COMMSCOPE®

FTTX Solutions
Outdoor FDH 3000

2015 PRODUCT CATALOG | 2ND EDITION

CommScope's FTTX infrastructure solutions are designed from the ground up to meet the unique requirements of FTTX networks. Designed for operational efficiency and scalability, CommScope's FTTX solutions simplify network installation, maintenance and management from the central office/head end to the outside plant.

The FDH 3000 is designed to meet and serve the distinct needs of diverse markets and customer segments. The unique design of the FDH 3000 provides for rapid connection between fiber optic cables and passive optical splitters in the outside plant segment of the network, facilitating fast service connection and reconfiguration, simplified network installations and improved installation efficiencies in the field.

Features and Benefits

Unique Design to Meet Diverse Customer Requirements

Scalable models from 12 to 864 distribution ports are available to support both low and high density networks. Multiple cabinet designs accommodate nearly any network application.

Flexible and Modular

Standardized splitter modules and growth panels for all FDH 3000 cabinets

Easy to Order

Streamlined configurations simplify the process

Incorporates CommScope Quality and Innovation

CommScope is a high quality, industry-leading brand you can rely on to future-proof your network, with a complete portfolio of FTTX products to ensure seamless deployment and maintenance over the life of the network

The FDH 3000 incorporates four time-tested elements that have long impacted reliability, flexibility and operational costs within the in fiber networks:

- Bend radius protection

- Intuitive cable routing

- Easy fiber/connector access

- Physical protection
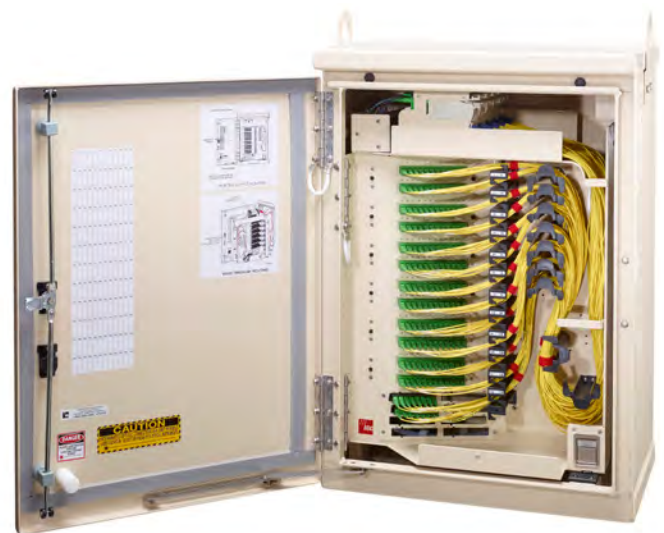
CommScope-the innovation leader with over 35 patented and pending patent applications

Features and Benefits

- Unique "swing-out frame" design allows for easy maintenance and access to back of distribution panels and cables. Allows for easy maintenance and access to back of distribution panels and cables

- Industry-leading splitter capacity

- Three-point latch provides weather-tight seal of cabinet

- Angled bulkhead panels eliminate 90° bends and assist technicians with cable routing

- Integrated slack storage spools allow for storage of excess fiber while providing positive bend radius control

- Parking lots hold and protect fiber splitter outputs until needed for service

- In-hub distribution splicing option incorporates splicing of distribution cables within the cabinet
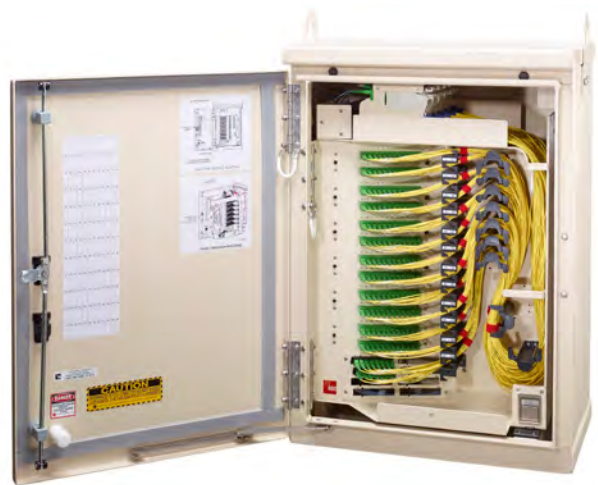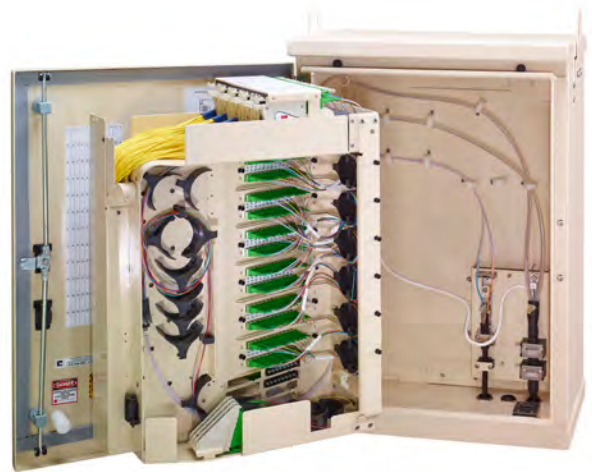
Features and Benefits

