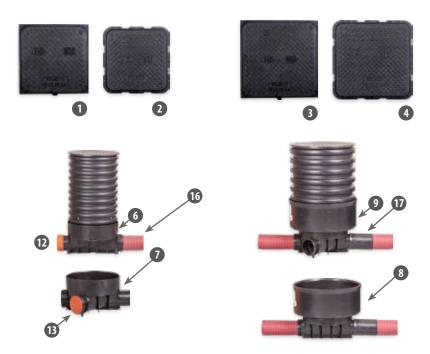
Boxes can be modify upon a request.

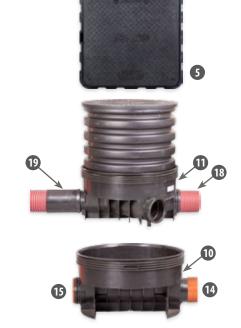






## **ACCESSORIES** for Underground chamber





|  | Order Code          | Name   | Position |  |
|--|---------------------|--|----------|--|
|  | 85BR.95/0000F       | Composite lid for pavement (12.5 t/m²) for MUC 315                         | 1        |  |
|  | 493808              | Composite lid for asphalt (12.5 t/m²) for MUC 315                          | 2        |  |
|  | 85BR.96/0000F       | Composite lid for pavement(12.5 t/m²) for MUC 425                          | 3        |  |
|  | 493809              | Composite lid for asphalt (12.5 t/m²) for MUC 425                          | 4        |  |
|  | 493810              | Composite lid (12.5 t/m²) for MUC 600                                      | 5        |  |
|  | 493924              | Chamber base streaight $2\times \emptyset$ 110 mm for MUC 315              | 6        |  |
|  | 493925              | Branching chambere base $4 \times \emptyset$ 110 mm for MUC 315            | 7        |  |
|  | 495354              | Chamber base streaight 2×160 mm for MUC 425                                |          |  |
|  | 495353              | Branching chambere base $4\times \emptyset$ 160 mm for MUC 425             | 9        |  |
|  | 494221              | Chamber base straight 2× Ø 160 mm for MUC 600                              | 10       |  |
|  | 494222              | Branching chamber base $4\times \emptyset$ 160 mm for MUC 600              | 11       |  |
|  | 493927              | Cap for entry point Ø 110 mm for MUC 315                                   | 12       |  |
|  | 493926              | Plug for entry point Ø 110 mm for MUC 315                                  | 13       |  |
|  | *                   | Cap for entry point Ø 160 mm for MUC 600                                   | 14       |  |
|  | *                   | Plug for entry point Ø 160 mm for MUC 600                                  | 15       |  |
|  | 493949              | Protection tube 50 m Ø 110 mm for MUC 315 and 425                          | 16       |  |
|  | 493950              | Protection tube joint Ø 110 mm for MUC 315 and 425                         | 17       |  |
|  | *                   | Protection tube 25 m Ø 160 mm for MUC 600                                  | 18       |  |
|  | *                   | Protection tube joint Ø 160 mm for MUC 600                                 | 19       |  |
|  | 85BH.17/0000F       | Set of 3 sealing inserts Ø 2-3 mm incl. frame and plugs                    |          |  |
|  | 85BH.17/0100F       | Set of 3 sealing inserts Ø 3-4 mm incl. frame and plugs                    |          |  |
|  | 85BH.17/0200F       | Set of 3 sealing inserts Ø 4-5 mm incl. frame and plugs                    |          |  |
|  | 85BH.17/0300F       | Set of 3 sealing inserts Ø 5-6 mm incl. frame and plugs                    |          |  |
|  | 85BH.17/0400F       | Set of 3 sealing inserts Ø 6-7 mm incl. frame and plugs                    |          |  |
|  | 85BH.17/0500F       | Set of 3 sealing inserts Ø 7-8 mm incl. frame and plugs                    |          |  |
|  | 85BH.17/1300F       | Set of 3 sealing inserts Ø 8-9 mm incl. frame and plugs                    | 20       |  |
|  | 85BH.17/1400F       | Set of 3 sealing inserts Ø 9-10 mm incl. frame and plugs                   |          |  |
|  | 85BH.17/1500F       | Set of 3 sealing inserts Ø 10-11 mm incl. frame and plugs                  |          |  |
|  | 85BH.17/1600F       | Set of 3 sealing inserts Ø 11-12 mm incl. frame and plugs                  |          |  |
|  | 85BH.17/1700F       | Set of 3 sealing inserts Ø 12-13 mm incl. frame and plugs                  |          |  |
|  | 85BH.17/1800F       | Set of 3 sealing inserts Ø 13-14 mm incl. frame and plugs                  |          |  |
|  | 85BH.17/1900F       | Set of 3 sealing inserts Ø 14-15 mm incl. frame and plugs                  |          |  |
|  | 85BH.17/0800F       | Set of 4 sealing inserts $4 \times \emptyset$ 2-3 mm incl. frame and plugs |          |  |
|  | 85BH.17/0900F       | Set of 4 sealing inserts $4 \times \emptyset$ 3-4 mm incl. frame and plugs | 21       |  |
|  | 85BH.17/1000F       | Set of 4 sealing inserts $4 \times \emptyset$ 4-5 mm incl. frame and plugs | 21       |  |
|  | 85BH.17/1100F       | Set of 4 sealing inserts $4\times \emptyset$ 5-6 mm incl. frame and plugs  |          |  |
|  | 85BH.17/0600F       | Grommet M50 76× Ø 1.5-2.6 mm and 2× Ø 2.5-5mm                              | 22       |  |
|  | 85BH.17/0700F       | Grommet M50 19ר 3.2-6.5 mm   | 23       |  |
|  | *) On request   For | other variants, please, contact our sales department.                      |          |  |









### **MICRO DUCT SYSTEM**

 $Microduct\ system\ is\ designed\ for\ modular\ construction\ of\ optical\ networks-an\ effective\ solution\ for\ urban\ areas,\ energy,\ industrial\ and\ commercial\ zones.$ 

#### > ORDER CODES

| Order Code  | Name                                     | Position |
|---|--|----------|
| On request  | Thin-walled microducts different types   | 1        |
| On request  | Thick-walled microducts different types  | 2        |
| On request  | Microducts bundles different types       | 3        |
| On request  | Microducts strip different types         | 4        |
| On request  | Protection tube for HDPE different types | 5        |
| For other variants, please, contact our sales department. |  |          |





#### ORDER CODES ACCESSORIES FOR HDPE AND FOR MICRODUCTS

| Order Code    | Name   | Position | Order Code | Name                                    | Position |
|---------------|--|----------|------------|---|----------|
| 710221        | MT Gas block connector, 5, cable 0.5 to 3  | 1        | 710133     | MT End cap, 12                          | 25       |
| 710222        | MT Gas block connector, 7, cable 0.5 to 3  | 2        | 710108     | MT End cap, 14                          | 26       |
| 710223        | MT Gas block connector, 7, cable 3 to 5  | 3        | *          | MT Female plug, 5                       | 27       |
| 710224        | MT Gas block connector, 10, cable 0.5 to 3                                       | 4        | 710145     | MT Female plug, 7/8                     | 28       |
| 710225        | MT Gas block connector, 10, cable 3 to 6   | 5        | 710146     | MT Female plug, 10                      | 29       |
| 710226        | MT Gas block connector, 10, cable 6 to 8   | 6        | 710147     | MT Female plug, 12                      | 30       |
| 710227        | MT Gas block connector, 12, cable 3 to 6   | 7        | 710158     | MT Female plug, 14                      | 31       |
| 710228        | MT Gas block connector, 12, cable 6 to 8   | 8        | 710128     | MT Locking clip, 5                      | 32       |
| 710229        | MT Gas block connector, 12, cable 8 to 10  | 9        | 710127     | MT Locking clip, 7                      | 33       |
| 710230        | MT Gas block connector, 14, cable 3 to 6   | 10       | 710122     | MT Locking clip, 8                      | 34       |
| 710231        | MT Gas block connector, 14, cable 6 to 8   | 11       | 710126     | MT Locking clip, 10                     | 35       |
| 710232        | MT Gas block connector, 14, cable 8 to 10  | 12       | 710125     | MT Locking clip, 12                     | 36       |
| 710131        | MT Connector DB**, 7   | 13       | *          | MT Locking clip, 14                     | 37       |
| 710130        | MT Connector DB**, 10  | 14       | 710246     | MT Gas block endcap, 7, cable 0.5 to 3  | 38       |
| 710129        | MT Connector DB**, 12  | 15       | 710247     | MT Gas block endcap, 7, cable 2.6 to 4  | 39       |
| 710189        | MT Connector DB**, 14  | 16       | 710248     | MT Gas block endcap, 7, cable 3 to 5    | 40       |
| 710144        | MT Connector, 5  | 17       | 710249     | MT Gas block endcap, 10, cable 0.5 to 3 | 41       |
| 710134        | MT Connector, 7  | 18       | 710250     | MT Gas block endcap, 10, cable 3 to 6   | 42       |
| 710136        | MT Connector, 10   | 19       | 710251     | MT Gas block endcap, 10, cable 6 to 8   | 43       |
| 710135        | MT Connector, 12   | 20       | 710252     | MT Gas block endcap, 12, cable 3 to 6   | 44       |
| *             | MT Connector, 14   | 21       | 710253     | MT Gas block endcap, 12, cable 6 to 8   | 45       |
| 710143        | MT End cap, 5  | 22       | 710254     | MT Gas block endcap, 12, cable 8 to 10  | 46       |
| 710140        | MT End cap, 7  | 23       | 710255     | MT Gas block endcap, 14, cable 3 to 6   | 47       |
| 710121        | MT End cap, 8  | 23       | 710256     | MT Gas block endcap, 14, cable 6 to 8   | 48       |
| 710142        | MT End cap, 10   | 24       | 710257     | MT Gas block endcap, 14, cable 8 to 10  | 49       |
| *) On request | **) DB — Direct bury   For other variants, please, contact our sales department. |          |            | ·                                       |          |

### MUC Cube 320 UNDERGROUND CHAMBER

NEW

The MUC Cube 320 is a purpose designed mini access box, or boundary box, that will cater for low fibre count connections. The MUC Cube 320 is normally used to connect MDU's or single use Clients from the network.

- Ideal for low density traffic installations. Depending on splitter configuration, up to 12 clients can be connected
- The unit can be split between base or pan and chamber section to allow installation over existing networks
- ▶ Low footprint unit  $250 \times 230 \text{ mm}$
- ▶ No tools required for assembly press-on clips complete the assembly
- Duct ports are sealed with rubber grommets allowing interface with Multi-Duct and/or MicroDuct. No foaming agent or additional sealants are required
- ▶ Knock-down design allows high packing density for transport savings
- ▶ Hingeless slide-in lid with nylon lanyard



#### Products suitable for installation in MUC Cube 320 chamber:









ORM 3 PG

COYOTE® STP − JR

COYOTE® STP − MD

COYOTE® DTC

For more information, please, see PLP catalogue.

#### TECHNICAL SPECIFICATIONS

Lid, box and base PP, UV stabilised
Lock PP, UV stabilised
O Ring 6 mm NBR
Clips PP, UV stabilised
40 mm reducer cup Rubber compound
Colour Black

**Dimensions** 250 × 230 mm, Heigt 310 mm

**Loading** 1500 gg Downward Point load with 150 mm foot print







## MUC 400 UNDERGROUND CHAMBER

NEW

The MUC 400 is a purpose designed mini Access Box, or Boundary Box, that will cater for medium fi bre count connections. The MUC 400 is normally used to connect MDU's or multiple users to the network.

- Ideal for medium density traffic installations. Depending on splitter configuration, multiple clients can be connected
- The unit can be split between Base or Pan, and Chamber section to allow for installation over existing networks
- ▶ Small footprint diameter of 350 mm
- ▶ No tools required for assembly press-on clips complete the assembly
- Duct ports are sealed with rubber grommets allowing interface with Multi-Duct and/or MicroDuct. No foaming agent or additional sealants are required (4×50 mm ports) (2×110 mm ports)
- ▶ Knock-down design allows high packing density for transport savings
- ▶ Hingeless slide-in lid with nylon lanyard
- ▶ No metal parts



COYOTE® DTC8

#### Products suitable for installation in MUC 400 chamber:



COYOTE® DTC4 & DTC6

For more information, please, see PLP catalogue.

COYOTE® DTC

### TECHNICAL SPECIFICATIONS

| Clips        | PP, UV stabilised                                  |
|--------------|--|
| Lock         | PP, UV stabilised                                  |
| O Ring / Lid | 6 mm NBR   |
| Base         | PP, UV stabilised                                  |
| Split Panels | Black / PP, UV stabilised                          |
| Dimensions   | ø 350–450 mm, Height 600 mm                        |
| Loading      | 1500 kg Downward Point load with 250 mm foot print |

NEW

The MUC 600 is a modular composite solution offering the network builder unsurpassed flexibility, performance and economy. The Chamber section is an assembly of quarter segments.

