



TC-40146-IP-EN Rev. A / Nov. 2018 www.commscope.com

### MFPS pre-cabled shelves

## 1 General product information

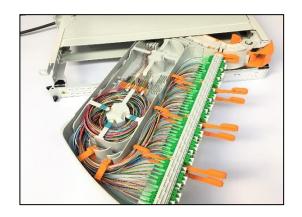
MFPS is a family of pivoting front patching panels addressing the specific needs of fiber access networks (POP houses and cabinets).

The MFPS series offers best-in-class density. Due to its modular, layered design, MFPS shelves can be configured to match the fiber count of most common fiber cables used in the access networks (96, 144, 192, 216 or 288 fibers) while preserving excellent fiber organization and management. The MFPS series is offered in patch-only, splice/patch and pre-cabled versions.

This document describes the MFPS pre-cabled shelves for 1 and 2 HU versions.

Left oriented versions: jumpers are leaving on the front left side. Right oriented versions: jumpers are leaving on the front right side.





# 2 Product image and dimensions



XD-LC version 1HU, right out.

Width: 19", Height 1 HU, Depth 280 mm, 290 mm incl. locker



XD-LC version 2HU, right out.

Width: 19", Height 2 HU, Depth 280 mm, 290 mm incl. locker

### **CONTENTS**

| 1  | GENERAL PRODUCT INFORMATION        | 1  |
|----|------------------------------------|----|
| 2  | PRODUCT IMAGE AND DIMENSIONS       |    |
| 3  | GENERAL SAFETY PRECAUTIONS         |    |
|    |                                    |    |
| 4  | INSTALLATION CONDITIONS            |    |
| 5  | TOOLS REQUIRED                     |    |
| 6  | LIST OF ACRONYMS AND ABBREVIATIONS | 2  |
| 7  | KIT CONTENT                        | 3  |
| 8  | MOUNTING POSITIONS                 | 4  |
| 9  | PORT NUMBERING                     | 4  |
| 10 | INSTALLATION                       | 5  |
| 11 | JUMPER PATCH                       | 12 |
| 12 | TRADE-MARKS                        | 14 |
| 13 | CONTACT INFORMATION                | 14 |

## 3 General safety precautions

- Fiber optic cables may be damaged if bent or curved to a radius that is less than the recommended minimum bend radius. Always observe the recommended bend radius limit when installing fiber optic cables and patch cords.
- Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not assume the laser power is turned off or that the fiber is disconnected at the other end.

### 4 Installation conditions

The shelf should be installed at temperature between 0°C and 45°C.

# 5 Tools required

Standard installation and stripping tooling for fiber optic cables. Mini Allen key is provided in the standard MFPS kit.

# 6 List of acronyms and abbreviations

MFPS - Modular Fiber Patch Shelf

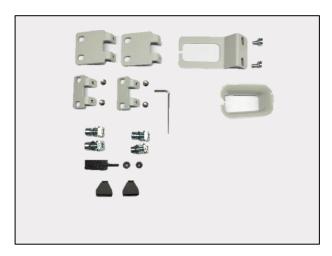
POP - Point Of Presence

CTU-L - Cable Termination Unit - Large FOPT - Fiber optic protection tube

# **7** Kit content

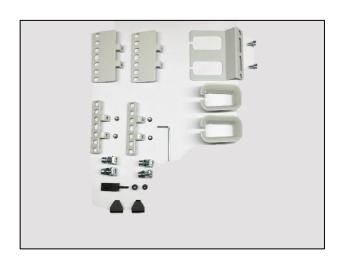
| N° | Description                              |
|----|--|
| 1  | Shelf with front cover, latch and hinges |
| 2  | Pre-installed adapters                   |
| 3  | Pre-installed store basket               |
| 4  | Small Allen key                          |
| 5  | Foam tape(s)                             |
| 6  | M6 screw and cage nuts                   |
| 7  | Jumper guiding trumpet(s)                |
| 8  | Cable/pigtails clips                     |





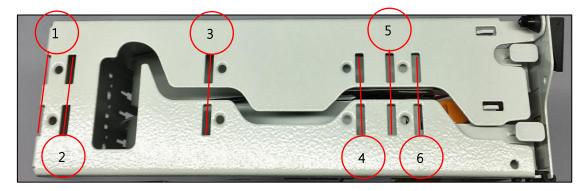
Kit content 1HU version.