- Allows for standardized splitter modules and accessories across all FDH 3000 cabinets

- Common "plug-and-play" splitter module with common output length

- Supports diverse splitter module configurations:
  1x32, 2x32, 1x16, 1x64, dual 1x16, 1x8,
  dual 1x8, 1x4, dual 1x4, 1x2, dual 1x2

- Craft friendly splitter module design: easy to insert and remove without affecting adjacent splitters

- Intelligent, easy to use cable routing schemes

- Allows for true plug and play functionality

Features and Benefits

- Discrete ground and cable location access

- Allows for locating wires without entry into the cabinet

Features and Benefits

- Re-skinnable casing design

- Allows replacement of cabinet shell without a break in customer service

Product Line Overview

Outdoor FDH 3000 Cabinets are available in three application types

- Ground Mount with 100' Stubs

- Pole Mount with 100' Stubs

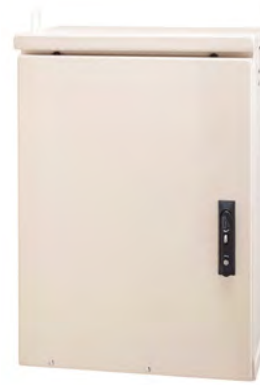- Ground Mount with In-Hub Feeder/Distribution Splicing

All FDH 3000 Cabinets include superior features such as a swing frame, plug and play splitter chassis and dust cap friendly parking lots.

Ground Mount FDH 3000 Cabinets

Ground Mount FDH 3000 Cabinets are designed to be installed over a hand hole or concrete pad. All four sizes of ground mount cabinets include 100' feeder and distribution stub cables that exit downward through the base of the cabinet. Each ground mount cabinet is shipped with a factory installed 6" riser attached to the cabinet bottom. A kit is available to attach some configurations of ground mount FDH 3000 cabinet to a pole. Contact CommScope technical assistance center for ordering details.

Pole Mount FDH 3000 Cabinets

Pole Mount FDH 3000 Cabinets are designed for overhead/aerial cable plant installations and are available in extra small, small and medium cabinet sizes. All three sizes of pole mount cabinets include 100' feeder and distribution stub cables that exit from underneath.

Ground Mount Small 288 Configuration Shown

Rear View Pole Small
288 with Bottom Cable Entry Configuration

Rear View Pole Mount Medium
432 with top cable

FDH 3000 Cabinets with In-Hub Distribution Splicing Option

Ground Mount FDH 3000 Cabinets are designed to be installed over a hand hole or concrete pad and integrate the ability to splice both feeder and distribution cables within the cabinet. This product offers design flexibility for applications where a hand hole for stub cable splicing is not available or desirable. In-Hub Distribution Splicing Cabinets are available in extra small, small and medium cabinet sizes, and are shipped with a factory installed 6" riser attached to the cabinet bottom.