- Modern composite design ensures high strength / low weight for installation cost savings
- $\blacktriangleright$  Ideal for high fibre traffic installations up to 2× 144 or 4× 48 Fibre Closures
- > Splittable porting panels uniquely allow retrofitting to existing networks or new builds alike
- Easy assembly with basic hand tools only
- ▶ Unique multi-port knock-outs give industry leading interface with all Duct and Multiduct
- Modular design allows various depth configurations
- ▶ DMC cover eliminates the threat of theft
- ▶ Full range of loading options available
- Modular knock-down design offers high packing density for transport savings

#### Products suitable for installation in MUC 600 chamber:



COYOTE® DTC4 & DTC6







COYOTE® Dome 6.5" × 22"

COYOTE® Dome 9.5" × 19"





COYOTE® ONE



COYOTE® DTC8

FIBREGUARD™

| TECHNICAL SPECIFICATIONS             |  |  |
|--------------------------------------|--|--|
| Panels                               | PP, UV Stabilised — Colour Black   |  |
| Coping, Lid and Base                 | DMC – Colour Grey (DI available on request)                                |  |
| Fasteners                            | Stainless Steel / Nylon  |  |
| Lock                                 | Details on request   |  |
| Slack bracket                        | PP   |  |
| Slack bracket                        | PP   |  |
| Loading Class<br>As per EN124 Weight | A15-15kN 45 kg<br>B125-125kN 45 kg<br>C250-250kN 57 kg<br>D400-400kN 66 kg |  |
| Dimensions                           | ø 750 mm, Height 700 mm  |  |





## ORMP 1U/2U DRAW-OUT-TYPE ODF

GPON READY 5G READY

The ORMP draw-out-type ODF is designed for the placementn of 24/48/72 optical connectors indoors. The design of the patch panel enables to install it into a 19"

- ► Capacity of 24–72 optical connectors
- ► Connector panel 12/24/48/72 SC simplex, E2000
- ▶ Needle holder of optical splice trays
- ▶ Placement of optical fiber reserve
- ▶ Self-adhesive cable rings
- Possibility to fit it with PG bushings
- ▶ Adjustable mounting brackets
- Easy assembly
- ▶ Installation into a 19" base
- ▶ Height of 1U/2U











#### TECHNICAL SPECIFICATIONS

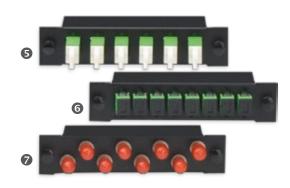
|                             | ORMP 1U                                  | ORMP 2U                                  |
|-----------------------------|--|--|
| Input/Output                | 2× PG16 (8×–16 mm);<br>2× PG9 (5–8.5 mm) | 2× PG16 (8×–16 mm);<br>2× PG9 (5–8.5 mm) |
| Colour                      | Black RAL 9005                           | Black RAL 9005                           |
| Material – distribution box | Painted steel                            | Painted steel                            |
| Height                      | 10                                       | 20                                       |
| Dimensions                  | $44 \times 483 \times 250 \text{ mm}$    | $88 \times 483 \times 250 \text{ mm}$    |
| Weight                      | 2.9 kg                                   | 3.5 kg                                   |

#### ORDER CODES

| Order Code                      | Name                      | Position |
|---------------------------------|---------------------------|----------|
| 8A78.00/0005K                   | ORMP 1U                   | 1        |
| 85HS.00/BK05F                   | ORMP 1U 12× SC/E2000      | -        |
| 85HS.05/BK05F                   | ORMP 1U 24× SC/E2000      | 2        |
| 8A69.00/0005K                   | ORMP 2U                   | 3        |
| 85HS.09/BK05F                   | ORMP 2U 48× SC/E2000      | _        |
| 85HS.10/BK05F                   | ORMP 2U 72× SC/E2000      | 4        |
| For other variants inlease con- | tact our sales denartment |          |

| Order Code  | Name                         | Position |
|---|------------------------------|----------|
| 8535.01/0005  | Connector panel 6× E2000/SC  | 4        |
| 8535.02/0005  | Connector panel 8× E2000/SC  | 5        |
| 8535.03/0005  | Connector panel 12× E2000    | -        |
| 8535.04/0005  | Connector panel 6× ST/FC     | -        |
| 8535.05/0005  | Connector panel 8× ST/FC     | 6        |
| 8535.07/0005  | Connector panel 6× SC duplex | -        |
| 8535.06/0005  | Blinding connector panel     | -        |
| For other variants, please, contact our sales department. |                              |          |





## ORSM 4/6 MODULE ODF





The optical distribution patch panel ORSM 4/6 and is designed for the placement of 72/144 or 36/72 optical connectors indoors in the central office. The concept of the distribution box enables to terminate and lead out all types of optical cables to the point of main optical node. The distribution patch panel is designed for the installation into 19" or 21" data cabinet.

- ▶ Capacity of 72/144 or 36/72 optical connectors
- ► Compose from 3 or 6 modules
- Module structure (12× SC simplex or 12× LC duplex adapters)
- Module contains space for pigtail reserve and tray for splicing
- Easy access into each module (possibility splicing out from the frame)
- ▶ Possibility placing E2000, SC simplex, LC duplex adapters
- ▶ Placement of up to 2 m of an optical fiber reserve
- ► Fixing standard optical cables or microcables (3—4 mm)
- Possibility of installing passive elements into the modules
- ▶ Installation into a data cabinet 19" or 21"
- ▶ Possibility of installation into 300 mm depth cabinet
- ▶ Recommended patchcords diameter 1.8 mm











#### TECHNICAL SPECIFICATIONS

|            | ORSM 4   | ORSM 6                  |
|------------|--|-------------------------|
| Heigh      | 4U   | 2U                      |
| Material   | Painted Steel  | Painted Steel           |
| Colour     | Light grey RAL 7035                                  | Light grey RAL 7035     |
| Dimensions | 483 × 177 × 267 mm – 19"<br>535 × 177 × 267 mm – 21" | 483 × 88 × 267 mm – 19" |
| Weight     | 4.4 kg   | 2.5 kg                  |

#### **▶** RECOMMENDED ACCESSORIES

Accessories on the pages 067–075

| Order Code  | Name          |  |
|---|---------------|--|
| 85CU.10/0001F   | ORSM 4/19/300 |  |
| 85CU.20/0001F   | ORSM 4/21/300 |  |
| 85CU.70/0001F   | ORSM 6/19/300 |  |
| For other variants, please, contact our sales department. |               |  |

## Splitter panel 1U/2U 1:32/1:64 WITH SC CONNECTORS

GPON READY 5G READY

Panels are designed for storage 1 $\times$  PLC splitter 1:32 (1U panel) or 1 $\times$  PLC splitter 1:64 (2U panel). Splitter Input and outputs are connected to the front adaptor plate and are terminated on SC adaptors.

- Advanced planar technology
- ▶ Low loss and PDL
- ▶ Easy installation
- ► Ready for use plug & play
- Used in PON networks to realize optical signal power splitting
- ▶ LHC splitter version = Large Hard Case

#### Application

- ▶ FTTH/B Network
- ▶ CATV
- Data Communication





#### TECHNICAL SPECIFICATIONS

|            | 10                                    | 2U                |
|------------|---------------------------------------|-------------------|
| Material   | Painted steel                         | Painted steel     |
| Colour     | Black RAL 9005                        | Black RAL 9005    |
| Dimensions | $44 \times 483 \times 250 \text{ mm}$ | 88 × 483 × 250 mm |
| Weight     | 3.3 kg                                | 4 kg              |

#### > SPLITTER SPECIFICATIONS / SPECIFIKACE SPLITTERU

|                            | 1:32                  | 1:64                   |
|----------------------------|-----------------------|------------------------|
| Operation Wavelength (nm)  | 1260-1650             | 1260-1650              |
| Fiber type                 | G657A                 | G657A                  |
| Insertion loss (dB)        | ≤ 17.3                | ≤ 21.8                 |
| Loss uniformity (dB)       | ≤ 1.6                 | ≤ 2.0                  |
| PDL (dB)                   | < 0.2                 | < 0.3                  |
| Directivity (dB)           | > 55                  | > 55                   |
| Return loss (dB)           | > 60                  | > 60                   |
| Operation temperature (°C) | -40 ÷ +85             | -40 ÷ +85              |
| Storage temperature (°C)   | -40 ÷ +85             | -40 ÷ +85              |
| Splitter size (mm)         | $120\times80\times18$ | $140\times114\times18$ |

#### ORDER CODES

| Order Code    | Name                             |
|---------------|----------------------------------|
| 85DP.00/0BS5F | ORMP 1U 1:32 (without splitters) |
| 8A78.70/0BV5F | ORMP 2U 1:64 (without splitters) |

## ORMPV 1U/2U/3U HINGED ODF

GPON READY 5G READY

The ORMPV hinged module patch panel is designed for placing 48/96/144 optical connectors indoor. The design of the distributor enables installation on

- ▶ Capacity of 48/96/144 optical connectors
- ▶ Connector holder SC simplex, ST, FC, E2000, LC, SC duplex
- Optical splice tray holder
- ▶ Placement of optical fiber reserve
- ▶ Self-adhesive cable rings
- Easy assembly
- ▶ Installation into a 19" base
- Possibility of rear fastening
- ▶ Side depth adjustable 19" mounting kit
- ▶ Height of 1U/2U
- ▶ Cable entrance from the back or the side









ADJUSTABLE MOUNTING KIT





#### TECHNICAL SPECIFICATIONS

|                             | UKMPV IU                               | UKIMPV ZU                             |
|-----------------------------|--|---------------------------------------|
| Colour                      | Light grey RAL 7035                    | Light grey RAL 7035                   |
| Material – distribution box | Painted steel (Aluzinc)                | Painted steel (Aluzinc)               |
| Height                      | 10                                     | 2U                                    |
| Dimensions                  | $436 \times 43 \times 280 \text{ mm}$  | $436 \times 88 \times 282 \text{ mm}$ |
| Weight                      | 4 kg                                   | 5.2 kg                                |
|                             | ORMPV 3U                               |                                       |
| Colour                      | Light grey RAL 7035                    |                                       |
| Material – distribution box | Painted steel (Aluzinc)                |                                       |
| Height                      | 3U                                     |                                       |
| Dimensions                  | $465 \times 132 \times 269 \text{ mm}$ |                                       |
| Weight                      | 7 kg                                   |                                       |

#### ▶ RECOMMENDED ACCESSORIES

|             | MINIEMPED ACCESSORIES         |  |
|-------------|-------------------------------|--|
| Splice tr   | trays                         |  |
| Splice h    | holders                       |  |
| Lid         |                               |  |
| Other acces | occarios on the nages 067 075 |  |

#### ORDER CODES **ORMPV 1U**

ORMPV 2U

| Order Code   | Name                                 |  |
|--|--------------------------------------|--|
| 8505.80/0AZCF  | Without connectos panel              |  |
| 8505.07/000CF  | Panel 24 × E2000                     |  |
| 8505.09/000CF  | Panel 36 × E2000                     |  |
| 8505.12/000CF  | Panel 12 × E2000                     |  |
| 8505.65/000CF  | Panel 12 × SC duplex/QUADPLEX        |  |
| 8563.52/000CF  | Panel 24 × SC                        |  |
| 8563.53/000CF  | Panel 36 × SC                        |  |
| 8563.54/000CF  | Panel 12 × SC                        |  |
| 8505.16/000CF  | Panel 24 $\times$ SC duplex (1.9 mm) |  |
| 8505.29/000CF  | Panel 24×ST/FC                       |  |
| 8523.40/0000   | Splice tray KM 1                     |  |
| 8510.12/0000   | Lid for KM 1                         |  |
| 491481   | Splices holder TS6                   |  |
| KM 1 for capacity 24 and splice trays SK 120 for capacity 36 |                                      |  |
| For other variants, please, contact our sales department.    |                                      |  |

#### ORDER CODES **ORMPV 2U**

| Order Code   | Name   |  |
|--|--|--|
| 8563.00/0AZCF  | Without connectos panel  |  |
| 8505.15/000CF  | Panel 72× E2000  |  |
| 8505.27/000CF  | Panel 48× E2000  |  |
| 8505.28/000CF  | Panel 48× ST/FC  |  |
| 8563.51/000CF  | Panel 48 × SC  |  |
| 8563.57/000CF  | Panel 72 × SC  |  |
| 8505.56/000CF  | Panel 96× SC   |  |
| 8505.57/000CF  | Panel 96× E2000  |  |
| 8505.84/0000F  | Set $-8 \times$ Splice tray SK120, splice holders, cover, hinges |  |
| KM 1 for capacity 72 and splice trays SK 120 for capacity 96 |  |  |
| For other variants, please, contact our sales department.    |  |  |

#### > ORDER CODES **ORMPV 3U**

| Order Code    | Name                    |  |
|---------------|-------------------------|--|
| 85HU.85/00BKF | Without connectos panel |  |
| 85hu.95/000CF | Panel 144 × E2000/SC    |  |
| 8563.69/00AC  | Panel 72× LCQ right     |  |

## ORMPM 3U/144 MODULE ODF

Module rackmounted distributor ORMPM 3U/144 is designed for the placement 144 optical connectors into 12 vertical modules indoor. It is to install into 19" rack.