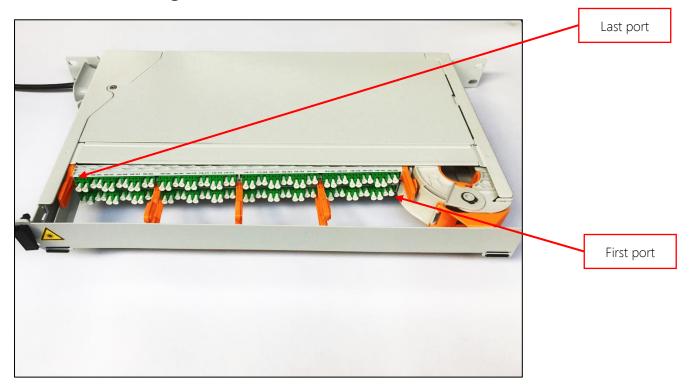
Kit content 2HU version

# 8 Mounting positions



Position 1 - 0 mm from backside Position 4 - 100 mm from frontside
Position 2 - 20 mm from backside Position 5 - 85 mm from frontside
Position 3 - 185 mm from frontside Position 6 - 70 mm from frontside

# 9 Port numbering



9.1.1 MFPS standard port numbering; starting from the **hinge** side, bottom is the first port (right side for a right orientated MFPS version, left side for a left orientated MFPS version). The opposite side on the top is the last port.

## 10 Installation

### 10.1 Front cover & hinges & latch



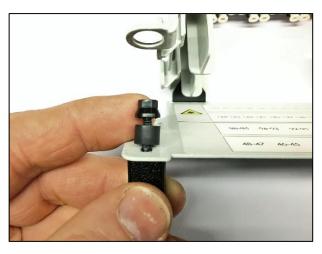
10.1.1 Install the hinge on right side of the shelf by first inserting the narrow end of the hinge into the hinge slot and then snap it into place.



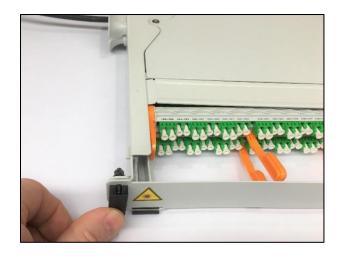
10.1.2 Open the subunit and place the hinge on the left side.



10.1.3 Take the front cover, place it into the slot of the hinges under an angle of 45°, push until the cover is fixed. Repeat on the other side.



10.1.4 Install the latch, bushing and nut as shown in the picture.

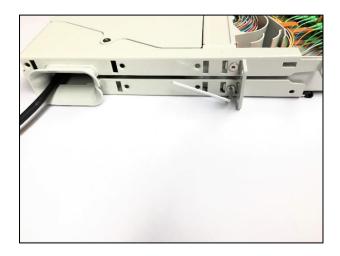


10.1.5 For locking the cover, push the latch down.



10.1.6 Option; to secure the cover together with the panel (when taken of) install a rope between the cover and shelf. (Not included in the standard kit)

## 10.2 Mounting brackets



10.2.1 Select the preferred mounting position. Mount the bracket with the 2 small provided screws. Open the shelf for gaining space to mount the left and or right side.



10.2.2 Example with an ETSI bracket.

### Shelves front mounted:



### Shelves back mounted:





10.2.3 Install trumpets in brackets and install brackets in one of the three possible positions as shown in the pictures.

## 10.3 **Mounting MFPS**



10.3.1 The pre-terminated cable is bundled into 2 parts. Unbundle the first bundle of 3m to make it possible mounting the MFPS shelf and leave the second part bundled.

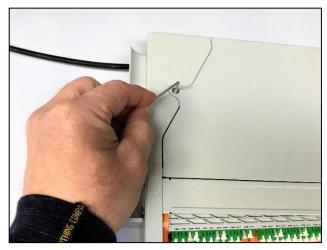


10.3.2 Mount the MFPS shelf into the cabinet.

## 10.4 **Opening & access**

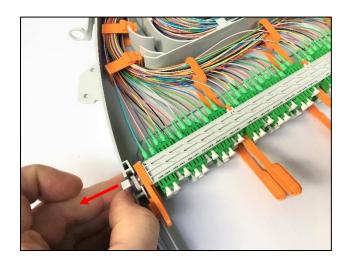


10.4.1 Open one subunit by pressing the locker insides and slide open the subunit.



10.4.2 Top cover can take off by removing the screw.

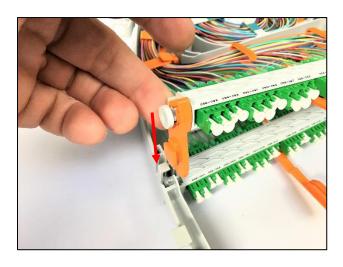
# 10.5 Repair of connector/pigtail



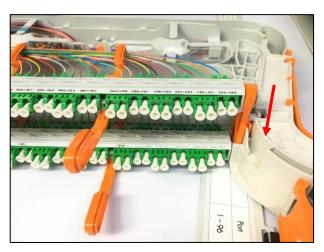
10.5.1 Remove the top row of adapters by pressing the left lip outwards and slide out.



