INSTALLATION INSTRUCTIONS

IDEAA® Mini Interior Distribution Cabinet

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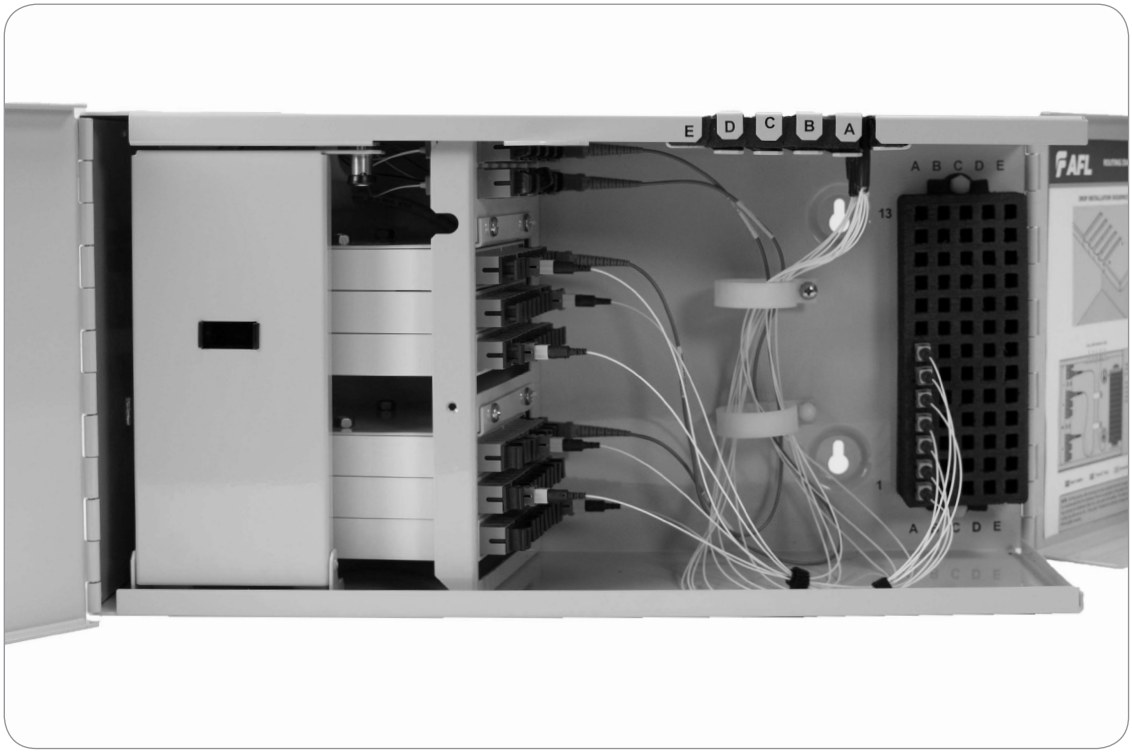
GENERAL

The IDEAA Mini Interior Distribution Cabinet (Mini IDC) provides a convenient and extremely compact modular approach to centralized fiber distribution in small MDUs. The Mini IDC provides up to 64 home run drop output connections using two 1x32 IDEAA Splitter Modules. The Mini IDC utilizes innovative jumper routing and drop strain relief to enable efficient fiber management. Thanks to the adapter interface of the IDEAA splitter module, no additional interconnection is needed between the splitter and drop cables, allowing for MDU splitting and drop fiber distribution in an extremely compact size.

SPECIFICATIONS

Parameter	Value—32/64 Fiber
Splitter Capacity	Up to 2 Modules
Input/Pass Through Ports	12
Dimensions—(H x W x D) in. (cm)	9.25 x 18.00 x 6.25 (23.5 x 45.7 x 15.9)

PACKAGE CONTENTS



A. IDEAA Interior Distribution Cabinet
B. Fiber Input Pigtails
C. Single Fusion Splice Tray

PACKAGE CONTENTS: ACCESSORIES

IDEAA Splitter Module Input Jumpers

SC IDEAA Module – 1 x 32 (Optional)

