MDB-M48 - Modular Distribution Box - 48fo Module

Prysmian Part Numbers: See table next page

Features and benefits

• The MDB-M48 is a wall box or module that allows splicing, patching, splitting or storage of optical fibres.
• A MDB-M24 version is also available (see datasheet WM062-01 Modular Distribution Box MDB-M24) with half the capacity, it can be stacked with the MDB-M48 to create a modular system.
• The MDB-M48 module has a central area to organize the fibres, this area is protected with a front door.
• The right hand side cover allows access to a common patch panel for up to 48SC positions. In the area, the top and bottom walls are removable to provide patching between the modules.
• The two covers are secured with a 8mm male triangular key, DIN3223.
• Two cable entry ports are available on the MDB-M48.
• The MDB-M48 module can be configured as :
  • A Patch Module: Suitable to receive up to four SC pre-terminated cables.
  • A Splice Module: Suitable to splice up to 48 fibres from one or two cables to pigtails connected to the patch panel.
  • A Splitting Module: Suitable to mount twelve pre-terminated SC/APC 1x4 PLC splitters or six pre-terminated SC/APC 1x8 PLC splitters connected to the patch panel. The splitter input fibres can be spliced to the fibres of one or up to four incoming cables.
  • A Storage Module: Suitable to store unused cable elements.
• The MDB-M48 is rated IP41 with a light grey color RAL 7035.
• A metallic wall support is available to align the modules on a wall.

Kits Contents

See next page

Additional Items

• MDB Wall Support
• MDB-M24 module
• 1x4 PLC splitters with outputs pre-terminated 900 microns SC/APC.
• 1x8 PLC splitters with outputs pre-terminated 900 microns SC/APC.
• SC/APC Adapters
• SC/APC Pigtails
• Splice Protectors

The MDB-M48 is an indoor wall box, particularly adapted for FTTH Building (MDU) cabling. The MDB-M48 allows the connection, through patch panels or directly by splices, between the optical fibres feeding the MDU, and the optical fibres from the cables coming from the building network. According to the MDU configuration several modules can be assembled to form a MDB24, MDB48 or a MDB96.
Prysmian Part Numbers

<table>
<thead>
<tr>
<th>Prysmian Part Number</th>
<th>Designation and Kit Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCPSC02123</td>
<td>MDB-M48 patch with 48 SC/APC-SC/APC adaptors</td>
</tr>
<tr>
<td></td>
<td>The MDB-M48 is supplied with two fixing kits (wall and wall support), a triangular key, 48 SC/APC-SC/APC adaptors protected with semi-transparent caps mounted on the patch panel,, three cable entry kits, and all accessories required for the following configurations:</td>
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<tr>
<td></td>
<td>1. Patch module: no accessories have to be mounted for this option.</td>
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<tr>
<td></td>
<td>2. Storage module: By using the cable elements locking combs</td>
</tr>
<tr>
<td>XCPSC02124</td>
<td>MDB-M48 splice with SC/APC-SC/APC adaptors and 48 SC/APC pigtails</td>
</tr>
<tr>
<td></td>
<td>The MDB-M48 is supplied with two fixing kits (wall and wall support), a triangular key, 48 SC/APC-SC/APC adaptors protected with semi-transparent caps mounted on the patch panel, 48 SC/APC 900 microns pigtails mounted already prepared in splice trays and connected to the patch panel, three cable entry kits.</td>
</tr>
<tr>
<td>XCPSC02047</td>
<td>Additional kit for a Splitting module</td>
</tr>
<tr>
<td></td>
<td>In addition to the following Part number XCPSC02123 (MDB-M48 patch with 48 SC/APC-SC/APC adaptors) this kit allows to configure the module as a Splitting module:</td>
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<td></td>
<td>The kit contents are a splitter main plate to mount in the module and a splice main plate to mount inside the central cover.</td>
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</tbody>
</table>

(*) : The splitters are not supplied within the kit. See Part Numbers on next page.