Inside the FDH
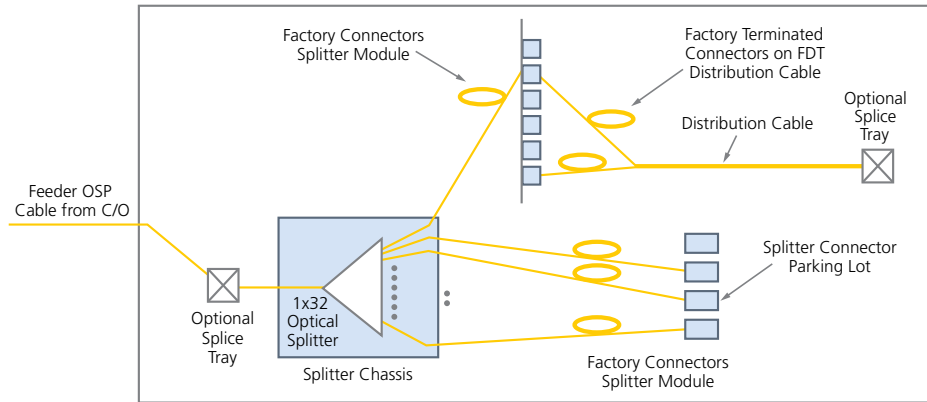
Ground Mount Small 288 Configuration with In-Hub Distribution Cable Splicing

FDH 3000 at a glance

	Cabinet	Size (HxWxD)	Unit Weight*	Access	Mounting Options	Splitter Slots	Pass Through Fibers	Cable Exit Location
Ground Mount	Extra Small (24-144)	36" x 21" x 14" (91.4 x 53.3 x 35.6 cm)	120 lbs (54.5 kg)	All Front	Ground	18	18	Bottom
	Small (72-288)	36" x 27" x 18" (91.4 x 68.58 x 45.72 cm)	140 lbs (63.5 kg)	All Front	Ground	24	36	Bottom
	Medium (72-432)	42" x 27" x 18" (106.68 x 68.58 x 45.72 cm)	225 lbs (102 kg)	All Front	Ground	30	36	Bottom
	Large (72-864)	49" x 47" x 20" (124.5 x 119.4 x 50.8 cm)	340 lbs (154 kg)	All Front	Ground	48	72	Bottom
Pole Mount	Extra Small	30" x 21" x 14" (76.2 x 53.3 x 35.6 cm)	115 lbs (52 kg)	All Front	Pole	18	18	Top or bottom
	Small	30" x 27" x 18" (76.2 x 68.58 x 45.72 cm)	130 lbs (59 kg)	All Front	Pole	24	36	Top or bottom
	Medium	36" x 27" x 18" (91.4 x 68.58 x 45.72 cm)	295 lbs (134 kg)	All Front	Pole	30	36	Top or bottom
In-Hub Splice	Extra Small	36" x 21" x 14" (91.4 x 53.3 x 35.6 cm)	130 lbs (59 kg)	All Front	Ground	18	18	Bottom
	Small	36" x 27" x 18" (91.4 x 68.58 x 45.72 cm)	105 lbs (60 kg)	All Front	Ground	24	36	Bottom
	Medium	42" x 27" x 18" (106.68 x 68.58 x 45.72 cm)	225 lbs (102 kg)	All Front	Ground	30	36	Bottom

* Approximate weight. Actual weight will vary based on selected options.

Mini Plug-and-play Splitter Modules

The FDH 3000 utilizes a Mini Plug-and-play Splitter Module which is common to all of the cabinets and features a common output length. This module allows for true plug-and-play functionality.

- Standardized splitter modules for all cabinet sizes

- Features bend-optimized fiber and ruggedized extreme temperature cabling rated for material handling in cold temperatures and superior loss performance at 1490 and 1550 nm wavelengths

- Rated from -55° C to 85° C

- Allows pass-through of up to 2 fibers per splitter set

- Splitters are easy to insert and remove without affecting adjacent splitters

- Reversible dust cap makes test and turn-up easy

- Wide band pass 1260-1635 nm to ensure optical performance for all applications

Feeder Pass-Thru Feature

Splitter types supported with specifications

Standard	Max Loss*	Typical Loss*	Uniformity	Return Loss	Directivity	PDL
1x2	3.7 dB	3.1 dB	0.8 dB	≥55 dB	≥55 dB	0.3 dB
1x4	7.2 dB	6.2 dB	0.8 dB	≥55 dB	≥60 dB	0.2 dB
1x8	10.7 dB	9.8 dB	1.0 dB	≥55 dB	≥60 dB	0.2 dB
1x16	13.5 dB	13.2 dB	1.5 dB	≥55 dB	≥60 dB	0.3 dB
1x32	16.7 dB	16.5 dB	1.5 dB	≥55 dB	≥60 dB	0.3 dB
1x64	20.4 dB	19.7 dB	2.0 dB	≥55 dB	≥60 dB	0.4 dB
2x16	14.7 dB	13.0 dB	2.0 dB	≥55 dB	≥60 dB	0.4 dB
2x32	17.9 dB	16.3 dB	2.5 dB	≥55 dB	≥60 dB	0.4 dB