REQUIRED TOOLS

216 style Socket Tool

Phillips Head Screwdriver

ADD-ON COMPONENTS

SC IDEAA Module – 1 x 32

Compression Fitting Kit

FUSEConnect® Splice-On Connectors

FASTConnect® Mechanical Connector

One-Click SC Cleaner

CABINET MOUNTING

CABINET MOUNTING—WALL MOUNT

1. Using local engineering practices, determine the mounting position of the cabinet on the wall.
2. Mark the two upper mounting points to be pre-drilled for cabinet placement. **(Figure 1)**

Figure 1

3. Using local accepted practices and approved hardware, insert a lag screw into each of the two pre-drilled mounting holes. Screw the lag screws half-way into the wall.

Note: For best practice, it is recommended that the lag screws hex head is wider than the key slots of the cabinet mounts. Also, ensure that the shaft of the screws is smaller than the actual mounting slots for ease of installation.

4. Mount the cabinet over the pre-installed lag screws.

5. Secure the enclosure to the wall by tightening the two lag screws in the top two corners and secure with lag screws in the bottom corners. Before the lag screws are completely tightened a level may be used to ensure that the enclosure is in the desired position.

LOCK AND UNLOCK EXTERIOR DOORS

1. Using a standard 216 style tool, or similar, loosen the screw located on the front of the Mini IDC located on the subscriber door. Do not remove these screws from the cabinet doors. **(Figure 2)**

Figure 2

2. With the subscriber door open, using a standard 216 style tool, or similar, loosen the screw located on the provider side of the cabinet. Do not remove these screws from the cabinet doors. **(Figure 3)**

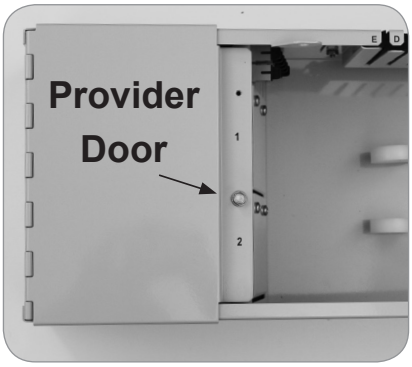


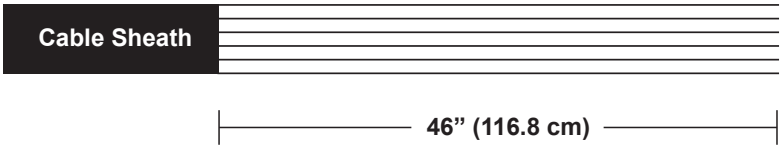
Figure 3

Note: A pad lock, not provided, may be utilized if additional security is desired.

CABLE PREPARATION

Caution: Fiber optic cable is susceptible to damage from excessive bending, pulling or crushing forces. At every stage of the installation process ensure that the loose buffer tubes, ribbon or Wrapping Tube Cable (WTC) with SpiderWeb® Ribbon (SWR®) fibers are free from unintentional cuts, nicks or bends to avoid potential fiber damage.

1. Mark the cable to have a minimum 46" (116.8 cm) opening.
2. Use local accepted practice to remove the cable sheath.
3. Using wire cutters cut the central strength member back to the sheath opening.



Note: For best practice when working with WTC, it is recommended that accepted local practices be used to protect the SWR fiber before continuing to the cable installation.

CABLE INSTALLATION

1. Determine the appropriate compression fitting for the application.
2. Located in the provider side of the cabinet, knock out the appropriate mounting hole to accommodate the compression fitting. **(Figure 4)**

Figure 4

Note: Note: Knock outs are located on both the top and bottom of the Mini IDC.