Technical Data

- Number of cable entry: 4
- Maximum cable diameter (mm): 15
- Number of splice tray: 1 for the splitting module
- Splice capacity per splice tray: 24 for the splitting module
- Maximum splice capacity: 48 for the splitting module
- Maximum capacity on the patch panel: 48 positions for SC type adaptors
- Maximum splitter holder capacity: 12 PLC splitters with 60mm maximum length and 4mm wide
- Required space envelope (mm): 450x150(depth)x180(height)
- Operating Temperature: -25°C to + 70°C (5 to 95% RH)
- Material: ABS-FR, color light grey RAL 7035
- Testing: Fully compliant with FT/RD/RESA/12/02/78 Orange’s specification

Logistics

<table>
<thead>
<tr>
<th></th>
<th>MDB-M48 module</th>
<th>Kit for MDB-M48</th>
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</thead>
<tbody>
<tr>
<td>Packing dimensions (mm):</td>
<td>460 x 180 x 190</td>
<td>130 x 180 x 20</td>
</tr>
<tr>
<td>Packed weight (Kg):</td>
<td>3.0</td>
<td>0.16</td>
</tr>
<tr>
<td>Net weight (Kg):</td>
<td>2.6</td>
<td>0.15</td>
</tr>
</tbody>
</table>

The packaging used for these products is environmental friendly and 100% recyclable.
### Additional Items

#### MDB wall support

The MDB wall support is a metallic frame used to fix the MDB modules on a wall. It allows to obtain a plane surface and guarantees a good alignment for the modules MDB-24 or MDB-M48. The support is formed by two vertical rails with cross members and uses diamond shaped nuts supplied within each MDB module to fix the modules. The MDB wall support is supplied with a fixing kit (four 5x60mm wood screws and four 8x50mm wall plugs) and a spirit level.

Wall support dimensions (mm) : 800 x 330 x 21 - Net weight : 2.8 Kg

_Prysmian Part Number - XCPSC02126_

#### MDB-M24

The MDB-M24 module is compatible with the MDB-M48. It is equipped with a 24 SC positions patch panel. The MDB-M24 allows splicing, patching, splitting or storage of optical fibres. As for the MDB-M48 module, different part numbers are available according to the required configuration.

For more details please contact your local Prysmian Group sales office and ask for the data sheet WM062 - Modular Distribution Box MDB-M24

MDB-M24 Dimensions (mm) : 450 (w) x 150 (d) x 100 (h)

_Prysmian Part Numbers – Please see data sheet WM062_

#### FTTH PLC splitter 1x4 Pre-terminated SC/APC

The 1/4 PLC splitter has 0.70 meters legs over-sleeved with a 900 micron buffer and pre-terminated with SC/APC connectors. The input fibre is 1.5 meter over-sleeved with a 900 microns buffer and is not pre-terminated.

For more details please contact your local Prysmian Group sales office and ask for the data sheet AC029 – Compact PLC Splitter

_Prysmian Part Number - XSPSC00359_

#### FTTH PLC Splitter 1x8 Pre-terminated SC/APC

The 1/8 PLC splitter has 0.70 meters legs over-sleeved with a 900 micron buffer and pre-terminated with SC/APC connectors. The input fibre is 1.5 meter over-sleeved with a 900 microns buffer and is not pre-terminated.

For more details please contact your local Prysmian Group sales office and ask for the data sheet AC029 – Compact PLC Splitter

_Prysmian Part Number - XSPSC00360_
Additional Items continued

SC/APC Adapters

The simplex SC/APC adapter is green, with flanges, a Zirconia sleeve and metallic fixing clips. It is equipped with transparent protection caps to enable to control the optical continuity without removing the caps.

_Prysmian Part Number - XPPSC02037_

SC/APC Pigtails 900μm – Set of 12

The 900 micron pigtail has a 2.5 meter length with LSZH buffer and is pre-terminated with SC/APC connectors. The fibre used is G657A2.

_Prysmian Part Number - XPPSC02033 (set of 12 colours)_

Heat Shrink Splice Protectors

Heat shrink splice protectors are used to protect a splice between two fibres. They are 2.2mm in diameter and 45mm length.

_Prysmian Part Number - XPESC00053 (pack of 50)
-XKTSC00050 (pack of 12)_