* Does not include connector loss

Ordering Information

FPS - MPP1 X X X

Splitter Type

A	1x32	N	1x4
C	1x16	O	2x4
G	2x32	P	2x16
J	1x8	S	Single 1x64
K	2x8	U	Dual 1x4
L	Dual 1x8	W	1x2
M	Dual 1x16	X	Dual 1x2

Output Connector Style

N	SC ultra polish
J	SC angled polish

Input Connector Style

N	SC ultra polish
J	SC angled polish

All shaded configuration options are lead configurations and have best delivery dates.
Additional options are available, please contact the CommScope Technical Assistance Center.

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For more information, visit **commscope.com**

Ordering Information

FD3 - A X X X X X X X X X X X X

Cabinet Size

C	144 cabinet
E	288 cabinet
G	432 cabinet

Distribution Fiber Panel Loaded

024	24 Fibers	216	216 Fibers
048	48 Fibers	288	288 Fibers
072	72 Fibers	360	360 Fibers
096	96 Fibers	432	432 Fibers
144	144 Fibers		

Adapters/Connector Type

Singlemode	
N	SC/UPC
J	SC/APC

Number of Splitter Modules

0	No splitter modules
1	1 splitter module
2	2 splitter modules

Splitter Type Loaded

0	No splitter
A	(1x32)
C	(1x16)
G	(2x32)
J	(1x8)
L	(Dual 1x8)
M	(Dual 1x16)
N	(1x4)
P	(2x16)
S	(1x64)
U	(Dual 1x4)
W	(1x2)
X	(Dual 1x2)

Feeder/Distribution Cable Type*

G	Single armor loose tube
J	Dielectric loose tube
L	Armored ribbon
M	Ribbon pigtails
T	Dielectric ribbon
D	Dry-dry dielectric ribbon
N	Dry arm LT for feeder. Dry arm ribbon for dist.
P	Dry-dry armored ribbon