- Capacity 144 optical connectors
- ▶ Connector holder SC simplex, E2000
- ▶ 12 vertically placed modules
- ▶ Placement of optical fiber reserve
- ▶ Installation into a 19" frame
- ▶ High 3U
- Possibility of installing the both the front and the rear support rails
- ▶ Possibility of horizontal sliding









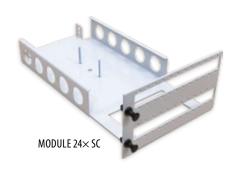
#### TECHNICAL SPECIFICATIONS

| Colour                     | Light grey RAL 7035 |
|----------------------------|---------------------|
| Material — ORMPM<br>3U/144 | Painted steel       |
| Material – module          | Painted aluminium   |
| Dimensions                 | 483 × 130 × 250 mm  |
| Weight – ORMPM<br>3U/144   | 3.2 kg              |
| Weight – module            | 0.2 kg              |

#### **▶** RECOMMENDED ACCESSORIES

| Splice trays                                | Kazety na sváry                          |
|---|--|
| Splice holders                              | Držáky svárů                             |
| Lid   | Víčko                                    |
| Other accessories on the pages 053, 067–075 | Další příslušenství na str. 053, 067–075 |

| Order Code  | Name                           |  |
|---|--------------------------------|--|
| 8562.00/0000F   | ORMPM 3U/144                   |  |
| 8562.10/SC00F   | Module 12 × SC / Modul 12 × SC |  |
| 8562.43/SC00F   | Module 24 × SC / Modul 24 × SC |  |
| For other variants, please, contact our sales department. |                                |  |



## **ACCESSORIES FOR ORMPM**



### **ACCESSORIES FOR ORMPM**

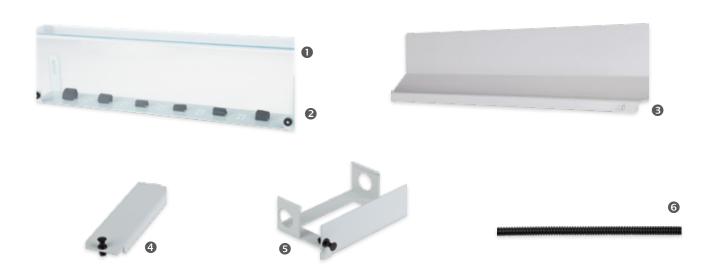




#### > ORDER CODES

| Order Code    | Name   | Position |
|---------------|--|----------|
| 8562.25/0000F | Box for reserves 1U                            | -        |
| 8562.15/0000F | Box for reserves 2U                            | 1        |
| 8562.34/0000F | Box for reserves — rear entry without rings    | 2        |
| 8562.80/0000F | Box for reserves — rear entry with cable rings | 3        |

For other variants, please, contact our sales department.



| Order Code  | Name                                | Position |
|---|-------------------------------------|----------|
| 8562.18/PLEXF   | Plexi for ranging panel             | 1        |
| 8562.18/PANOF   | Ranging panel                       | 2        |
| 8562.18/0000F   | Ranging panel with plexi            | 1+2      |
| 8562.11/0000F   | Cable lead panel ORMPM 3U           | 3        |
| 8562.38/000CF   | Blinding panel                      | 4        |
| 8562.39/000CF   | Blinding modul                      | 5        |
| 491582  | Corrugated tube 4.8 $\times$ 7.1 mm | 6        |
| For other variants, please, contact our sales department. |                                     |          |

### **ORSM 1** ORSM 2

### HIGH DENSITY OPTICAL DISTRIBUTION CABINET WITH COMPACT CONNECTOR MODULES





High density cabinet of a simple concept based on compact modules accommodating connectors, adapters and pigtails. Modules are located in the column in the middle part of the rack. In the right part of the rack there is sufficient space for optical fibre cables termination. Left part is dedicated to comprehensive patchcord management allowing smooth routing of requested fibre connections.

Can be used mainly in distribution points of FTTH point to point or PON networks, data centers, SAN networks, for mobile backhaul optical fibre termination and finally in backbone and transmission networks of telco operators.

- Capacity of 72 modules (864 SC connectors)
- ORSM2 capacity up to 1728 LC
- Standard rack dimensions 2200 × 600 /900 × 300 mm
- ▶ Easy manipulation and comprehensive arrangement of terminated optical cables
- Modular design allowing to split investment in time according to demand
- Supports back to back or side by side installation including sufficient raceways for patchcord routing between racks
- Compact modules accommodating connectors adapters, pigtails and fibre splices including the overlength storage of microcable (3 m), indoor optical cable up to 4 mm outside diameter or optical cable buffer
- Manipulation with the compact module does not impact any other optical fibre in neighbouring modules
- Compact modules support pre-terminated cables
- ▶ Compact modules support accommodation of ribbon splices and ribbon fan-outs









**CABLE SPLITTER** 

### TECHNICAL SPECIFICATIONS

| Colour                         | Light grey RAL 7035              |  |  |
|--------------------------------|----------------------------------|--|--|
| Material – distribution<br>box | Painted steel                    |  |  |
| Dimensions                     | 2200 × 600/900 × 300 mm          |  |  |
| Weight                         | 66 kg / 150 kg (without modules) |  |  |

#### RECOMMENDED ACCESSORIES

Other accessories on the pages 069, 074





### **ACCESSORIES FOR ORSM**



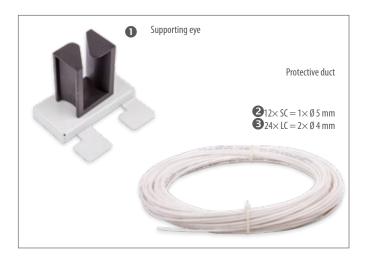




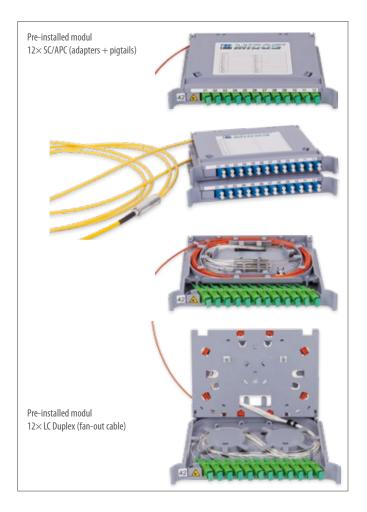
#### **OPTIONAL ACCESSORIES**

- ▶ Lockable double glass door with three-point lock
- Fixing material for fibre optic cable terminations
- Compact modules equipped with 12 connectors and pigtails SC/APC including splice holder for heat-shrink fusion splice protective sleeves
- Compact modules equipped with 12 connectors and pigtails SC/UPC including splice holder for heat-shrink fusion splice protective sleeves
- Compact modules equipped with 24 connectors and pigtails LC/APC including splice holder for heat-shrink fusion splice protective sleeves
- Compact modules equipped with 24 connectors and pigtails LC/UPC including splice holder for heat-shrink fusion splice protective sleeves
- ▶ Heat-shrink fusion splice protective sleeves
- ► Cable/duct splitter 24 × 5 mm
- Mechanical fibre optic splice
- ▶ Optional protective duct  $12 \times SC = 1 \times \emptyset$  5 mm,  $24 \times LC = 2 \times \emptyset$  4 mm

Other options of the compact module assembly can be supplied upon request (E2000 connectors, applications with pre-terminated optical cables, ribbon fan-outs, splitters)



| Order Code                     | Name   | Position |
|--------------------------------|--|----------|
|                                |  |          |
| 85T2.14/0000F                  | Supporting eye   | 1        |
| 8506.17/0000F<br>(30 m)        | Protective duct $12 \times SC = 1 \times \emptyset 5 \text{ mm}$ | 2        |
| 85BV.09/0000F<br>(50 m)        | Protective duct $24 \times LC = 2 \times \emptyset 4 \text{ mm}$ | 3        |
| 85T2.11/0000                   | Partition from management feel                                   | 4        |
| 852X.60/0000F                  | Cable/duct splitter 1/24   | 5        |
| 85EK.00/0000F                  | ORSM 1 left  |          |
| 85EK.50/0000F                  | ORSM 1 right   |          |
| 852X.10/0000F                  | ORSM 2 left  |          |
| 852X.70/0000F                  | ORSM 2 right   |          |
| 852X.24/SESTF                  | Two-piece door ORSM 2 L  |          |
| 852X.73/SESTF                  | Two-piece door ORSM 2 P  |          |
| 85T2.24/SESTF                  | Two-piece door ORSM 1, 3 L                                       |          |
| 85T2.94/SESTF                  | Two-piece door ORSM 1, 3 P                                       |          |
| For other variants, please, co | ontact our sales department.                                     |          |







# ORS 1/300 / ORS 1/600 ORS 2/300 / ORS 2/600 HIGH DENSITY CABINET

#### **5G** READY

The ORS 1/300/600 and the ORS 2/300/600 optical distribution cabinets are designed for the placement of 1920 and 960 optical connectors indoors in a CENTRAL OFFICE. The distribution boxes allow to terminate and lead out any type of optical cables to main optical node.

- ▶ Capacity of the ORS 1 is 1920 optical connectors
- Capacity of the ORS 2 is 960 optical connectors
- For ORS 1, two separarte sections, 20 modules each
- For ORS 2, one section, 20 modules
- ▶ Module construction (48 optical connectors)
- ▶ Module for placement of splice trays/patchcord reserves
- ► Easy access double rotating system (frame/module)
- Connector pannel E2000, SC simplex, LC duplex
- Placement up to 5 m for ORS 1 and 8 m for ORS 2 of optical fiber
- For ORS 2, option of left or right handed rack and module
- ▶ Easy and variable management
- Possibility of installing passive elements into the modules
- Frame locking in the open position
- ▶ Recommended patchcord diameter 1.8 mm





#### TECHNICAL SPECIFICATIONS

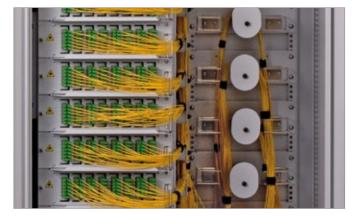
| Colour                         | Light grey RAL 7035   |
|--------------------------------|---|
| Material – distribution<br>box | Painted steel   |
| Dimensions                     |   |
| - ORS 1/300 / ORS 1/600        | 2200 × 1200 × 300 mm / 2200 × 1200 × 600 mm                                     |
| - ORS 2/300 / ORS 2/600        | $2200 \times 830 \times 300 \text{ mm} / 2200 \times 830 \times 600 \text{ mm}$ |
| Weight (netto)                 |   |
| - ORS 1/300 / ORS 1/600        | 195 kg / 215 kg   |
| - ORS 2/300 / ORS 2/600        | 137 kg / 158 kg   |
| Weight (brutto)                |   |
| - ORS 1/300 / ORS 1/600        | 235 kg / 260 kg   |
| - ORS 2/300 / ORS 2/600        | 177 kg / 205 kg   |





#### ► RECOMMENDED ACCESSORIES

Splice trays Splice holders Lid Other accessories on the pages 058, 069-075



### **ACCESSORIES FOR ORS**



#### **MODULES FOR ORS**

Hinged ORS modules are designed for the placement of 48/96 optical connectors indoors. The design of the modules enables to install it into high-capacity distribution cabinets ORS with maximum capacity 1920 optical connectors.

- ► Capacity of 48/96 optical connectors
- ▶ Connector panel E2000, SC simplex, LC duplex
- Module for the placement of splice trays or patchcords reserves or breakout cabels
- Modules for ORS cabinet with depth 300 mm and 600 mm
- ▶ Placement of optical fiber reserve, length 5 m



| Colour   | Light grey RAL 7035   |
|----------|---|
| Material | Painted steel   |
| Weight   | Module for reserves: cca 1.7–2.2 kg (by type) Module for splice trays: cca 2–2.9 kg (by type) |



#### > ORDER CODES

| For ORS 300                    | For ORS 600                 | Name  |
|--------------------------------|-----------------------------|---|
| 8573.62/E200F                  | 8542.52/0000F               | Module for reserves left, connector panel E2000   |
| 8573.63/E200F                  | 8542.53/0000F               | Module for reserves right, connector panel E2000  |
| 8573.62/SC00F                  | 8542.52/SC00F               | Module for reserves left, connector panel SC/LC duplex  |
| 8573.63/SC00F                  | 8542.53/SC00F               | Module for reserves right, connector panel SC/LC duplex   |
| 8573.60/E2BKF                  | 8542.50/E2BKF               | Module for splice trays left, connector panel E2000, without splice trays                                     |
| 8573.61/E2BKF                  | 8542.51/E2BKF               | Module for splice trays right, connector panel E2000, without splice trays                                    |
| 8573.60/SCBKF                  | 8542.50/SCBKF               | Module for splice trays left, connector panel SC/LC duplex, without splice trays                              |
| 8573.61/SCBKF                  | 8542.51/SCBKF               | Module for splice trays right, connector panel SC/LC duplex, without splice trays                             |
| 8523.41/0000                   | 8523.41/0000                | Set of splice trays KM 1 for 48 splices ( $4 \times$ splice tray KM 1, $8 \times$ splice holders, cover KM 1) |
| For other variants, please, co | ntact our sales department. |   |

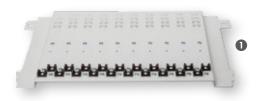


### ACCESSORIES FOR 1, 2/600



#### ORDER CODES

| Order Code                 | Name                             | Positi-<br>on |
|----------------------------|----------------------------------|---------------|
| 8542.56/0000F              | Blinding panel ORS 1, ORS 2      | -             |
| 8542.58/0000F              | Cable holder ORS up to 12 mm     | 1             |
| 8542.95/1100F              | Cable holder ORS up to 18 mm     | _             |
| 8542.10/1100F              | Cable holder ORS 2 up to 8 mm    | 2             |
| 8542.94/1100F              | Cable holder ORS 2 up to 13 mm   | _             |
| 8542.59/0000F              | Cable holder to 20 mm            | -             |
| For other variants, please | e, contact our sales department. |               |



| Order Code                | Name                                | Positi-<br>on |
|---------------------------|-------------------------------------|---------------|
| 8542.29/1101F             | Cables base ORS 1, ORS 2            | 1             |
| 8546.36/0001F             | Panel for ducts and cables          | -             |
| 490978                    | Plastic duct 25 $\times$ 40 mm      | _             |
| 8558.17/00B1F             | Floor plate cover ORS 1, ORS 2      | -             |
| 8542.77/2200F             | Connection enclose ORS 1, ORS 2     | _             |
| 490360                    | Strap SCOTCHFLEX 20 mm × 10 m       | -             |
| 8542.14/0001F             | Base for cable holders ORS 1, ORS 2 | _             |
| For other variants, pleas | e, contact our sales department.    |               |

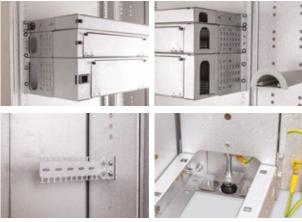
## ORSLEE | HIGH DENSITY CABINET

NEW

**5G** READY

High-capacity stand distribution cabinet is designed for the installation of 19" technology indoors. There is space for the placement of the optical interconnected patchcords reserve on the right side. The distribution cabinet is designed for the assembly of 19" optical distribution panels and for the installation of active components only on rear 19" rails.