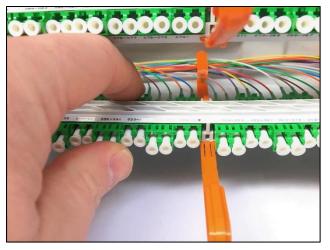
10.5.2 Repeat at the other side.



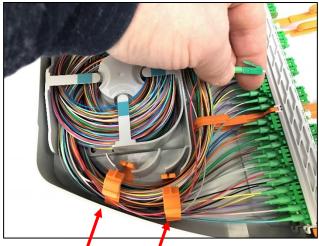
10.5.3 Place the adaptors row into the extended position.



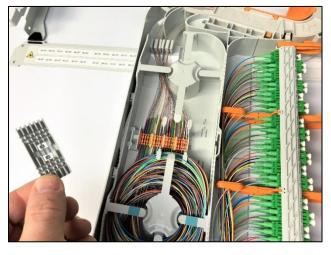
10.5.4 Repeat at the other side.



10.5.5 Take out the damaged connector.

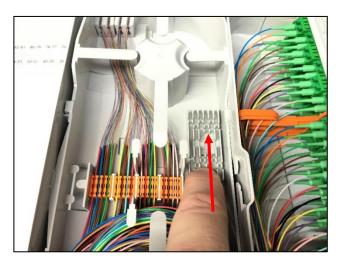


10.5.6 Open the two internal pigtail clips.



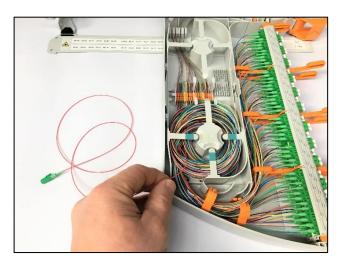
10.5.7 Take a splice holder and push and slide this into place. For a right MFPS; click into the right position (not included in a standard kit).



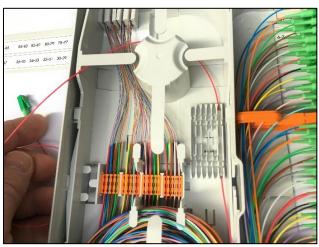


10.5.8 Push down and slide upwards the splice holder until its snaps into place.

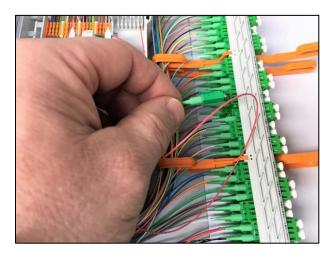
10.5.9 Splice holder is suitable for 12 SMOUVs or 6 ANT



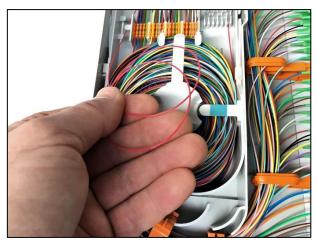
10.5.10 Take out the fiber to gain length and make a splice to a new pigtail.



10.5.11 Route the new pigtail via the bend control towards the adapter.



10.5.12 Place the new connector in the adapter.

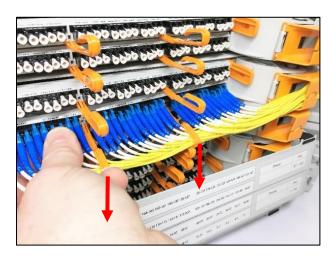


10.5.13 Store the overlength of the new pigtail and close the two internal pigtail clips.

# 11 Jumper patch

#### Note:

- Advised jumper jacket diameter 1.2 mm when MFPS XD version is used and fully populated.
- Advised connector < 30mm boots lengths.



11.1.1 Clean the connectors before making a patch. Route the jumpers via the trumpet and jumper guiding towards the adaptor. To gain more access push the adaptor holders down.

**Note**: When the 1HU version is used, remove the front cover for more access.

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