3. Install the compression fitting, reference the ***Compression Fitting Installation*** section of this document. **(Figure 5)**

Figure 5

4. Using local engineering practices determine which fibers will be unused for the input splicing and separate the bundles from the fibers that will be routed to the splice tray.
5. Route the unused buffer tubes or protected SWR fiber through the fiber management rings located on the back wall of the Mini IDC. **(Figure 6)**

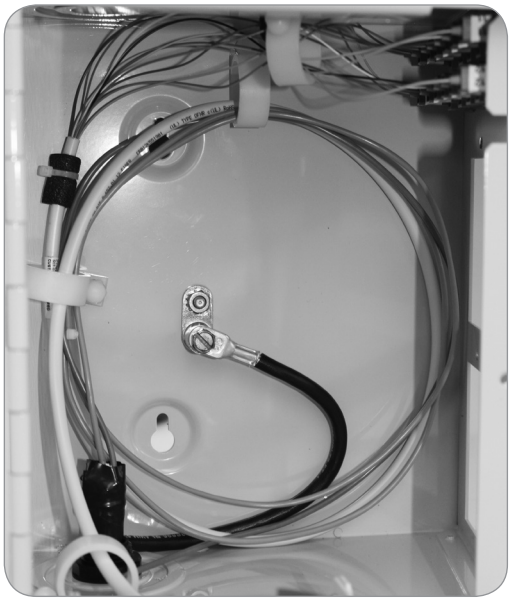


Figure 6

COMPRESSION FITTING INSTALLATION

⚠ **Caution: In order to avoid micro bends or fiber damage do not over-tighten the compression fitting around the fiber cable.**

1. Ensure that the mounting hole is free from burrs and that the cabinet surface is smooth and free of debris.
2. Place the hex portion on the body (not the sealing nut) into the mounting hole.
3. Insert the cable through the fitting to the desired position.

✻ **Note: For best practice, it is recommended that when working with the 9-port compression fitting that the multi-port grommet be removed from the fitting body. Slit each of the application appropriate ports and align the grommet around the cables. Once all required cables are seated in the grommet, insert both the cables and grommet back into the fitting body.**

4. Tighten the sealing nut to hand-tight.
5. Using a wrench hold the body hex stationary while tightening the sealing nut with a second wrench. Tighten until the cable is held securely in place.
6. Check to ensure that the fitting body is still screwed tightly into the panel.

DISASSEMBLE COMPRESSION FITTING—CABLE REPLACEMENT

1. To disassemble for cable replacement, loosen the sealing nut.
2. Grip the disconnected cable and pull while turning the cable in the counter-clockwise direction.

SPLICING

1. Pull down on the pin used to secure the swing down splice tray holder in order to reveal the splice tray. **(Figure 7)**

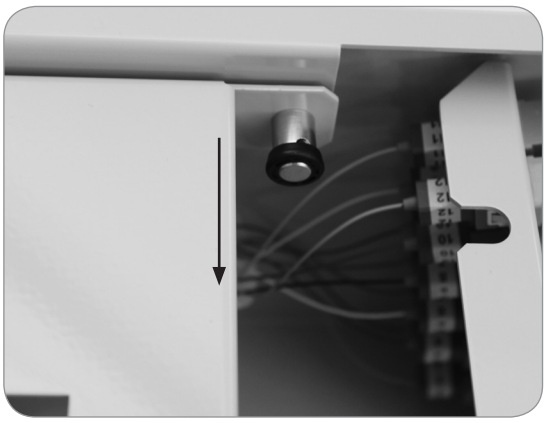


Figure 7

2. Prior to splicing, ensure that adequate slack for both the expressed fiber and the pigtail fiber is stored within the splice tray. Mark fibers for splicing.
3. Clean the individual fiber per accepted local practice using an approved fiber cleaner.
4. Follow accepted local practice for preparing and splicing express fibers and pigtail fibers.
5. Once all splicing is complete, route the exposed fibers inside the splice tray. **(Figure 8)**