- ▶ Height 44U
- ▶ Easy module system
- ▶ Cable inputs from bottom or from top
- Easy access to cables and fibers
- > Option to terminate all the types of cables and micro ducts
- ▶ Horizontal and vertical organization of patchcords
- ▶ Easy assembly
- ▶ Possibility of right or left version





ADJUSTABLE FEET Í



#### TECHNICAL SPECIFICATIONS

| Colour                         | Light grey RAL 7035  |  |
|--------------------------------|--|--|
| Material – distribution<br>box | Painted aluzinc  |  |
| Dimensions                     | $2200 \times 1050 (150 + 600 + 300) \times 300 \text{ mm}$ |  |
| Weight (brutto)                | 90 Ka  |  |

#### ▶ RECOMMENDED ACCESSORIES

| RECOMMENDED ACCESSORIES                     |  |
|---|--|
| Door  |  |
| Lock  |  |
| Hinged ODF ORMPV 1U/2U<br>for ORSL EE       |  |
| Splice trays                                |  |
| Splice holders                              |  |
| Lid   |  |
| Other accessories on the pages 058, 069–075 |  |





WITHOUT DOOR

### **ORSL AP 300** ORSLAP 600 HIGH DENSITY CABINET

GPON READY 5G READY

High-capacity stand distribution cabinet is designed for the installation of 19" technology outdoors. There is prepare the space for the placement of the optical interconnected patchcords reserve on the right. Distribution cabinet is designed for the assembly of 19" optical distribution boxes and for the installation of active components.

- ▶ Height 42U
- ▶ Easy module system
- ▶ Cable inputs from bottom or from top
- Easy access to cables and fibers
- > Option to terminate all the types of cables and micro ducts
- ▶ Horizontal and vertical organization of patchcords
- Easy assembly
- **Extensive accessories**
- Optional final finish
- Possibility of right or left version



ILLUSTRATIVE PHOTO







**TECHNICAL SPECIFICATIONS** 

| TECHNICAL SI ECH ICATIONS |   |                     |  |
|---------------------------|---|---------------------|--|
| Colour                    | Light grey RAL 7035   | Light grey RAL 7035 |  |
| Bushings                  | Brushed inlets  |                     |  |
| Material                  | Painted steel   |                     |  |
| Dimensions                | $2165 \times 900 \times 300 \text{ mm} / 2000 \times 900 \times 600 \text{ mm}$ |                     |  |
| Weight (netto)            | 15 kg/25 kg   |                     |  |
| Weight (brutto)           | 65 kg / 75 kg   |                     |  |

#### **▶** RECOMMENDED ACCESSORIES

| RECOMMENDED ACCESSORIES                     |  |
|---|--|
| Hinged ODF ORMPV 1U/2U                      |  |
| Splice trays                                |  |
| Splice holders                              |  |
| Lid   |  |
| Other accessories on the pages 051, 069–075 |  |

ORSL AP 600

## MNORS WALL-MOUNTED OPTICAL DISTRIBUTION CABINET

GPON READY 5G READY

The wall-mounted optical distribution cabinet MNORS is designed for the placement of 480/672 optical connectors indoor and outdoor.

- ▶ Capacity of 480/672 optical connectors
- ▶ High 10U and 14U
- ▶ Possibility to install 19" hinged special version of ODF ORMPV (installation on the rear rails)
- ► Easy access to cables and fibers
- ▶ E2000 or SC simplex connector panel
- ▶ Easy module system
- ▶ Easy manipulation with connecting patchcords
- > 2× one-point lock
- ▶ It enables to install active components
- ▶ Cable inputs/outputs from bottom or from top
- ▶ Recommended patchcord diameter 1.8 mm









| Bushings        | 24× PG13.5 (8–12 mm)     |
|-----------------|--------------------------|
| Coverage degree | IP 20 or 54 to EN 60529  |
| Colour          | Light grey RAL 7035      |
| Dimensions      | 10U - 730 × 700 × 370 mm |
|                 | 14U - 930 × 700 × 370 mm |
| Woight          | 25 kg / 40 kg            |

#### **▶** RECOMMENDED ACCESSORIES

| Hinged ODF ORMPV 1U/2U                      |
|---|
| Splice trays                                |
| Splice holders                              |
| Lid   |
| Other accessories on the pages 051, 069–075 |



### rDSLAM 450M rDSLAM 900D REMOTE DSLAM

Remote DSLAM is designed for complete reinstallation of the network node in a metallic network and installing DSLAM devices. Cabinet contains metallic elements and extra space for splitters field. It allows voice services. Required outage during installation of the cabinet is about 8 hours. Scenerios for remote DSLAM devices are always necessary to modify for your network, please contact our sales department.

- Possibility to remote power feed (20/30 pairs) or set up a new power supply
- ▶ Technology for metallic cables HD 180 (typically up to 450/900 pairs)
- ▶ Splitters field SID-C (96/192 voice services)
- ▶ Underground base for installation in trench or through a template on
- ▶ Cable transit sealing with cement Compound 16 A
- ▶ Cooling fan for the power dissipation of up to 400 W
- ▶ 19" technology for DSLAM and other devices 4U/5U (max. depth 255mm)
- ▶ DIN rail for electrical devices 14/18 positions
- Holder for 6× SC (incoming fiber optic cable is spliced in splice box placed in the base of the cabinet)
- ▶ Rail for SONAP holders areplaced in the base of cabinet
- ▶ Cable clips





#### TECHNICAL SPECIFICATIONS

| 3× ø50; 4× ø30; 2× PG13.5 (5–12 mm);<br>1× PG9 (2.5–8 mm) |
|---|
| IP54 to EN 60529  |
| V0 to UL 94   |
| IK 10 to EN 50102   |
| EN 60068-2-5  |
| PREPREG SMC   |
| Light grey RAL 7035                                       |
| 1200 × 550 × 350 mm                                       |
| 39 Kg   |
|   |

#### > ORDER CODES

| Order Code | Name                                  |
|------------|---------------------------------------|
| On request | rDSLAM 450M                           |
| On request | rDSLAM 900D                           |
| On request | Underground base                      |
| On request | Template for installation on concrete |

### **FIBEROAD SYSTEM**

GPON READY 5G READY

FibeRoad system is designed for optical fiber networks of all types. For the use in distribution boxes, street cabinets or high capacity cabinet. It allows for all configurations of fiber distribution and patching direct in the stacking system. Ideal for GPON networks.

- Possibility of cascade solution for saving place
- Compatible to trays KM 4 (24 splices), KM 5 (12 SC), KM 6 mini (24 splices)
- ▶ Posssibility to mix different trays in one box
- Modular capacity increasing by segments
- ▶ Patching solution in the stacking system
- Possibility of placing the splitters away from trays
- Space for the placement of unused fibers
- ► Compatible to fibers in secondary sheath (0.9 mm)









#### ORDER CODES

| Order Code   | Name                        | Position |
|--|-----------------------------|----------|
| 495529   | Management KM P             | 1        |
| 495785   | Support stick (2pcs needed) | 2        |
| 495530   | Tray holder KM              | 3        |
| For other configurations will you please contact our sales department. |                             |          |

070 ACCESSORIES

### FIBEROAD SYSTEM - TRAYS



#### **TRAY KM 4**





KM 4 12 $\times$  0.9 mm sheat



KM  $424 \times 0.25$  mm sheat

- ▶ Placement of up to 24 splices
- Without the need to measure the fibers before splicing
- Placement the splices away from the fibers
- Possibility to unwind incoming directions separately
- Possibility to place a splitter
- Possibility of placing fibers in 0.9 mm sheath (pigtail)
- Possibility of ribbon fibers
- ▶ Hingeable and stackable on mandrel

### ORDER CODES

KM  $43 \times \text{ribbon} + \text{splitter}$ 

| Order Code   | Name        |
|--|-------------|
| 85AV.04/0000   | Tray KM4    |
| 85AV.05/0000   | Lid for KM4 |
| For other configurations will you please contact our sales department. |             |



### TRAY KM 5



- ▶ Placement of up to 24 splices
- ▶ Placement of 12 SC simplex or 12 LC duplex adapters
- Place for pigtails and fibers reserves in the lower part
- Screw-free/Fast system of adapter mounting
- Patchcords cover
- Channels for patchcord routing
- Possibility to place a splitter
- Possibility of placing fibers in 0.9 mm sheath (pigtail)
- Possibility of ribbon fibers
- ▶ Hingeable and stackable with help of connecting pieces



### ORDER CODES

| Order Code  | Name                  |  |
|---|-----------------------|--|
| 85AV.94/0000F   | Tray KM 5 (set)       |  |
| 495531  | Connecting piece KM 5 |  |
| For other configurations will you please contact our sales department |                       |  |



### TRAY KM 6





- ▶ Placement of up to 24 splices
- Compact size
- Possibility to place a splitter
- Possibility of placing fibers in 0.9 mm sheath (pigtail)
- Possibility of ribbon fibers
- ▶ Hingeable and stackable on threaded rod

#### ORDER CODES

| Order Code | Name                                |  |  |  |
|------------|-------------------------------------|--|--|--|
| 495535     | Tray KM6                            |  |  |  |
| 495536     | Lid for KM6                         |  |  |  |
| F          | nlassa contact our calor donartment |  |  |  |

ACCESSORIES 071

### **ORSM SYSTEM**





#### ORDER CODES

| Order Code  | Name  |  |  |  |
|---|---|--|--|--|
| 85T2.48/0000F   | ORSM module — complete unequipped module                              |  |  |  |
| 85T2.48/0SALF   | ORSM module 12×SC/APC for the left ORSM (with adapters)               |  |  |  |
| 85T2.48/0SULF   | ORSM module 12×SC/UPC for the left ORSM (with adapters)               |  |  |  |
| 85T2.48/0LALF   | ORSM module 24×LC/APC for the left ORSM (with adapters)               |  |  |  |
| 85T2.48/0LULF   | ORSM module 24×LC/UPC for the left ORSM (with adapters)               |  |  |  |
| 85T2.48/PSALF   | ORSM module 12× SC/APC for the left ORSM (with adapters and pigtails) |  |  |  |
| 85T2.48/PSULF   | ORSM module 12×SC/UPC for the left ORSM (with adapters and pigtails)  |  |  |  |
| 85T2.48/PLALF   | ORSM module 24×LC/APC for the left ORSM (with adapters and pigtails)  |  |  |  |
| 85T2.48/PLULF   | ORSM module 24×LC/UPC for the left ORSM (with adapters and pigtails)  |  |  |  |
| 85T2.48/P0CEF   | ORSM splicing module  |  |  |  |
| 852X.90/000XF   | ORSM assembly module  |  |  |  |
| For other variants, please, contact our sales department. |   |  |  |  |



## **SAFeTNET SYSTEM**

SAFeTNET







### ▶ ORDER CODES

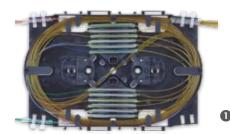
| Order Code    | Name                   | Position |
|---------------|------------------------|----------|
| 490376        | Subscriber unit kit    | 1        |
| 490375        | Element unit kit       | 2        |
| 8506.59/0000F | SS splice trays module | 3        |
| 8510.21/0000  | SE, SC module lid      | -        |

# **UNIVERSAL ACCESSORIES**



### **SPLICE TRAY KM 1**

- ▶ Placement of 12 splices
- ► Material plastic
- ▶ The possibility of a packet assembly
- ▶ Dimensions  $-152 \times 102 \times 8$  mm
- Recommended for distributor range ORM, ORMP, ORMPV, ORS, SNM, ORMPTR, SOP, POR, ORMPM





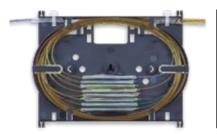
#### ▶ ORDER CODES

| Order Code  | Name                                   | Position |
|---|--|----------|
| 8523.40/0000  | KM 1 – black                           | 1        |
| 8510.12/0000  | Lid for splice tray KM 1 — transparent | 2        |
| 8523.40/B000  | KM 1 – white                           |          |
| For other variants, please, contact our sales department. |  |          |



### **SPLICE TRAY KM 2**

- ▶ Placement of 8 splices
- ► Material plastic
- ▶ Dimensions  $116 \times 87 \times 10$  mm
- Recommended for distributor range ORM 4, ORM 8





#### ORDER CODES

| Order Code                    | Name                         |
|-------------------------------|------------------------------|
| 8523.42/0000                  | KM 2 + lid                   |
| For other variants, please, o | ontact our sales department. |



- ▶ Placement of 12 splices
- ► Material plastic
- Modular hinged system

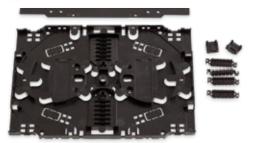




| Order Code                             | Name  |
|--|---|
| 85HC.35/0000F                          | Splice tray SK 123 with splice holder (modular hinged system) |
| 492769                                 | Lid for SK 123  |
| 85HC.06/0000                           | Locking for modular hinged system of splice tray              |
| For other variants, please, contact ou | ur sales department.  |



### **SPLICE TRAY EC2**



▶ Placement of 24 splices

- ▶ Dimensions  $171.5 \times 110 \times 8$  mm
- ► Material plastic
- ▶ The possibility of a packet assembly

#### ORDER CODES

| Order Code | Name   |
|------------|--|
| 491711     | Splice tray EC2                              |
| 491712     | Lid for splice tray EC2                      |
| 492001     | Splice comb for pigtails for splice tray EC2 |
| 491713     | Hinge for splice tray EC2                    |
|            |  |

For other variants, please, contact our sales department.



### **SPLICE TRAY SK121/S**



▶ Placement of 24 splices

▶ Dimensions  $-180 \times 130 \times 8$  mm

► Material – plastic

▶ The possibility of a packet assembly

#### ORDER CODES

| Order Code                                       | Name                                  |
|--|---------------------------------------|
| 490262   | SK 121/S (Included the plastic higes) |
| 850D.11/0000                                     | Lid for SK 121/S                      |
| For other variants, please, contact our sales de | enartment.                            |



# SPLICE HOLDERS AND HEATSHRINKS













#### ▶ ORDER CODES

| Order Code    | Name                                 | Name   | Position |
|---------------|--------------------------------------|--|----------|
| 491481        | TS 6                                 | 6 position splice holder (heatshrink)                | 1        |
| 491303        | TS 8                                 | 8 position splice holder (heatshrink)                | 2        |
| 85M9.16/0000  | TS 12                                | 12 position splice holder (heatshrink)               | 3        |
| 85M9.17/0000  | K 12                                 | 12 position splice holder Crimp                      | 4        |
| 8541.35/BALOF | CTS 12 $-37.5 \times 40 \times 8$ mm | Rubber 12 position splice holder (heatshrink)        | 5        |
| 495241        | RIB 3                                | 3 position splice holder Ribbon or splitter 4 × 4 mm | 6        |

For other variants, please, contact our sales department.