Mounting

N	Ground mount
-P	Pole mount top entry
-B	Pole mount bottom entry

Feeder Cable Size*

1	12 Fibers
2	24 Fibers
4	48 Fibers
7	72 Fibers

Splitter Style

2	Heat shrink fusion splice
M	Mechanical splice
P	Plug and play
O	None

Feeder/Distribution Cable Stub Length

A	25 feet
B	100 feet
D	200 feet
E	350 feet
H	10 feet
O	Splice

Distribution Cable Configuration*

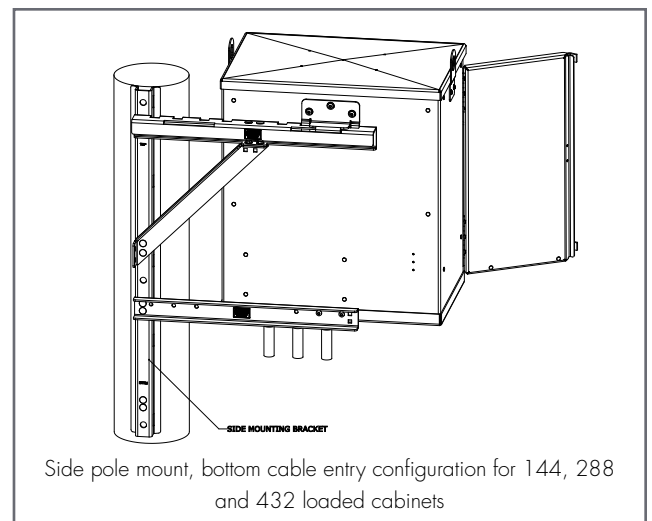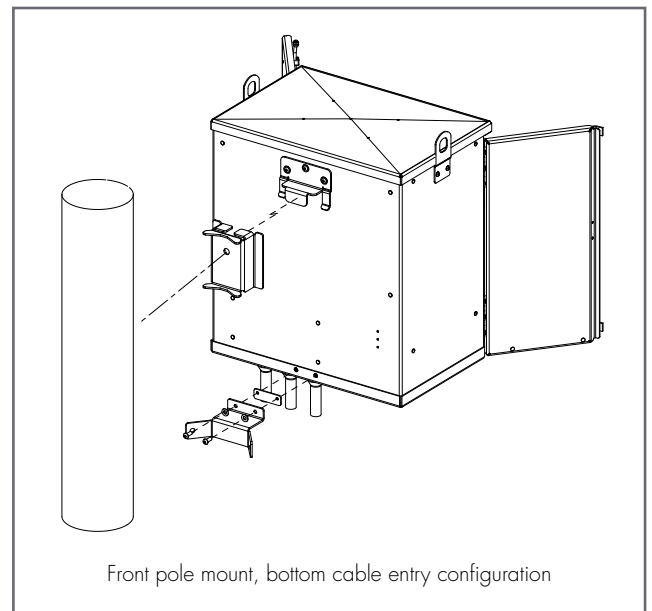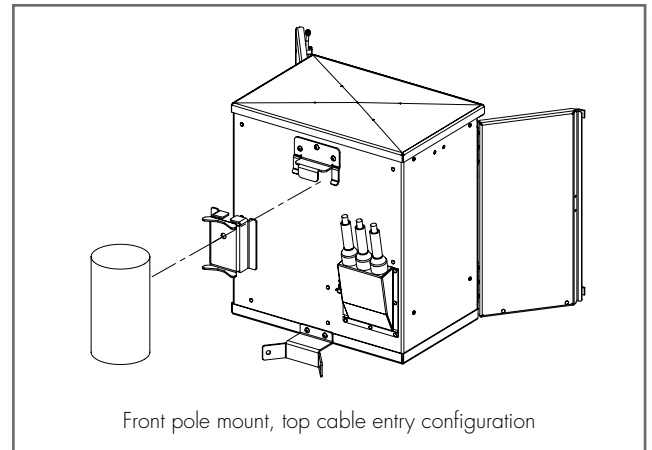| A	All 72 fiber stubs
B	All 144 fiber stubs
C	All 216 fiber stubs
F	All 432 fiber stubs
G	All 288 fiber stubs
J	All 48 fiber stubs
K	All 96 fiber stubs

* Some configuration options are not available.

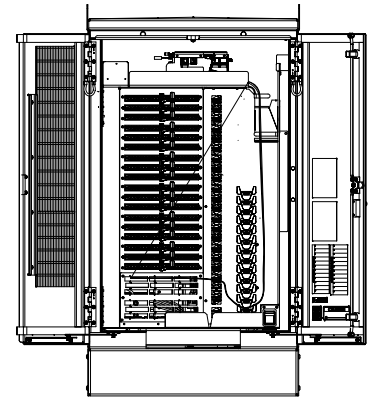## Pole Mount Configurations

Features

- All front access

- Maximum of two distribution cables allowed

- Available in extra small, small and medium cabinet sizes

- Cabinet Dimensions

    - FD3-ACxxxxx: 30"(H) x 21"(W) x 14"(D)

    - FD3-AExxxxx: 30"(H) x 27"(W) x 18"(D)

    - FD3-AGxxxxx: 36"(H) x 27"(W) x 18"(D)

Front pole mount, top cable entry configuration

Front pole mount, bottom cable entry configuration

SIDE MOUNTING BRACKET

Side pole mount, bottom cable entry configuration for 144, 288 and 432 loaded cabinets

Large Ground Mount Cabinet (72-864 Fibers)

FD3 - AJ X X X X X X X X X

Distribution Fiber Panel Loaded

072	72 Fibers	432	432 Fibers
096	96 Fibers	504	504 Fibers
144	144 Fibers	576	576 Fibers
216	216 Fibers	648	648 Fibers
288	288 Fibers	720	720 Fibers
360	360 Fibers	864	864 Fibers

Adapters/Connector Type

Singlemode	
N	SC/UPC
J	SC/APC

Number of Splitter Modules

0	No splitter modules
1	1 splitter module
2	2 splitter modules

Splitter Type Loaded

0	No splitters
A	(1x32)
C	(1x16)
G	(2x32)
J	(1x8)
L	(Dual 1x8)
M	(Dual 1x16)
N	(1x4)
P	(2x16)
S	(1x64)
U	(Dual 1x4)
W	1x2
X	Dual 1x2

Feeder/Distribution Cable Type*

G	Single armor loose tube
J	Dielectric loose tube
L	Armored ribbon
M	Ribbon pigtails
T	Dielectric ribbon
D	Dry-dry dielectric ribbon
N	Dry arm LT for feeder. Dry arm ribbon for dist.
P	Dry-dry armored ribbon

