

COMMSCSPE® Instruction Sheet

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# **High-Density Sliding Fiber Shelf**

#### General

The CommScope high-density sliding fiber shelves come equipped with modular pair trays, fiber management trough, and steel top cover. Shelf will accommodate G2 and InstaPATCH® 360 distribution modules. These shelves are intended for indoor use, but may be used outdoors in a suitable enclosure.

Ordering information is listed below:

Material ID	Part No.	Description
760209940	HD-1U	Modular HD 1U shelf, sliding with door and trough
760209957	HD-2U	Modular HD 2U shelf, sliding with door and trough
760209965	HD-4U	Modular HD 4U shelf, sliding with door and trough



**High-Density Sliding Fiber Shelves** 

## How to Contact Us

- To find out more about CommScope® products, visit us on the web at http://www.commscope.com •
- For technical assistance, use our online interface to filter by problem and location: • http://www.commscope.com/SupportCenter
- To report any missing/damaged parts: within the United States, contact CommScope Customer Claims at • 1-866-539-2795 or email to claims@commscope.com; outside the United States, contact your local account representative or PartnerPRO Network Partner.

# **Tools Required**

Phillips-head screwdriver



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This product is covered by one or more U.S. patents or their foreign equivalents. For patents, see www.commscope.com/ProductPatent/ProductPatent.aspx

## Parts List

Verify parts against the parts list below:

Quantity	Description
1	Shelf assembly
1	Hook-and-loop strip cable retainer kit
4	#12-24 x 1/2-inch screws for 19-inch (483mm) and 23-inch (584mm) rack mounting
4	M6 x 12mm screws for ETSI rack mounting
1	Instruction sheet

#### **Separately Orderable Components**

Material ID	Part No.	Description
760039883	G2-23BRKT	Mounting bracket accessory kit for 23-inch (584mm) rack and ETSI rack

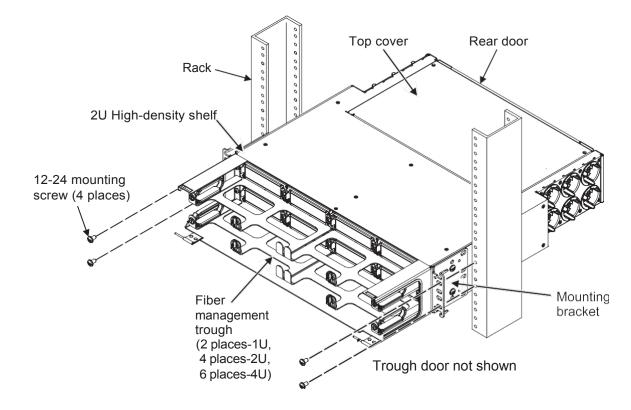
# Important Safety Cautions

- To reduce the risk of fire, electric shock, and injury to persons, read, understand, and adhere to the following instructions as well as any warnings marked on the product.
- Remote risk of electric shock. Never install the product in wet locations or during lightning storms. Never touch uninsulated communication wires or terminals.
- Disconnected optical components may emit invisible optical radiation that can damage your eyes. Never look directly into an optical component that may have a laser coupled to it. Serious and permanent retinal damage is possible. If accidental exposure to laser radiation is suspected, consult a physician for an eye examination.
- Wearing safety glasses during installation of this shelf is recommended. Although standard safety glasses provide no protection from potential optical radiation, they offer protection from accidental airborne hardware and cleaning solvents.

#### Precautions

- Fiber optic trunk cable and jumper performance is sensitive to bending, pulling, and crushing. Minimum bend radius must be maintained during installation per the manufacturer's specification. Appropriate pulling grips must be used during installation, and pulling forces shall not exceed manufacturer's recommendations. Use caution to avoid kinking trunk cables.
- All wiring that connects to this equipment must meet applicable local and national building codes and network wiring standards for communication cable.
- **IMPORTANT**: Dust covers are installed in the ports to protect the fibers connected to the back of the ports. Do not remove a dust cover from a port until you connect a patch cord to that port. If you remove a patch cord later, replace dust cover in the port.
- Prior to installation, clean the trunk cable and jumper connectors per the manufacturer's recommendations.
- Isopropyl alcohol is flammable, and can cause eye irritation on contact. If eye contact occurs, flush with water for at least 15 minutes. In case of ingestion, consult a physician. Use only in well ventilated areas.
- Care should be taken not to compromise the stability of the rack by installation of this equipment.
- To be installed in restricted access areas only.

## Step 1 – Mount Shelf to Rack



- 1. Determine the rack size and desired mounting location.
  - For 19-inch (483mm) rack Mount shelf to rack using the pre-installed mounting brackets and four #12-24 x 1/2-inch screws (provided) as shown.
  - For a 23-inch (584mm) rack, use the G2-23BRKT accessory kit (ordered separately) and install conversion brackets on each side of shelf using four 10-32 screws included in the kit. Mount shelf to rack using four 12-24 screws provided.