#### ▶ ORDER CODES

| Order Code                      | Name                        | Description                   |
|---------------------------------|-----------------------------|-------------------------------|
| 493519                          | Heatshrink L=40mm D=2.4mm   | Compatible with TS 12         |
| 493520                          | Heatshrink L=45mm D=2.4mm   | Compatible with TS 12         |
| 493522                          | Heatshrink L=40mm D=2.6mm   | Compatible with TS 6 and TS 8 |
| 493523                          | Heatshrink L=45mm D=2.6mm   | Compatible with TS 6 and TS 8 |
| 493524                          | Heatshrink L=60mm D=2.6mm   | Compatible with TS 6 and TS 8 |
| For other variants, please, con | ntact our sales department. |                               |



#### PARKING ELEMENT



- ▶ Save placement of unused connectors
- ► Capacity 16×SC
- ▶ Dimensions  $54 \times 67 \times 20 \text{ mm}$
- ▶ Material: low-porous rubber T130 selfadhesive

| Order Code  | Name            |
|---|-----------------|
| 85BV.04/0000F   | Parking element |
| For other variants, please, contact our sales department. |                 |



# **BUSHINGS**



#### ▶ ORDER CODES

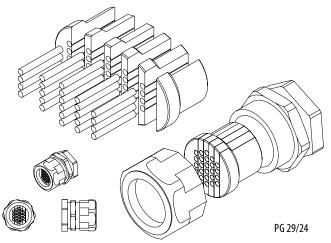
| Order Code  | Name    | Position |
|---|---------|----------|
| 85BV.25/0000F   | PG 7    | 1        |
| 391900  | PG 9    | 2        |
| 301000  | PG 13.5 | 3        |
| 301100  | PG 16   | 4        |
| 341000  | PG 29   | 5        |
| For other variants, please, contact our sales department. |         |          |



#### ▶ ORDER CODES

| Order Code    | Name                      | Position |
|---------------|---------------------------|----------|
| 85BV.25/0MVLF | PG $7/3 \times 1.6 - 2.6$ | 1        |
| 8580.67/0000F | PG 16/2×3                 | 2        |
| 8580.68/0000F | PG 16/4×3                 | 3        |
| 8580.66/0000F | PG 16/4×5                 | 4        |
| 8560.23/1000F | PG 29/12×3                | 5        |
| 8523.30/0000F | PG 29/24×3                | 6        |

For other variants, please, contact our sales department.















| Order Code                            | Name   | Position |
|---------------------------------------|--|----------|
| 8555.03/0000F                         | Plug $5 \times 10$ (for HDPE 40/33)              | 2        |
| 8555.02/0000F                         | Plug $10 \times 7$ (for HDPE $40/33$ )           | 4        |
| 8555.09/0000F                         | Plug $3 \times 7$ (for HDPE 25/20)               | 1        |
| 8555.07/0000F                         | Plug $3 \times 10 + 5 \times 7$ (for HDPE 40/33) | 3        |
| 8555.10/0000F                         | Plug 5 (10 pcs)                                  | 7        |
| 8555.05/0000F                         | Plug 7 (for Plug) (10 pcs)                       | 6        |
| 8555.04/0000F                         | Plug 10 (for Plug) (10 pcs)                      | 5        |
| 8555.12/0000F                         | Bushing ø 50 mm, 6×12 mm                         | -        |
| 475500                                | Coupling 32/32                                   | -        |
| 438800                                | Coupling 40/40                                   | 8        |
| 490632                                | Corrugated tube TXP40                            | 9        |
| For other variants, please, contact o | ur sales department.                             |          |



#### ▶ ORDER CODES

| Order Code    | Name                                   | Position |
|---------------|--|----------|
| 85H2.01/BAL0F | Oval bushing for undivided cable MICOS | 1        |
| 85M9.15/0000  | Dividable rubber bushing 2×1–3 mm      | 2        |
| 490837        | Oval bushing for undivided cable       | 3        |
| 490847        | Assembly set                           | 4        |

For other variants, please, contact our sales department.



#### **EXPRESS PORT**

Express port for mid-span access allow optical cable installation into a box/cabinet as a loop and its use for only needed fibers — the rest pass through the box/cabinet.

- ▶ 1. Express port I. ( $2 \times 7 9$  mm and  $9 \times 2 5$  mm)
- $\triangleright$  2. Expres port II. (2×7–13 mm and 16×2–5 mm or 8×11–12 mm)





#### ORDER CODES

| Order Code   | Name             | Position |
|--------------|------------------|----------|
| 85K3.07/S000 | Express port I.  | 1        |
| 85K3.99/0000 | Express port II. | 2        |
| E d t a l    |                  |          |

For other variants, please, contact our sales department.



# RANGING RINGS AND PROTECTIVE TUBES



| Order Code                          | Name  | Position |
|-------------------------------------|---|----------|
| 8201.02/0300                        | Big ring / Oko velké  | 1        |
| 8201.01/0100                        | Small ring / Oko malé   | 2        |
| 490471                              | Plastic ring $40 \times 80 $ mm / Plastové oko $40 \times 80 $ mm | 3        |
| 490550                              | Plastic ring $40 \times 50 $ mm / Plastové oko $40 \times 50 $ mm | 4        |
| 490824                              | Plastic ring $80 \times 80 $ mm / Plastové oko $80 \times 80 $ mm | 5        |
| 8506.12/0000F                       | Protective tube / Trubička ochranná 3/2.1 mm, 50 m                | 6        |
| 8506.17/0000F                       | Protective tube / Trubička ochranná 5/3.5 mm, 30 m                | 7        |
| For other variants, please, contact | our sales department.   |          |



#### **CABLE SPLITTER**

- ► The cable splitter is used to divide the optical fibres of one cable into six protection tube of ø 5/3.5 mm (No. 1) or 24×5 mm, 24×4 mm (No. 2)
- Maximum capacity of 288 fibers in cable
- ▶ Range of cables used ø 5.4–20 mm











#### ▶ ORDER CODES

| Order Code                          | Name                                      | Position |
|-------------------------------------|---|----------|
| 85H2.05/BAL0F                       | Cable splitter                            | 1        |
| 852X.60/0000F                       | Cable splitter                            | 2        |
| 85FH.00/0000F                       | Cable splitter 1/8 (ø 2.5−8 mm/8× ø 3 mm) | 3        |
| For other variants, please, contact | our sales department.                     |          |



### **FIXING MATERIAL**





#### > ORDER CODES

| Order Code | Name   | Position |
|------------|--|----------|
| 490360     | Strap SCOTCHFLEX 20 mm $\times$ 10 m                             | 1        |
| 492790     | 3M adhesive tape for the fibers fiixation in optical splice tray | 2        |
| 490543     | Spiral tape 4 mm   | 3        |
| 490544     | Spiral tape 6 mm   | 3        |

For other variants, please, contact our sales department.



### **TOOLS FOR CONNECTORS**

#### ORDER CODES

| Order Code | Name                            | Position |
|------------|---------------------------------|----------|
| 491794     | Tools for connectors SC simplex | 1        |
| 492426     | Tools for connectors LC         | 2        |

For other variants, please, contact our sales department.





#### PATCHCORDS AND PIGTAILS



#### **▶** ORDER CODES

| Order Code | Name   | Order Code | Name  |
|------------|--|------------|---|
| CN0007     | Pigtail SM9/125 SC/UPC G657A SX 0.9 mm, 2 m tight buffer | CN0019     | Pigtail set 12× SC/UPC SM9/125 G657A SX 0.9 mm multi color pigtail, 1 m easy strip  |
| CN0008     | Pigtail SM9/125 SC/APC G657A SX 0.9 mm, 2 m tight buffer | CN0020     | Pigtail set 12× SC/UPC, SM, G657A 0.9 mm LSZH, 2 m (12-multi color set), easy strip |
| CN0009     | Pigtail SM9/125 LC/UPC G657A SX 0.9 mm, 2 m tight buffer | CN0021     | Pigtail set 12× SC/APC, SM, G657A 0.9 mm LSZH, 2 m (12-multi color set), easy strip |
| CN0010     | Pigtail SM9/125 LC/APC G657A SX 0.9 mm, 2 m tight buffer |            |   |

For other variants, please, contact our sales department.



#### **OPTICAL ADAPTERS**



#### ▶ ORDER CODES

| Order Code                | Name   | Order Code | Name   |
|---------------------------|--|------------|--|
| CN0001                    | Adapter SC/UPC SM, SX, blue, metal clip                    | CN0002     | Adapter SC/APC SM, SX, green, metal clip                   |
| CN0003                    | Adapter SC/UPC SM, DX, blue, metal clip                    | CN0004     | Adapter SC/APC SM, DX, green, metal clip                   |
| CN0005                    | Adapter LC/UPC SM, DX, blue, with SC footprint, metal clip | CN0006     | Adapter LC/APC SM, DX, green with SC footprint, metal clip |
| For other variants, pleas | se, contact our sales department.                          |            |  |



### PLANAR LIGHTWAVE CIRCUIT SPLITTER

PLC splitter shall spilt one or two optical signal into multiple output ports, and features low insertion loss, high uniformity and low polarization dependent loss.

- ▶ Compact design
- ▶ High Reliability
- Customized packing and configuration
- Available configuration: 1:2–1:64 and 2:4–2:64

#### **Availability**

- ▶ Bare fiber
- ▶ Fan-out
- ▶ 900 µm
- Pre-installed in splice tray
- Pre-installed in ODF or ODB

### TECHNICAL SPECIFICATIONS

| Low insertion loos and low PDL                    |  |
|---|--|
| Wide wavelength (1260 nm-1650 nm)                 |  |
| Operation temperature (-40 °C to +85 °C)          |  |
| Fulfill Telecordia GR-1209-CORF and GR-11221-CORF |  |

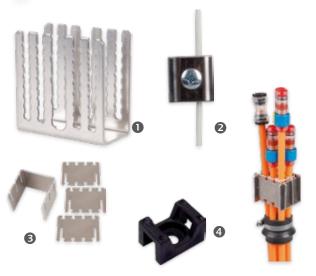




| Order Code                     | Name                        |  |
|--------------------------------|-----------------------------|--|
| On request                     |                             |  |
| For other variants, please, co | ntact our sales department. |  |



### ACCESSORIES FOR ORU, ORU SIS



#### **▶** ORDER CODES

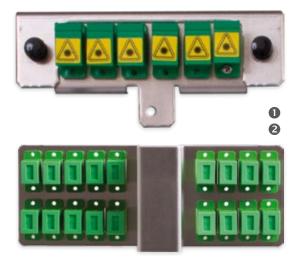
| Order Code    | Name  | Position |
|---------------|---|----------|
| 8506.34/0000F | Microtubes holder $24 \times 3 \text{ mm} + 3 \times 5 \text{ mm}$  |          |
| 8506.35/0000F | Microtubes holder $36 \times 3 \text{ mm} + 3 \times 10 \text{ mm}$ |          |
| 8506.31/0000F | Microtubes holder $24 \times 5 \text{ mm} + 3 \times 10 \text{ mm}$ | 1        |
| 8506.32/0000F | Microtubes holder 10×7 mm   |          |
| 8506.33/0000F | Microtubes holder $9 \times 10 \text{ mm}$                          |          |
| 8506.14/0000F | Holder of tension element − 3 pcs.                                  | 2        |
| 8507.52/0000F | Holder of thick-walled microducts                                   | 3        |
| 8299.12/0100  | Fastening belt holder   | 4        |
|               |   |          |





| Order Code                  | Name  | Pozice |
|-----------------------------|---|--------|
| 8555.15//0000F              | Bushing ø 50 mm, $7 \times 10$ mm           | 1      |
| 8555.12/0000F               | Bushing $\emptyset$ 50 mm, $7 \times 12$ mm | 2      |
| 8555.16/0000F               | Bushing ø 50 mm, $7 \times 14$ mm           | 3      |
| 8506.41/0000F               | Rings holder + rings for ORU 2              | 4      |
| 8506.46/0000F               | Rings holder + rings for ORU 3              | 5      |
| For other variants, please, | contact our sales department.               |        |





#### ▶ ORDER CODES

| Order Code    | Name                      | Positi-<br>on |
|---------------|---------------------------|---------------|
| 8507.42/0000F | Measuring panel 6× SC ORU | 1             |
| 8508.31/0000F | Panel ORU 18 × SC         | 2             |

 $For other \, variants, \, please, \, contact \, our \, sales \, department.$ 



#### ▶ ORDER CODES

| Order Code    | Name                                    | Pozice |
|---------------|---|--------|
| 490360        | Strap SCOTCHFLEX 20 mm × 10 m           | _      |
| 8506.42/0000F | Tightening strap — 15 pcs.              | _      |
| 8506.38/0000F | Tightening strap — 100 pcs.             | _      |
| 8506.39/0000F | Holder of splice tray modules for ORU 2 | 1      |
| 8506.47/0000F | Holder of splice tray modules for ORU 3 | 2      |
| 8508.38/0100F | Assembly stand for ORU                  | 3      |
| 85BV.03/0000F | Resin pack 50 ml + adapter kit          | 4+5    |
| 493615UP      | Putty COMPOUND 16A, 500g                | 6      |
| E di Colonia  |   |        |

For other variants, please, contact our sales department.