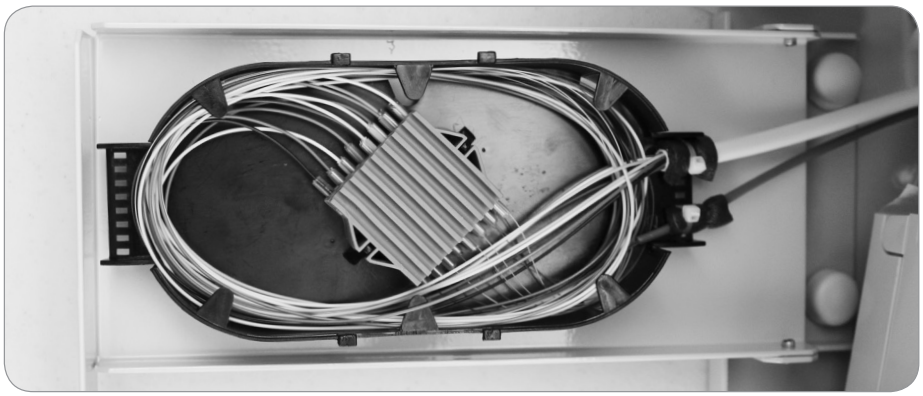


Figure 8

6. Replace the splice tray cover.
7. Route the expressed fiber and the pigtail fiber slack through the fiber management rings located on the back wall of the Mini IDC. **(Figure 6)**
8. Secure the swing down splice tray holder in the upright position ensuring that the pin is engaged.
9. Close the provider door. Using a using a standard 216 style tool, or similar, secure the provider side door.

IDEAA SPLITTER MODULE INSTALLATION

MOUNT IDEAA SPLITTER MODULE

1. Using local engineering practices, determine the location of the IDEAA Splitter Module to be installed within the Mini IDC.
2. Remove the two screws at the top of the cover plate in the desired module location, using a Phillips head screwdriver. **(Figure 10)**

Note: These screws will be re-used to mount the IDEAA Splitter Module into the Mini IDC.

Figure 10

3. Using the hex-head screws provided with the IDEAA Splitter Module, attach the bottom side of the module to the removed cover plate. **(Figure 11)**

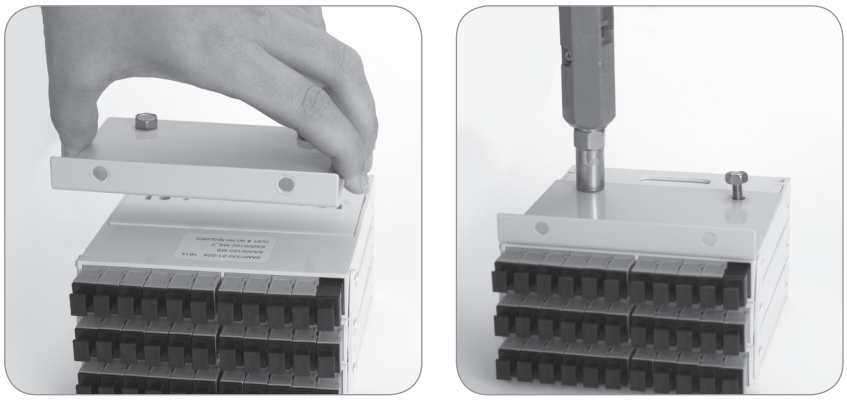


Figure 11

4. Re-mount the cover plate with the attached IDEAA module into the desired location, using the screws removed in Step 2. **(Figure 12)**

Figure 12

5. Repeat Steps 1 – 4 for each IDEAA Splitter Module that needs to be mounted.

ACTIVATE IDEAA SPLITTER MODULE

An IDEAA Splitter Module that has been mounted into the IDC is not active until it has been connected to the Input Field.

⚠ **Caution: When working with fiber optics, do not look directly into the end of the fiber cable or adapter port. A power meter may be used to determine if the cable or port is dark. Or use locally accepted fiber optic safety practices.**

1. Use local accepted practices to clean the connector end face at both ends of the jumper provided with the Mini IDC.
2. Plug the jumper cable into the black input port on the IDEAA Splitter Module.

✳ **Note: When mounted on the cover plate the black input port will be located in the top right corner of the adapter field. (Figure 13)**

Figure 13

3. Using local engineering practices, determine the port to be used on the input panel for activating the IDEAA Splitter Module. Plug the opposite end of the jumper into the desired port on the input panel. **(Figure 14)**