Feeder Cable Size

0	None
1	12 Fibers
2	24 Fibers
3	36 Fibers
4	48 Fibers
7	72 Fibers
8	96 Fibers
9	144 Fibers

Splitter Style

P	Plug and play

Feeder/Distribution Cable Stub Length*

B	100 feet
D	200 feet
E	350 feet
H	10 feet

Distribution Cable Configuration*

A	All 72 fiber stubs
B	All 144 fiber stubs
C	All 216 fiber stubs
D	All 144 fiber stubs, except 1-72 if 216 or 360, 2-72 if 288 or 432 fiber
F	All 432 fiber stubs
G	All 288 fiber stubs

* Some configuration options are not available

In-Hub Distribution Splicing Configurations

FD3 - A X X X X X X X X X X X

Cabinet Size

C	144 cabinet
E	288 cabinet
G	432 cabinet

Distribution Fiber Panel Loaded

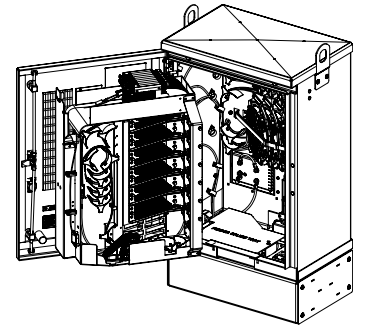|			
024	24 Fibers	216	216 Fibers
048	48 Fibers	288	288 Fibers
072	72 Fibers	360	360 Fibers
096	96 Fibers	432	432 Fibers
144	144 Fibers		

Adapters/Connector Type

Singlemode	
N	SC/UPC
J	SC/APC

Number of Splitter Modules

0	No splitter modules
1	1 splitter module
2	2 splitter modules

Splitter Type Loaded

0	No splitter
A	(1x32)
C	(1x16)
G	(2x32)
J	(1x8)
L	(Dual 1x8)
M	(Dual 1x16)
N	(1x4)
P	(2x16)
S	(1x64)
U	(Dual 1x4)
W	1x2
X	Dual 1x2

Feeder Cable Size

0	None
1	12 Fibers
2	24 Fibers
3	36 Fibers
4	48 Fibers
7	72 Fibers
9	144 Fibers

Splitter Style

2	Heat shrink fusion splice
M	Mechanical splice
P	Plug and play
O	None

Feeder/Distribution Cable Stub Length*

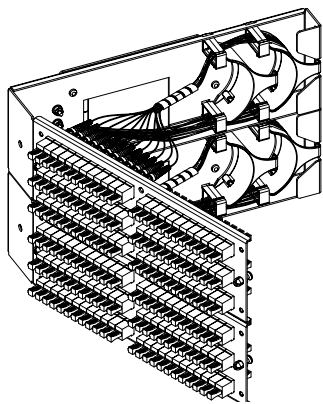|	
A	25 feet
B	100 feet
D	200 feet
E	350 feet
H	10 feet
O	Splice

Distribution Cable Configuration

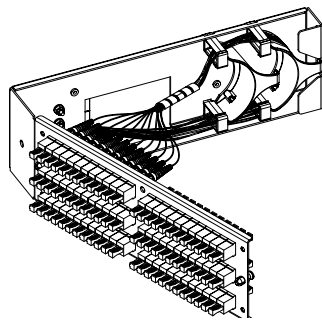|	
M	Mechanical fusion splice
2	Heat shrink fusion splice

Feeder Distribution Cable Type*

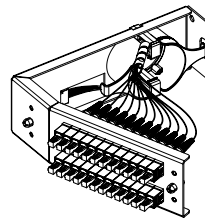|	
T	Dielectric ribbon
U	Loose tube pigtails

* Some configuration options are not available.

| 144 Fiber Panel | 72 Fiber Panel | 24 Fiber Panel |

Growth Panel Options

For adding distribution panels to existing partially loaded small, medium and large* cabinets

Ordering Information

Description	Catalog Number
Single Armor Loose Tube 72 position APC SC with 100' stub	FD3MOD-072JGAB
Dielectric Loose Tube 72 position APC SC with 100' stub	FD3MOD-072JJAB
Single Armor Ribbon 72 position APC SC with 100' stub	FD3MOD-072JLAB
Dielectric Ribbon 72 position APC SC with 100' stub	FD3MOD-072JTAB
Single Armor Loose Tube 144 position APC SC with 100' stub	FD3MOD-144JGBB
Dielectric Loose Tube 144 position APC SC with 100' stub	FD3MOD-144JJBB
Single Armor Ribbon 144 position APC SC with 100' stub	FD3MOD-144JLBB
Dielectric Ribbon 144 position APC SC with 100' stub	FD3MOD-144JTBB