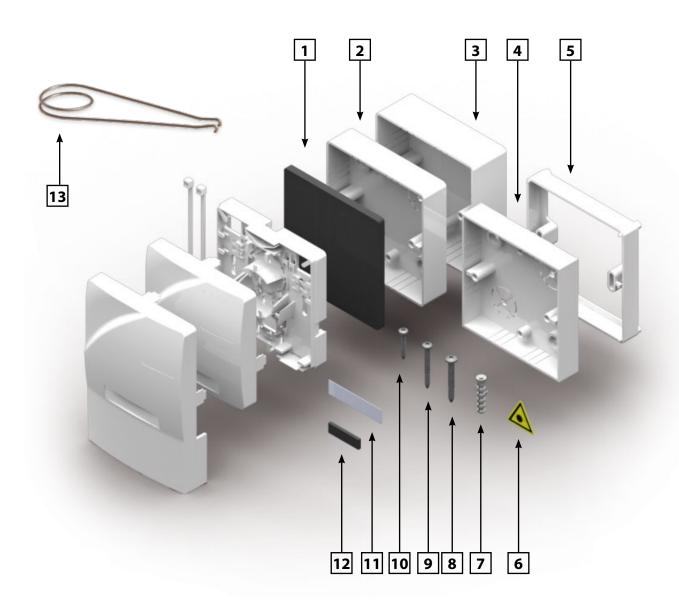
#### > ORDER CODES

| Order Code | Name                   | Positi-<br>on |
|------------|------------------------|---------------|
| 490985     | Cable holders 8–12 mm  | 2             |
| 490986     | Cable holders 12–16 mm | -             |
| 087500     | Cable holders 16–22 mm | -             |
| 103300     | Cable holders 22–28 mm | -             |
| 087600     | Cable holders 28–34 mm | _             |
| 073300     | Cable holders 34–40 mm | -             |
| 490993     | Cable holders 28–34 mm | 1             |
| 490994     | Cable holders 34–40 mm | -             |
|            | and the second second  |               |

For other variants, please, contact our sales department. .

O 80 ACCESSORIES FOR ORM 1

# ACCESSORIES FOR ORM 1



| Order Code                      | Name  | Position |
|---------------------------------|---|----------|
| 491797                          | Sealing ORM 1 (IP 54)   | 1        |
| 491818                          | Box for placement of reserves $80 \times 80 \times 19 $ mm        | 2        |
| 491819                          | Box for placement of reserves $80 \times 80 \times 28$ mm         | 3        |
| 491817                          | Box for placement of reserves $80 \times 80 \times 16$ mm         | 4        |
| 491820                          | Spacer frame $80 \times 80 \times 12 $ mm                         | 5        |
| 491870                          | Sticker Attention Laser Radiation                                 | 6        |
| 491075                          | Wall plug (min. 2 pieces needed)                                  | 7        |
| 491692                          | Screw for wall plug (min. 2 pieces needed)                        | 8        |
| 491692                          | Screw for frame fixation (min. 2 pieces needed)                   | 9        |
| 067600                          | Screw for fixation of installation box (min. 2 pieces needed)     | 10       |
| 491802                          | White sticker for description                                     | 11       |
| 491816                          | Rubber sealing for splice fixation when 4 pcs splices are applyed | 12       |
| 492004                          | Opening tool for ORM 1  | 13       |
| For other variants, please, cor | ntact our sales department.                                       |          |
|                                 |   |          |



#### PREVIOUS GENERATION OF MICOS BOXES

### **ORM 24** | WALL-MOUNTED OPTICAL DISTRIBUTION BOX

The ORM 24 optical distribution box is designed for the placement of up to 24 optical connectors for indoors and outdoors. The distribution box may be complemented by a simple bracket, which enables it to be post mounted

- Capacity of max 24 optical connectors
- Connector's capacity 12-24× SC/E2000, optionaly 24× LC, 12× ST,FC
- Cable clips
- Adaptor plate 24× SC simplex
- Lockable lid
- Securing of the incoming part (operator's side) optional
- Wall mounted, post mounted
- Bushings  $2 \times PG$  13.5;  $1 \times PG29$  patchcord 24 holes 2-3mm





Dimensions  $319 \times 205 \times 118 \text{ mm}$ 

#### ORM 24 VS | WALL-MOUNTED OPTICAL DISTRIBUTION BOX

The ORM 24 VS optical distribution box is designed for the placement of 24 optical connectors both for indoors and outdoors. The distribution box may be complemented by a simple bracket, which enables it to be post-mounted.

- Capacity 24 optical connectors
- Connector holder SC simplex or E2000, LC
- Modular hinged system
- Usage of SE splice trays for up to 12 fibers
- Optional connector panel
- Coverage degree IP 54
- Extensive accessories





Dimensions  $319 \times 205 \times 118 \text{ mm}$ 

#### ORM 12 (24) SIS, ORM 24 VS SIS | PILLAR OPTICAL DISTRIBUTION BOX

The optical distribution box ORM 12 (24) SIS/24 VS SIS is designed to protect saved, terminated, splitted and interconnected optical fibers, connectors and cables in optical FTTx networks. It provides excellent protection against various environmental conditions and simultaneously mechanical protection of the saved fibers. Pillar can be mounted outdoors in an open space in trench.

- Capacity of 12 (24) optical connectors
- Connector holder SC simplex, SC duplex, ST, FC, E2000, LC, LC duplex
- Modular hinged system (ORM 24 VS SIS)
- Usage of SE splice trays for up to 12 fibers (ORM 24 VS SIS)
- Optional connector panel
- Coverage degree IP 54
- Extensive accessories

Dimensions  $1747 \times 290 \times 209 \text{ mm}$ 



ORM 12 (24) SIS ORM 24 VS SIS

### **ORU 1 MUC** OPTICAL DISTRIBUTION BOX IN THE UNDERGROUND CHAMBER

ORU 1 MUC enables installation of optical fibers in the distributor under the ground level, outdoors, in demanding environment as historical town centres, on sites where is not possible to use the pillar version, near ways etc. Max. load is 3 tons. The assemble stands a short-lasting flooding and is intended for installation in areas used by pedestriens and cyclists. The built-in ORU 1 distributor is designed as multi-purpose with with hinged rack for mounting up to 4 pieces of SAFeTNET modules for termination or interconnection of optical fibers blown in microducts or HDPE tubes.

Dimensions 746 imes 1030 imes 594 mm



#### **SOP 36 VS** OPTICAL DISTRIBUTION BOX

Optical box SOP 36 VS is designed for distribution of optical network in buildings by usage of optical cables or microduct systém, for protection of optical connections and for interconnection of optical cables. It is wall-mounting in indoor climate with the option of entering / exiting the cable / fiber elements from either side. The box could be placed as necessary in respective etages where the needed number of optical fibers from backbone path is terminated.

- Maximum capacity is 36 optical splices
- Integrated fibre management 6×KM 3 splice tray for the placement of optical splices
- Fixation of input/output cables
- Use for fibers G.657 a,b
- Lockable door
- Break-out side plate from each side
- Wall-mounted
- Easy assembly
- Placement of optical fiber reserve, length 4 m
- The reel for cable reserves



Dimensions  $296 \times 206 \times 108 \text{ mm}$ 

#### ORU 6 MRS | TERMINAL PILLAR DISTRIBUTION BOX

The optical distribution box ORU 6 MRS is designed as pillar customer distributor for termination of one buffer (12 fibers) of a central optical suspension cable. Other fibers pass through distributor by the help of so-called OMEGA without an interruption. The suspension central cable enters from above. The distributor is ready for central cable enter from below by the help of HDPE tubes (Ø 40 mm max.) or microducts and connection of subscribers from below as well. By the help of the special bushings is possible to connect up to 12 subscribers from below by 2 fibers suspension drop cables with or without connectors. It is possible to install 1 piece of SC modul and 12 pieces of SC adaptors into the distributor.



Dimensions  $372 \times 303 \times 152 \text{ mm}$ 

#### POR 12 | FLOOR DISTRIBUTION BOX

Optical box POR 12 is designed for distribution of optical network in buildings by usage of optical cables or microduct system, for protection of optical connections and for interconnection of optical cables. It enables to install two standard splice trays for connection of optical fibers. The box could be placed as necessary in respective etages where the needed number of optical fibers from backbone path is terminated. It is wall mounting in indoor climate. Optical distribution box is designed for the placement of 12 optical connectors.



#### ORMPTR 1.5U/2U DRAW-OUT-TYPE ODF

The ORMPTR draw-out-type patch panel is designed for the placement of 24/48 optical connectors indoors. The design of the distribution box enables to install it into a 19" base. The distribution box is designed for installation cables and micro ducts.

- ► Capacity of 24/48 optical connectors
- Replaceable connector panel SC simplex, SC duplex, ST, FC, E2000, LC
- Placement of optical fiber reserve
- Easy assembly
- Installation into a 19" base
- ▶ Height of 1.5U/2U



ORMPTR 2U

#### **ORM SNP 4U** DRAW-OUT-TYPE ODF

The ORM SNP 4U draw-out-type ODF is designed for the placement of 288 optical splices, the cable termination and the transition from the fibers to pigtails indoors and outdoors. The design of the distribution box enables to install it into 19" base.

- Maximum capacity 288 optical splices
- Capacity: transition cable-cable 24 pcs of splice trays SE 288 fibers (12F in each splice tray SE)
   transition cable-pigtail 24 pcs of splice trays SE 144 fibers (6F in each splice tray SE)
- Height 4U
- Termination of all available types of cables ( loose tube, ribbon)
- Saving the handling reserve in a space of the box
- Holder for fixation of 12 pcs microducts ø 5 mm
- Holder for fixation of 48 pcs microducts ø 3 mm
- Easy access to fibers
- Well-arranged
- Mounting box from the front or the back
- Cable entrance from the side or the back
- Transition to pigtails
- Perfect control of bending
- Outputs for pigtails
- Extensive accessories





Dimensions  $176 \times 431 \times 278$  mm

#### ORM 32 SDF, ORM 32 SDF SIS OPTICAL DISTRIBUTION BOX

The optical distribution box ORM 32 SDF is designed for splicing, connectors connection and placing the splitter up to 1:32. Patchcord reserves can be stored in the box. The box is ideal for FTTx application.

- Capacity up to 36 SC connectors
- Capacity up to 36 optical splices or 12 optical splices together with ABS splitter
- Possibility to place PLC splitter in tray or ABS box
- Possibility to place excess reserves into the holder
- Possibility of pillar version or on the pole
- Express port (bushing)
- 16× dividable rubber bushing 2× 1−3 mm for patchcords
- Optical connector holder 16× SC/DX



Dimensions  $319 \times 205 \times 118$  mm /  $1747 \times 290 \times 209$  mm

#### **SOP 12 (24)** FLOOR DISTRIBUTION BOX

Optical box SOP 12 (24) is designed for distribution of optical network in buildings by usage of optical cables or microduct systém, for protection of optical connections and for interconnection of optical cables. It is wall-mounting in indoor climate with the option of entering / exiting the cable / fiber elements from either side. The box could be placed as necessary in respective etages where the needed number of optical fibers from backbone path is terminated.

- Maximum capacity is 36 optical splices
- Fixation of input/output cables
- Use for fibers G.657 a,b
- Lockable door
- Break-out side plate from each side
- Wall-mounted
- Easy assembly
- Placement of optical fiber reserve, length 4 m
- The reel for cable reserves





 $\begin{array}{c} \text{Dimensions} \\ 296 \times 206 \times 108 \text{ mm} \end{array}$ 

#### **MEDIA BOX** | STORAGE BOX FOR ACTIVE COMPONENTS

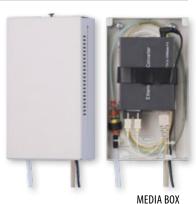
Storage box for active components MEDIA BOX is designed for mechanical control of a mediaconvertor and termination of transmission media —optical fiber at a client.

- Coverage degree IP 10 vnitřní prostředí (MEDIA BOX)
- Coverage degree IP 54 (MEDIA BOX plastic)



MEDIA BOX PLASTIC

Dimensions  $185 \times 103 \times 78 \text{ mm}$ 

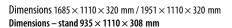


Dimensions  $186 \times 106 \times 47 \text{ mm}$ 

#### HDC 480/864 | STREET CABINET

Outdoor optical street cabinet for 19" technology suitable for installation of hinged ODF ORMPV 1U and 2U.

- Capacity of 480/864 optical splices
- SC simplex connector panel
- Section for cable/patchord reserves
- Lockable door (5 point lock)
- Lockable front cover (access for cables)
- Height above ground 1500 mm
- Anchoring basement
- Underground plastic base
- High 14U/20U





#### ORM 48/72/96 VSR, ORM 48/72/96 VSR SIS | OPTICAL DISTRIBUTION BOX

The ORM 48/72/96 VSR, 48/72/96 VSR SIS optical distribution box is designed for the placement of 96 optical connectors both indoors and outdoors. The distribution box could be installed outdoors or indoors on a wall, in an open area in trench or could be post-mounted using a special holder.

- Capacity of 480/864 optical splices
- Capacity of 48, 72, 96 optical connectors
- Adapter panel 48, 72, 96 × SC/E2000
- Modular hinged system
- Splice tray system with SK123 splice trays
- Usage of SE splice trays for up to 12 fibers
- Maximum number of modules 2

Dimensions 585 × 420 × 216 mm / 1180 × 420 × 216 mm

- Placement of up to 6 m of an optical fiber reserve
- Cable holders
- PG bushings / Rubber bushings
- Lockable doors
- Convenient placing of fibers in each splice tray
- One-point lock



#### SNM 288 VS, SNM 288 VS SIS OPTICAL CLOSURE

Optical closure SNM 288 VS / 288 VS SIS is designed for the placement of up to 288 optical splices indoors and outdoors. The distributor could be installed outdoors or indoors on a wall or in an open space in trench. The plastic corpus of pillar is staffed by one SNM 288 VS distributor.

- Maximum capacity is 288 optical splices
- Plastic corpus
- Installation wall-mounted or separate pillar
- Modular hinged system
- Placement of optical fiber reserve, length 2 m
- Usage of SK123 splice trays for up to 12 fibers
- Cable inputs/outputs from bottom
- Convenient placing of fibers in each splice tray
- oval bushing for undivided cable (express port)
- Hinged version SNM 288 VSR / VSR SIS for PLC splitters or 360 splices

Dimensions  $585 \times 420 \times 216 \text{ mm} / 1180 \times 420 \times 216 \text{ mm}$ 





# **CUSTOMER SOLUTIONS**

Have you not found a product in our catalogue to suit your needs? Do you need to modify a standard product?