Figure 14

4. Use the fiber routing rings to route the input jumper to the back of the enclosure. **(Figure 15)**

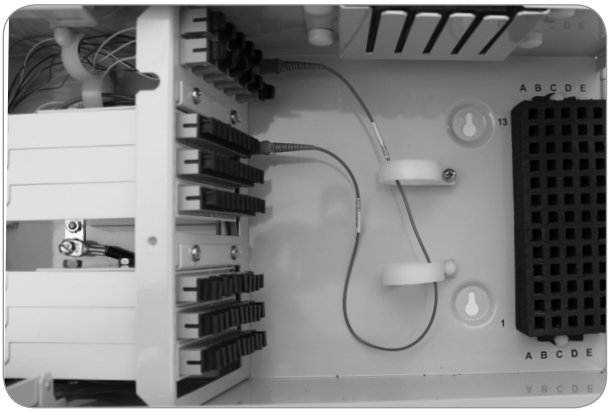


Figure 15

Note: For best practice, avoid looping the input jumper slack through the fiber routing section of the Mini IDC.

5. Use local accepted practices to label the input fiber connection in the appropriate space on the door label, as applicable.

Note: The lance located above the input port on the IDEAA Module cover plate may be used for additional labeling. As an alternative, self-adhesive label may be placed on the cover plate.

6. Repeat Steps 1 – 5 for each IDEAA Splitter Module to be activated.

MDU DROP CABLE INSTALLATION

Caution: Fiber optic cable is susceptible to damage from excessive bending, pulling or crushing forces. At every stage of the installation process ensure that the fibers are free from unintentional cuts, nicks or bends to avoid potential fiber damage.

1. Use local accepted practices to remove the cable sheath.

Recommendation: For best practice no more than 22" (60.0 cm) of 900um fiber be exposed for the MDU drop cable installation process. This length will optimize the routing capability within the Mini IDC and prevent excessive lengths of 900 um fiber from collecting within the cabinet.

2. Insert the 4.8 mm jacket into the MDU drop retention bracket. **(Figure 16)**

Figure 16

3. Slide the 4.8 mm drop cable to the backmost position within the drop retention bracket.

Recommendation: For best practice, install the first MDU drop cable into the backmost position on the right side of the MDU retention bracket. Continue to fill the first slot with (13) MDU drop cables before proceeding to the next cable entry slot. (Figure 17)

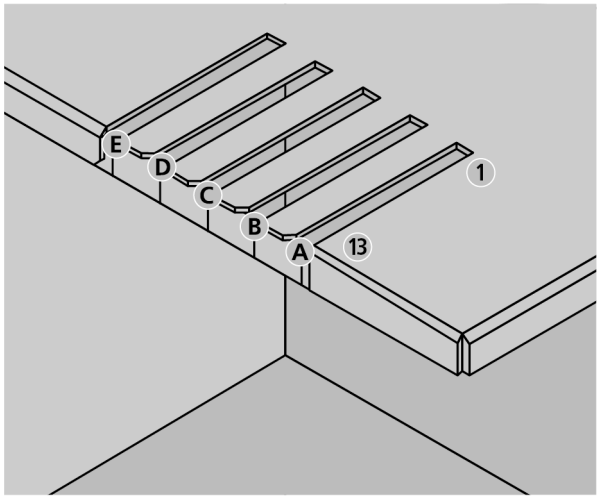


Figure 17

4. Ensure that the exposed 900 um fiber is long enough to reach the desired IDEAA Splitter Module port.
5. Repeat steps 1 – 4 for all desired MDU drop cables.

6. Install FASTConnect® Mechanical Connector. Reference the installation instructions provided with the FASTConnect® Mechanical Connector. The document will include the following:
   - Fiber Preparation
   - Fiber Termination
   - Connector Assembly
7. Use local accepted practices to label the MDU drop fiber.
8. Insert the connector into the connector storage area of the Mini IDC.