*Growth panels available for right side swing frame only
For adding distribution panels to existing partially loaded extra small cabinets
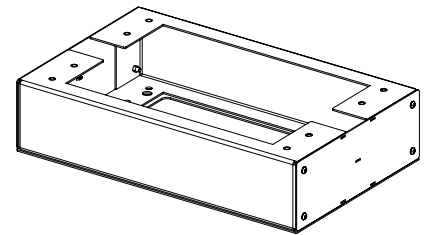
Ordering Information

Description	Catalog Number
Single Armor Loose Tube 24 position APC SC with 100' stub	FD3MOD-024JGHB
Dielectric Loose Tube 24 position APC SC with 100' stub	FD3MOD-024JJHB
Single Armor Ribbon 24 position APC SC with 100' stub	FD3MOD-024JLHB
Dielectric Ribbon 24 position APC SC with 100' stub	FD3MOD-024JTHB

## Risers for Ground Mount Style Cabinets

Including in-hub splice option cabinets. Note: All Ground Mount FDH 3000 cabinets ship with one riser

Ordering Information

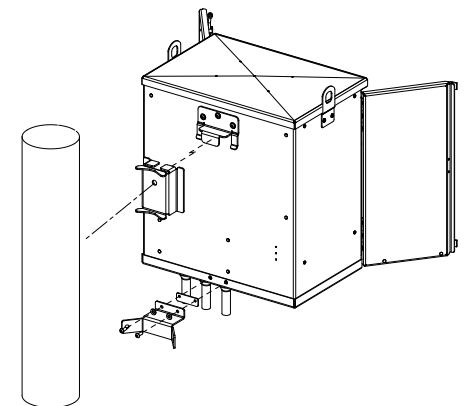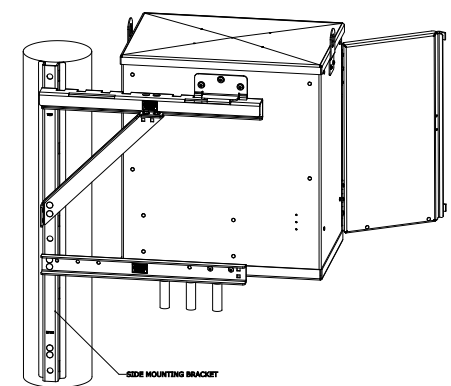| Description	Catalog Number
6" ground spacer/riser for extra small (24-144 fibers) cabinets Raises cabinet an additional 6"	FD3-RSRC06
6" ground spacer/riser for small (72-288 fibers) and medium (72-432 fibers) cabinets Raises cabinet an additional 6"	FD3-RSRE06
6" ground spacer/riser for large (72-864 fibers) cabinets Raises cabinet an additional 6"	FD3-RSRJ06

6" Split Spacer/Riser
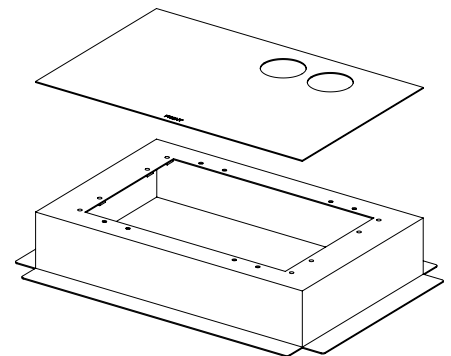
Pad Mount Frames
Ordering Information