Do not worry and contact us! We offer modifications of existing products and development of brand new solutions tailored to the customer's needs.

Our R&D department is ready to execute drawings according to your technical specifications, or manufacture a real test sample.

See below the examples of solutions that we have designed for our customers:



#### **OUTDOOR WALL BOX**



#### SPLICE OUTDOOR METAL BOX







#### **INDOOR WALL BOX**





### PATCH PANEL



# SOLUTION FOR PRE-CONNECTORIZED CABLE







# CLEAN ASSEMBLY ROOM



Adapters and pigtails installation in a clean environment

Company MICOS TELCOM provides professional assembling of optical housings as a complex deliveries to their customers. Thanks to this service our customers gain several advantages and especially certainity in installation quality.

The main benefits of assembling optical distributions components and optical fibers directly in the production:

- > Saving time during installation in the field
- Cost reduction
- ▶ Elimination of mistakes in comparison with complicated conditions in the field
- Increased quality for the final customer and user
- ▶ The flexible delivery dates due to high production capacity
- The advantages of assembling in the MICOS TELCOM production facilities:
- ▶ 18 workplaces under the "clean room" conditions
- ▶ High cleanliness requirements and efficiency in establishment
- Final inspection of cleanliness and quality
- Direct traceability to the logistics and flexible delivery supply of orders
- ► Complex solutions for your projects



Introducing pigtails into a optical cassettes



Final inspection of ferule cleanliness and measurement of the connectors

Please contact your sales representative with any questions and details you may have.



| DISTRIBUTION BOX                 | INDOOR USE   | OUTDOOR USE | MAX. CAPACITY OF OPTICAL CONNECTORS OR SPLICES | PAGE       |
|----------------------------------|--------------|-------------|--|------------|
| ► INDOOR DATA CABINETS           |              |             |  | D 92-D 95  |
| MNS / MBS                        | •            |             |  | D 92       |
| MSS                              | •            |             |  | D 93       |
| MSS0                             |              |             |  | D 94       |
| MZS                              | •            |             |  | D 95       |
| OUTDOOR DATA CABINETS            |              |             |  | D 96-D 98  |
| MSS 22U/55                       | •            | •           |  | D 96       |
| SAP 3                            | •            | •           |  | D 97       |
| SAP 4 1500/2000                  | •            | •           |  | D 98       |
| ► EMC ATECHNOLOGY AND SPECIAL DA | ITA CABINETS |             |  | D 99-D 100 |
| MTS 3                            | •            | •           |  | D 99       |
| BS                               | •            | •           |  | D 100      |
| ACCESSORIES                      |              |             |  | D 101-D 97 |
| EXAMPLES OF INSTALLATIONS        |              |             |  | 104–106    |



D88 DATA CABINETS

The MNS and MBS wall mounted data cabinets are designed for the indoor installation of 19" technology onto a wall. Sliding supporting rails are used to install 19" technology. The MBS data cabinets allow technology to be installed vertically, which makes them ideal for limited spaces.

- ▶ Base dimensions MNS 550 × 570 mm
- ▶ Base dimensions MBS  $600 \times 215$ ,  $600 \times 260$ ,  $600 \times 350$  mm
- ▶ Height MNS 4U, 6U, 9U, 12U, 15U a 17U
- ▶ Height MBS 3U, 4U, 6U
- Vertical placement of the technology
- ▶ Sliding rails for fastening 19" technology
- ▶ Lockable door



#### **BASIC VERSION**

2 pairs of sliding vertical 19" rails 1 pair of vertical 19" rails – MBS)

Lockable glass door with a closed frame

Sheet steel lockable front door (MBS)

One-point lock

Light grey colour (RAL 7035)

Cable inlets in the top and in the bottom (MNS  $-300 \times 65$  mm, MBS  $-220 \times 65$  mm)

Cable inlet in the bottom (rubber bushing ø 50 mm)

Coverage degree IP 20 to EN 60529

#### **▶** RECOMMENDED ACCESSORIES

Ventilation

Brush inlets Inlet panels

Racks and mounting subracks

Blinding panels

Mechanical and electronic locks

Supporting panels

Circuit breaker panel

Power supply leads

Other accessories on the pages D94–D97



#### ORDER CODES

| MNS Order Code MNS  | Base dimensions [mm] | Height [mm] | Height [U] | Weight [kg] |
|---------------------|----------------------|-------------|------------|-------------|
| 8670.00/09A0C1UU-32 | 550 × 570            | 506         | 9          | 26          |
| 8670.00/12A0C1UU-32 | 550 × 570            | 640         | 12         | 31          |
| 8670.00/15A0C1UU-32 | 550 × 570            | 773         | 15         | 37          |
| 8670.00/17A0C1UU-32 | 550 × 570            | 862         | 17         | 40          |
|                     | Base dimensions [mm] | Height [mm] | Height [U] | Weight [kg] |
| 8610.00/0300C4      | 600 × 215            | 535         | 3          | 18          |
| 8610.00/0400C4      | $600 \times 260$     | 535         | 4          | 20          |
| 8610.00/0600C4      | $600 \times 350$     | 535         | 6          | 22          |

For other variants, please, contact our sales department.

D 89

# MSS STAND DATA CABINETS

The MSS line stand data cabinets are designed for indoor installation of 19" or 21" technology (dimension of the base  $800 \times 600$  mm and larger). A design of the self-supporting assembled frame enables an easy assembly of the data cabinet at the point of installation. The unique construction of these data cabinets also permits to reduce their weight substantially.

- ▶ Assembled frame
- Sliding supporting rails
- ▶ Removable side covers
- ▶ Possibility of assembling a set of cabinets
- Variable base dimensions (up to the depth of 1070 mm)
- ▶ Coverage degree IP 20 to EN 60529
- ▶ Loading capacity data cabinets: 300 kg

#### **BASIC VERSION**

Assembled frame 2 pairs of sliding vertical 19" rails Lockable glass door with a closed frame Three-point lock Lockable side covers Lockable rear cover

Cable inlets in the top and in the bottom  $(300 \times 65 \text{ mm})$ 

Light grey colour RAL 7035

Possibility of assembling a set of cabinets

Coverage degree IP 20 to EN 60529

Delivered as a complete unit or Flat-Pack

#### ▶ RECOMMENDED ACCESSORIES

Ventilation **Brush inlets** Inlet panels Bases Castors Spacer legs Shelfs and mounting subracks Blinding panels Mechanical and electronic locks Supporting panels Pull-out light Circuit breaker panel **Power supply leads** Earthing bridge

#### **INFORMATION**

1U = 44.45 mm

Other accessories on the pages D94-D97

#### ORDER CODES

| Order Code           | Base dimensions [mm] | Height [U] | Height [mm] | Weight [kg] |  |
|----------------------|----------------------|------------|-------------|-------------|--|
| 8872.00/42A0CFU1-111 | $600 \times 600$     | 42         | 2050        | 87          |  |
| 8872.00/45A0CFU1-111 | $600 \times 600$     | 45         | 2185        | 93          |  |
| 8872.00/47A0CFU1-111 | $600 \times 600$     | 47         | 2275        | 97          |  |
| 8872.00/42B0CFU1-111 | $800 \times 800$     | 42         | 2050        | 130         |  |
| 8872.00/45B0CFU1-111 | $800 \times 800$     | 45         | 2185        | 139         |  |
| 8872.00/47B0CFU1-111 | $800 \times 800$     | 47         | 2275        | 145         |  |

For other variants, please, contact our sales department.

#### **▶** OTHER BASE DIMENSIONS

 $600 \times 300 \mid 600 \times 400 \mid 600 \times 900$ 

For further information, please, contact our sales department.

|  |   | - |
|--|---|---|
|  |   |   |
|  | 0 |   |
|  |   |   |
|  |   |   |

D90 DATA CABINETS The MSSO stand data cabinets are designed for the installation of data and telecommunications technology indoor and are fitted with non-adjustable 21" suspension supporting frames, which are mounted on silentblocks.

Stand data cabinets are constructed of welded frame with non-removable rear and side covers. There are breakable inlets for cables in roof and base. The stands with depth 450 mm are equipped with one 21" supporting frame, cable management brackets are included in rear part and can't be adjustable.

The stands with depth 600 mm having two supporting frames and cable management panels are placed on the side part between front and rear supprot frame. Cable management panels are vertically adjustable.

Earthing rail is a part of the basic equipment.

In the basic version, the data cabinets are supplied without the front door. The doors can be ordered in different variations with perforations or for installation of air-conditioning unit together with other accessories.







#### ORDER CODES ACCESSORIES

| 01.61                      | и .  |
|----------------------------|--|
| Order Code                 | Notes  |
| 8877.04/5601F              | MSSO 50SU L/P door with perforation, filter, three-point lock and hinges     |
| 8877.21/5601F              | MSSO 50SU L door for air-conditioning 850 W with three-point lock and hinges |
| 8877.21/5602F              | MSSO 50SU P door for air-conditioning 850 W with three-point lock and hinges |
| 8877.04/6601F              | MSSO 64SU L/P door with perforation, filter, three-point lock and hinges     |
| 8877.21/6601F              | MSSO 64SU L door for air-conditioning 850 W with three-point lock and hinges |
| 8877.21/6602F              | MSSO 64SU P door for air-conditioning 850 W with three-point lock and hinges |
| 8877.04/8601F              | MSSO 80SU L/P door with perforation, filter, three-point lock and hinges     |
| 8877.21/8601F              | MSSO 80SU L door for air-conditioning 850 W with three-point lock and hinges |
| 8877.21/8602F              | MSSO 80SU P door for air-conditioning 850 W with three-point lock and hinges |
| 8877.30/0000F              | Circuit breaker panel  |
| 88R4.00/0005F              | Pull-out rack 21"/2SU/300, for placement the notebook                        |
| 8877.18/64B1F              | Roof cover MSSO 600 $	imes$ 450 including installation kit                   |
| 8877.18/66B1F              | Roof cover MSSO $600 \times 600$ including installation kit                  |
| For other variants, please | e, contact our sales department.   |





#### ORDER CODES

| Order Code    | Notes                       |
|---------------|-----------------------------|
| 8877.00/5064F | MSSO 50SU(27U) 600 × 450 1R |
| 8877.00/6464F | MSSO 64SU(36U) 600 × 450 1R |
| 8877.00/6466F | MSSO 64SU(36U) 600 × 600 2R |
| 8877.00/8266F | MSSO 80SU(44U) 600 × 600 2R |
|               |                             |

D 91

# MZS SERVER CABINETS

Heavy-load data cabinets are designed for the indoor installation of 19" technology intended partikularly for data centres. The server cabinet can be connected to another rack to create a data center to increase the required performance server room.

- Riveted frame
- ▶ Sliding supporting rails
- ▶ Removable side covers or dividing partitions
- ▶ Possibility of assembling a set of cabinets including closed cold aisle
- Variable base dimensions (up to the depth of 1200 mm)
- ▶ Load up to 1000 kg
- ▶ Door perforation rate up to 82 %



#### **BASIC VERSION**

Riveted frame

2 pairs of sliding vertical 19" rails

Load 1000 kg

Base dimensions  $600 \times 1000 \text{ mm}/800 \times 1000 \text{ mm}$ 

Lockable perforated door (perforation 67 %)

Three-point lock

Lockable side covers

Lockable rear cover

Cable inlets in the top and in the bottom (300  $\times$  65 mm)

Light grey colour RAL 7035

Coverage degree IP 20 to EN 60529

### RECOMMENDED ACCESSORIES

Ventilation

Brush inlets

Inlet panels

Bases

Castors Spacer legs

Shelfs and mounting subracks

Blinding panels

Supporting panels

Supporting grids

Pull-out light

Circuit breaker panel

**Power supply leads** 

Earthing bridge

Other accessories on the pages D94–D97

D92 DATA CABINETS

# MSS 22U/55 OUTDOOR DATA CABINET

The case is designed for the installation of 19" outdoor technology. The design of the case enables opening of side covers which considerably simplify the installation of the technology. The case may be fitted with an air-conditioning unit upon customer's request.

- ▶ Enables the installation of 19" technology
- ▶ Basic dimensions  $1700 \times 600 \times 600$  mm
- Coverage degree IP 55 to EN 50102





#### **BASIC VERSION**

Base dimensions of 600  $\times$  600  $\,\text{mm}$ 

Physical height of the stand: 600 mm

Physical height of the case without the stand: 1.100  $\,$  mm  $\,$ 

Installation height 22U

Side covers may be opened during installation

2 pairs of sliding vertical 19" rails

Three-point lock

Thermal insulation

Heating equipped with a thermostat

 $1\times$  ventilator (220 V) equipped with a thermostat

PG openings in the bottom

Coverage degree IP 55 to EN 50102

Material: stainless steel sheet

Light-grey finish RAL 7035

#### ORDER CODES

 Order Code
 Notes

 8622.00/2200F
 MSS 22U/55

 For other variants, please, contact our sales department.

#### **▶** INFORMATION

For other variants, please, contact our sales department.

D 93

# SAP 3 OUTDOOR DATA CABINET

The SAP 3 data cabinet is designed for the installation of pasive and active 21" or 19" outdoor technology. The data cabinet is prepared for mounting airconditioning unit attached on the door.