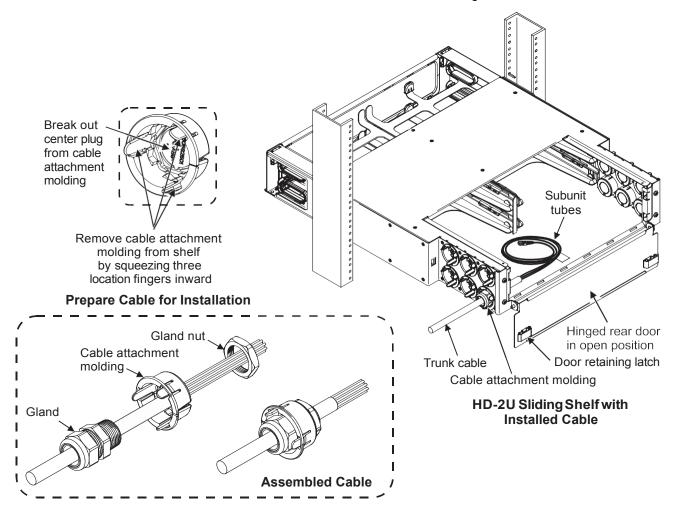
**Note:** 1 accessory kit is required for a 1U shelf, 2 accessory kits used for a 2U shelf and 4 accessory kits for a 4U shelf.

 For an ETSI rack, use the G2-23BRKT accessory kit (ordered separately) and install one conversion bracket on one side of shelf using two of the four 10-32 screws included in the kit. Mount shelf to rack using four M6 x 12mm screws (provided). The shelf will not be centered in the rack.

**Note:** 1 accessory kit can be used for two 1U shelves, 1 accessory kit to be used for a 2U shelf and 2 accessory kits for a 4U shelf.

#### Step 2 – Attach Fiber Trunk Cable to Shelf

**Note:** This shelf is designed for direct connection of fiber cables using cable glands inserted into cable attachment moldings provided. Another method for securing fiber cables is the use of optional rack mounted brackets, which is not covered here. See instruction sheet 860380781 for using rack mounted brackets.



#### **Cable Assembly**

- 1. Open rear door.
- 2. Slide top cover back to remove cover for access to cable routing.

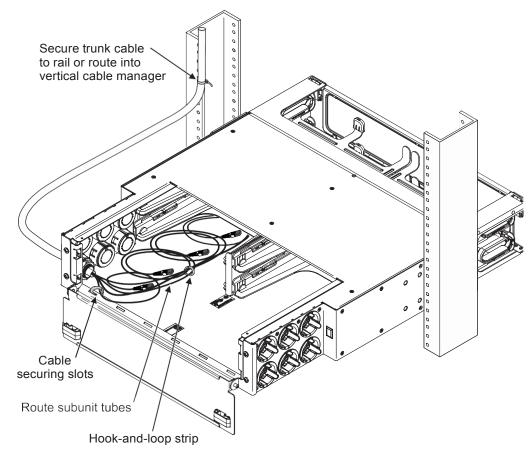
**Note:** HD-1U shelf top/rear cover is a one piece unit and slides off when the retaining latches are depressed.

3. Remove cable attachment molding from shelf as shown.

**Note:** Number of moldings is specific to shelf size. 1U shelf is equipped with six cable attachment moldings, 2U has twelve and 4U has twenty four cable attachment moldings.

- 4. Break out center plug from cable attachment molding as shown above.
- 5. Remove gland nut from cable gland.
- 6. Slide cable attachment molding onto cable and secure threaded gland nut to hold molding in place as shown.

## Step 3 – Route and Secure Trunk Cable



1. Feed cable assembly through cable attachment opening on side of shelf from outside of side wall and push until the assembly is seated.

Note: Fiber cables may enter shelf from right side and left side of shelf.

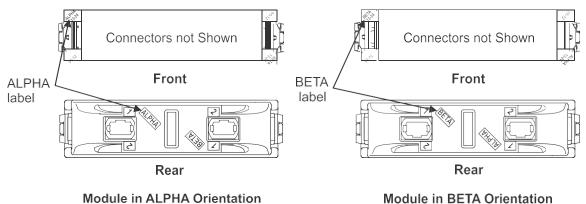
- 2. Loosely secure trunk cable to equipment rack upright approximately 3 inches (76mm) above or below shelf using cable ties. Leave approximately 48 inches (2.1m) length of cable/subunit tubes to route into shelf.
- 3. Loop subunit tubes inside shelf as shown or according to local practices. Secure loose fibers together using the provided hook-and-loop strips.

Caution: Do not exceed minimum bend radius of fiber.