Note: DO NOT remove the dust cap from the connector. (Figure 18)

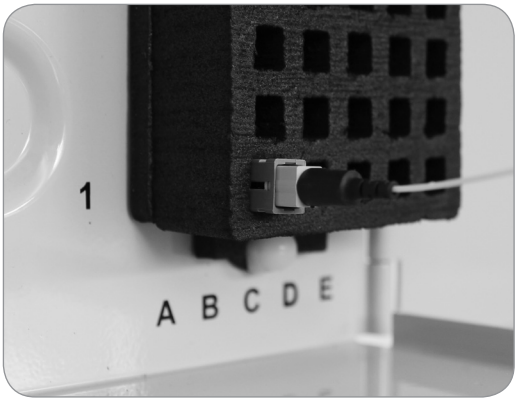


Figure 18

Recommendation: For best practice, insert the first connector into the lower left position on the connector storage area. Continue to fill the first column with (13) MDU drop cable connectors before proceeding to the next column. (Figure 19)

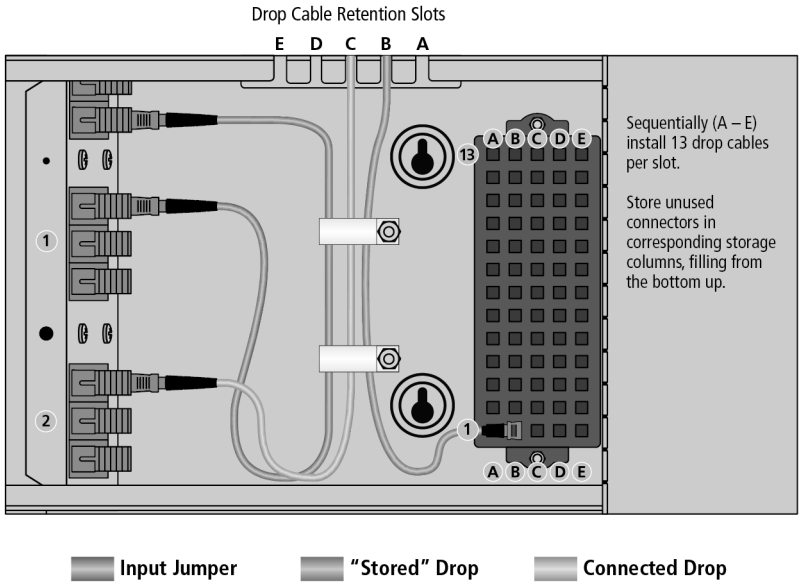


Figure 19

9. Use the fiber routing rings to route the 900 um fiber to the back of the enclosure. **(Figure 20)**

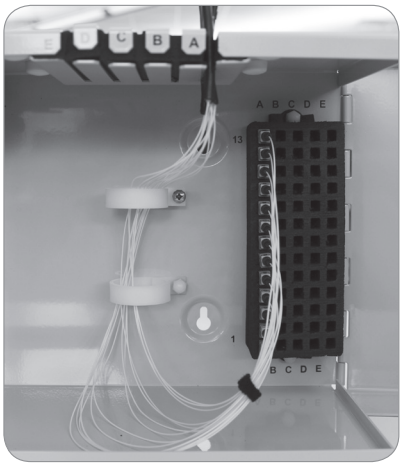


Figure 20

Note: For best practice, avoid looping the fiber slack through the fiber routing section of the Mini IDC.

IDEAA SPLITTER MODULE INSTALLATION
CONNECT DISTRIBUTION FIBER

1. Using local engineering practices, determine which port on the IDEAA Splitter Module will be used for the MDU drop connection.
2. Remove the connector from the connector storage area by pulling on the connector body.

Note: DO NOT pull the boot of the connector to release from the connector storage area.

3. Use local accepted practices to clean the distribution fiber connector end face.
4. Connect the distribution fiber to the appropriate port on the IDEAA Splitter Module. **(Figure 21)**

Figure 21

Note: For best practice, avoid looping the fiber slack through the fiber routing section of the Mini IDC.

5. Use local accepted practices to label the distribution fiber connection in the appropriate space on the door label, as applicable.
6. Repeat Steps 1 – 5 for each addition distribution fiber needing to be connected.

PASS THROUGH CONNECTION

1. Using local engineering practices, determine the appropriate distribution fiber to be used for a pass through connection.
2. Use local accepted practices to clean the distribution fiber connector end face.
3. Connect the distribution fiber to the appropriate port on the input field.
4. Use the fiber routing rings to route the remaining distribution fiber slack through the fiber routing section of the Mini IDC. Employing a similar technique to that used with the input jumper cable.
5. Repeat Steps 1 – 4 for each addition pass through connection.