- ▶ Double-walled construction with thermal insulation
- ▶ Riveted frame
- ▶ Non-removable rear and side covers
- ▶ Solid base with panels with bushings
- Perforated ceiling with the possibility of blinding when using air-conditioning
- ▶ Roof with front perforation
- ▶ Grounding bus
- Installation on a plastic base
- ▶ Installation high 48SU (approx. 27U)
- It is placed on the socle for the placement of cables





2 pairs of sliding vertical 21" rails Four-point lock (type 1670 – two-point lock)

Installation high 48SU Thermal insulation

Heating equipped with a thermostat

Ventilator

Reduction of 19" mounting rails, high 1U

Reduction of 19" mounting rails, high 2U

Reduction of 19" mounting rails, high 3U

Coverage degree IP 54 to EN 50102

Material: Galvanized sheet Colour Light grey RAL 7035

Dimensions  $1870 \times 800 \times 591 \text{ mm}$ 

Dimensions – stand 350  $\times$  800  $\times$  591 mm





#### ORDER CODES

| Order Code                            | Notes / Poznámka  |
|---------------------------------------|---|
| On request                            | Cabinet 1870 without air conditioning, door equipped with dust filter (right door opening on request) |
| On request                            | Cabinet 1870 with door preparation for air conditioning 1400W (right door opening on request)         |
| On request                            | Cabinet 1670 without air conditioning, door equipped with dust filter (right door opening on request) |
| On request                            | Cabinet 1670 with door preparation for air conditioning 850 W (right door opening on request)         |
| For other variants, please, contact o | ur sales department.  |

D94 DATA CABINETS

# SAP 4 1500 SAP 4 2000 OUTDOOR DATA CABINET

Outdoor data cabinet SAP 4 1500/2000 allows installation of the passive and active technology into 19" rails.

- ▶ 19" technology 20U/31U
- ▶ Hinged rack with space for documents
- Profile shelves for a second set of accumulators
- ▶ 4 lifting ears for the transport by crane
- Optional disassembling the cabinet for the transport without crane
- ▶ Door fixation in the open position (130°)
- ▶ Cooling by ventilator up to 800 m³/h
- ▶ Heating 400 W
- ▶ PLC LOGO regulation (Ethernet)
- Optional electrical and regulation equipment based on request
- ▶ DIN rails for electrical devices 30 positions
- ▶ Gland system BST ( $18 \times 5 12 \text{ mm} + 16 \times 13 23 \text{ mm}$ )
- ▶ Aluzinc sheet
- ▶ Lock 2/4 points, lock semi-cylinder 31 mm
- Lighting
- ▶ Isolation PIR plate 30 mm



SAP 4 2000

#### **BASIC VERSION**

Base dimension: 700 × 700 mm Plinth height: 150 mm

Cabinet height: 1500/2000 mm

Installation height (1 set of batteries): 20U/31U Installation height (2 set of batteries): 12U/23U

Door locking: 2/4-point, lock semi-cylinder 31 mm

Weight: 139/165 kg

Bushing: BST system (18 $\times$  5–12 mm + 16 $\times$  13–23 mm)

Coverage degree: IP54 according to ČSN EN 60529

Material Cabinet: Aluzinc sheet metal

Colour: Epoxy-polyester RAL 7035 (light grey)

Isolation: PIR plate 30 mm thick  $\lambda_{\text{D}} = 0.022 \, \text{W/mK}$ 

Lifting ears: 4 lifting ears under the detachable

Operating temperature: -25 to +35  $^{\circ}\text{C}$ 

Electric connection:

Covering IP20, Nominal voltage 3NPE, AC 50Hz, 400/230V, TN-C-S, Protection from dangerous voltage according to ČSN 332000-4-41ed.2: Live parts: isolation, covers, desk. Non-live parts: automatic disconnecting from power.

Additional: current protector.



SAP 4 1500

#### **ORDER CODES**

| Order Code  | Notes      |  |  |
|---|------------|--|--|
| On request  | SAP 4 1500 |  |  |
| On request  | SAP 4 2000 |  |  |
| For other variants, please, contact our sales department. |            |  |  |

DATA CABINETS

# MTS 3 | HEAVY DUTY TRANSPORT BOXES

The MTS 3 heavy duty transport box is designed for use of 19" technology and can be used in difficult operating conditions, such as aviation, railway and waterway transport.

The inner frame is placed on antivibration elements which together with its outer casing, ensure high resistance to mechanical vibration. The removable lids give an easy access to 19" technology, and the embedded panel of the rear lid enables the installation of connectors and other connecting elements. The transport box is equipped with an atmospheric pressure equalizing valve, which is activated automatically when the closing elements are opened. The inner box frame itself, as well as the application of HF conductive packing around both lids, meets the electromagnetic compatibility (EMC) requirements.

- ▶ Transport of 19" technology
- ▶ Height of 4U, 6U and 12U
- ▶ Enables the stacking of transport boxes
- ▶ EMC requirements fulfilment
- ▶ Protection from the weather effects
- Protection from dust
- ▶ Pressure equalizing valve
- ▶ Coverage degree IP 65 to EN 60529
- ▶ Dark green colour







#### ORDER CODES

| Order Code                          | Base dimensions [mm]  | Height [mm] | Height [U] | Weight [kg] | Loading capacity [kg] | Notes           |
|-------------------------------------|-----------------------|-------------|------------|-------------|-----------------------|-----------------|
| 8B20.00/040DZ50                     | 570 × 540             | 290         | 4          | 11          | 50                    |                 |
| 8B20.00/060DZ50                     | 570 × 540             | 380         | 6          | 16          | 50                    |                 |
| 8B20.00/120DZ2035                   | 570 × 540             | 740         | 12         | 30          | 50                    | Sectional frame |
| For other variants, please, contact | our sales department. |             |            |             |                       |                 |

D96 DATA CABINETS

# **BS** DATA CABINETS WITH INCREASED PROTECTION

These data cabinets are special products and designed to increase the reliability of the installed technology. Cabinets with increased protection will also find use in the protection of information systems, both from the disturbing effects of an electromagnetic environment and from any possible leak of important data.

The base of the BS line cabinets is a self-supporting welded construction conceived mainly for the installation of 19" technology.

- ▶ Construction according to individual clients' requirements
- ▶ Up to IP 65 coverage degree to EN 60529

#### Services offered in the sphere of EMC

The TELCOM division also offers a wide range of services in the EMC sphere. A trained team will recommend a solution suitable for your needs and we offer expert consulting and training, analyses and even complete solutions for technical projects.

# ▶ RECOMMENDED ACCESSORIES

Racks and mounting subracks
Blinding panels
Supporting panels
Circuit breaker panel
Power supply leads
Filters with or without a dust insert
Waveguide inlets
Cable waveguide inlets
Closing mechanisms
Mains EMC screens
Data and telephone EMC screens
Ventilation
Other accessories on the pages D94—D97

#### **▶** INFORMATION

For further information, please, contact our sales department. / Pro více informací kontaktujte naše obchodní oddělení.



# **ACCESSORIES**



#### **BASE**

The bases are provided with three breakable inlets ( $300 \times 65 \,$  mm).

#### **ORDER CODES**

| Order Code    | Suitable for | Base dimensions [mm] | Height [mm] | Colour            |
|---------------|--------------|----------------------|-------------|-------------------|
| 8872.38/10A1F | MSS          | $600 \times 600$     | 120         | RAL 7035 lt. gray |
| 8872.38/10D1F | MSS          | $600 \times 800$     | 120         | RAL 7035 lt. gray |
| 8872.38/10B1F | MSS          | $800 \times 800$     | 120         | RAL 7035 lt. gray |
|               |              |                      |             |                   |

For other variants, please, contact our sales department.





### **SPACER LEGS**

 $The spacer legs, with adjustable \ height and inclinable \ surface \ contact, allow for the \ possible \ unevenness \ of the \ floor.$ 

#### ▶ ORDER CODES

| Order Code  | Setting range [mm] | Loading capacity [kg] | No. in one pack |  |  |
|---|--------------------|-----------------------|-----------------|--|--|
| 8A62.97/0000F   | 0-25               | 400                   | 4               |  |  |
| For other variants, please, contact our sales department. |                    |                       |                 |  |  |





### **CASTORS**

The castors wheels make the handling of the MSS stand cabinets and MKS collocation cabinets easier.

#### ▶ ORDER CODES

| Order Code    | Loading capacity [kg] | No. in one pack                   |
|---------------|-----------------------|-----------------------------------|
| 8A62.96/0000F | 300                   | 2 with a brake, 2 without a brake |
| 8A62.96/0003F | 600                   | 2 with a brake, 2 without a brake |

For other variants, please, contact our sales department.





# **2U MOUNTING SUBRACK**

A .....

#### ORDER CODES

The mounting subrack is designed for fastening various technological elements.

| Order Code  | Height [U] | Colour |  |  |
|---|------------|--------|--|--|
| 8A63.00/0005F   | 2          | Black  |  |  |
| For other variants, please, contact our sales department. |            |        |  |  |

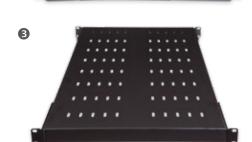
D98 DATA CABINETS



### **RACKS**

The racks are designed for placing the technology inside the data and collocation cabinets. The loading capacity stated for rack 500 and rack 600 is applicable when 2 supporting angles are used (angle 50 or angle 400).





#### **▶** ORDER CODES

| Order Code                                 | Depth<br>[mm]      | Height<br>[U] | Loading capacity<br>[kg] | Colour | Notes | Position |
|--|--------------------|---------------|--------------------------|--------|-------|----------|
| 8A06.10/00B5F                              | 255                | 1             | 10                       | Black  |       | -        |
| 8A29.35/00B5F                              | 350                | 1             | 10                       | Black  |       | 1        |
| 8A06.00/0005F                              | 255                | 2             | 10                       | Black  |       | -        |
| 8A29.00/1005F                              | 400                | 1             | 10                       | Black  |       | -        |
| 8A07.00/0005F                              | 400                | 2             | 10                       | Black  |       | 2        |
| 8A18.00/0005F                              | 500                | 2             | 40                       | Black  |       | -        |
| 8A91.00/0005F                              | 600                | 2             | 40                       | Black  |       | _        |
| 8A05.20/65B5F                              | 650                | 1             | 40                       | Black  | *     | 3        |
| 8A05.20/85B5F                              | 850                | 1             | 40                       | Black  | *     | _        |
| *) Only for MSS For other variants, please | e contact our sale | s denartment  |                          |        |       |          |



For the power supply of the installed technology, we offer a series of power supply leads, protected/unprotected, with different types of sockets.



#### ▶ ORDER CODES

| Order Code    | Name                     | Number of sockets | Over-voltage protection | HF screen | Power supply cable [m] | Installation to rails | Position |
|---------------|--------------------------|-------------------|-------------------------|-----------|------------------------|-----------------------|----------|
| 8A73.00/0005F | Protected extension lead | 5                 | Yes / Ano               | Yes / Ano | 3                      | Yes / Ano             | 1        |
| 8A74.00/0005F | Protected extension lead | 5                 | Yes / Ano               | Yes / Ano | 5                      | Yes / Ano             | -        |

For other variants, please, contact our sales department.



# **3U CIRCUIT BREAKER PANEL**

The circuit breaker panel is designed for mounting electrical installation elements onto the DIN ribbon.



| Order Code                             | Height [U]           | Colour |
|--|----------------------|--------|
| 8A30.00/0005DIN                        | 3                    | Black  |
| For other variants, please, contact ou | ır sales department. |        |



This adaptor allow 19" technology to be installed into the ETSI frame.



#### ORDER CODES

| Order Code  | No. in one pack | Height [U] | Colour |  |  |
|---|-----------------|------------|--------|--|--|
| 8821.50/0100F   | 2               | 1          | Black  |  |  |
| 8873.23/0205F   | 2               | 2          | Black  |  |  |
| 8A06.60/0305F   | 2               | 3          | Black  |  |  |
| For other variants, please, contact our sales department. |                 |            |        |  |  |



### **CONNECTING MATERIAL**





#### ▶ ORDER CODES

| Order Code                    | Name                          | Description                             |
|-------------------------------|-------------------------------|---|
| 8872.05/0000F                 | MSS connecting packing        | For connection frames of MSS            |
| 8872.12/B0A0F                 | Bar brackets                  | Increase of the regidity of MSS and MKS |
| 8872.12/B0B0F                 | Bar brackets                  | Increase of the regidity of MSS and MKS |
| 390100                        | M5 packing                    | 4× screw M5, washer, M5 nut             |
| 8A62.78/0000F                 | M5 packing                    | 20× screw M5, washer, M5 nut            |
| 390200                        | M5 packing                    | 4× screw M6, washer, M6 nut             |
| 8A62.66/0000F                 | M5 packing                    | 20× screw M6, washer, M6 nut            |
| For other variants, please, o | contact our sales department. |   |



#### **RANGING PANELS**



- The ranging panels are designed for leading cables inside the data and collocation cabinets.
- ▶ The ranging panels are designed for horizontal leading cables
- ▶ Installation on a 19" base
- ▶ Installation height 1U or 2U
- One-sided or two-sided supports
- ▶ Plastic cable rings 40/50, 40/80, 80/80



#### **▶** ORDER CODES

| Order Code    | Name                                    | Height [U] | Description   | Position |
|---------------|---|------------|---|----------|
| 8A82.04/0005F | 1U ranging panel (without cable rings)  | 1          | For plastic rings of $40 \times 50$ and $40 \times 80$ mm | 2        |
| 8A82.05/0005F | 2U ranging panel (without cable rings)  | 3          | For plastic rings of 80 × 80 mm                           | 1        |
| 8A58.00/0105F | Wire channel                            | 1          |   |          |
|               | Plastic cable rings 40/50, 40/80, 80/80 |            | See Cable Clips   |          |

For other variants, please, contact our sales department.

# **EXAMPLES OF INSTALLATIONS**



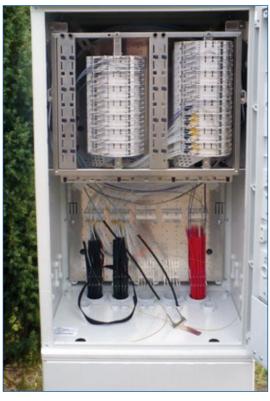










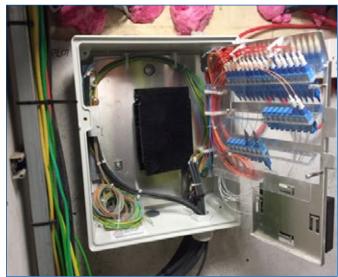
























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