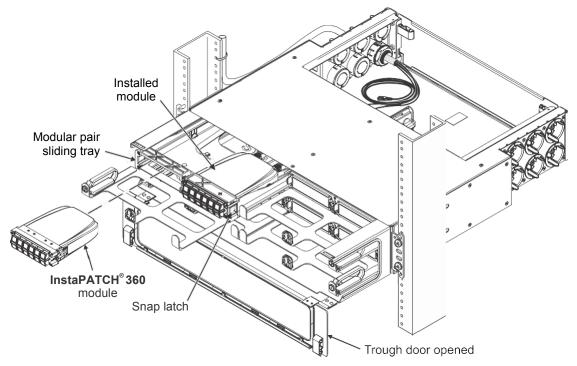
- 4. Fiber cable may be loosely secured to rear of shelf in slots provided using the additional hook-and-loop strips. Do not attach fiber bundles to floor of chassis.
- 5. Temporarily store slack subunit tubes on floor of chassis.

## Step 4 – Orient the InstaPATCH 360 Modules

**Note:** If the fiber shelf is shipped populated with **InstaPATCH 360** modules, they will all be installed in the ALPHA orientation. The **InstaPATCH 360** modules must be oriented for the proper polarity. Identical modules are used at each end of a trunk cable, but one module must be in the ALPHA orientation and the other module must be in the BETA orientation.







1. CommScope HD fiber shelves have two modular pair trays per row. Modular pair trays slide to the front of the shelf separately as shown.

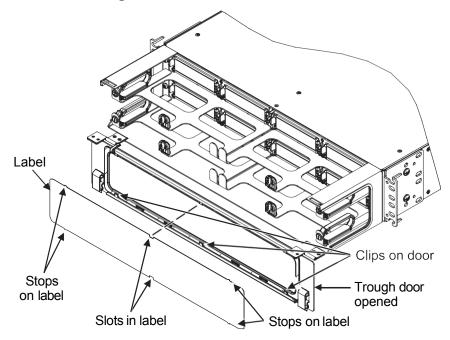
Note: Trays slide until reaching stop to prevent them from sliding out. Do not continue to pull tray past stop.

2. Install **InstaPATCH 360** modules in modular pair trays. Verify that latches on either side of module snap into tray opening with an audible click.

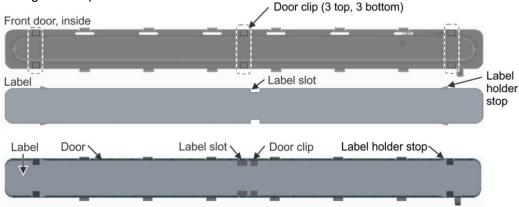
**Note**: Remove a module by using a small flat blade screwdriver to depress inner-most latch for release from modular pair tray position.

3. Pull subunit tubes with connectors through openings in front of shelf and plug MPO connectors into module.

## Step 6 – Install Label on Trough Door



- 1. The door may be fitted with labels visible through the door window when closed or may be visible when the door is opened.
- 2. Open door to 180°.
- 3. Align slots in label with center clips on door. Slide label to drop beneath center clips.
- 4. Slide label to one side to settle end under clips on end of door. Small stops on either end resist label sliding past door edge.
- 5. Bend label to slide end under clips on other end of door. Label locks into place when positioned under clips and pushed against stops.



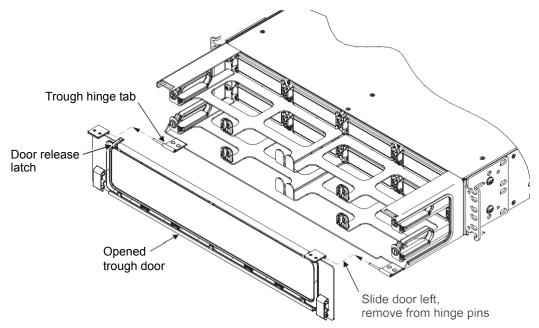
Slide label until slot clears door clip and locks label in place.

#### Install Label on 1U Trough Door

6. Printable label templates are available on the **CommScope**<sup>®</sup> website, which can be used along with available label stock to create finished port numbering labels.

**Note:** To print a designation label, go to <u>http://www.commscope.com/Resources/Labeling-Templates</u>, scroll down to the High-Density Fiber Shelf and select the appropriate label template.

## Step 7 – Remove Front Door (Optional)



- 1. Pull down on both door retaining latches and pull door forward to open.
- 2. Open door 180° as shown.
- 3. Pull up on door release latch and while holding it up to clear hinge, slide door to the left as shown to remove from hinge pins.
- 4. To re-install door, orient door open at 180°, place door release latch over trough hinge tab while sliding both door hinge tabs back over trough hinge pins.

# Step 8 – Fiber Management Trough Removal (Optional)

- 1. Using a screwdriver or similar tool, depress latching feature located on center support behind sliding tray module openings as shown.
- 2. Hold tray still while pulling the trough forward until it releases from sliding tray.