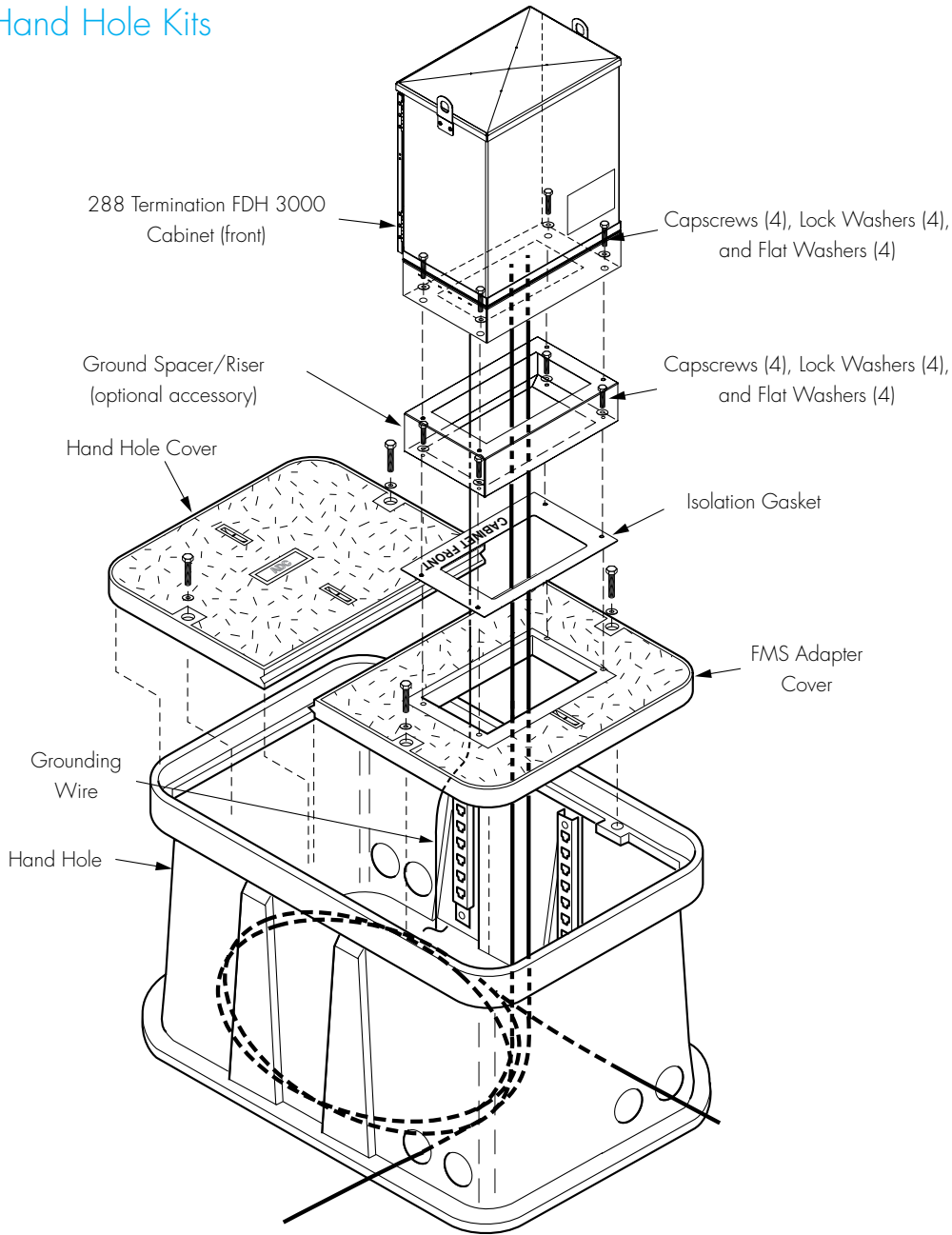| Description	Catalog Number
Extra small (24-144 fibers) pad mount frame	FD3-PMFC06
Small (72-288 fibers) and medium (72-432 fibers) pad mount frame	FD3-PMFE06
Large (72-864 fibers) pad mount frame	FD3-PMFJ06

Kit Pad Mount Frame

Pole Mount Accessories
Ordering Information

Description	Catalog Number
Front mount bracket	FD3-ACC144PMK-GTV
	FD3-ACC288PMK-GTV
Side mount bracket (144-432 models)	FD3-ACCUNVSMB

Front Mount bracket

Side Mount bracket

Hand Hole Kits

288 Termination FDH 3000 Cabinet (front)

Capscrews (4), Lock Washers (4), and Flat Washers (4)

Ground Spacer/Riser (optional accessory)

Capscrews (4), Lock Washers (4), and Flat Washers (4)

Hand Hole Cover

Isolation Gasket

CABINET FRONT

FMS Adapter Cover

Grounding Wire

Hand Hole

Ordering Information

Description	Catalog Number
30" x 60" Hand Hole and cover kit for extra small (24-144 fibers), small (72-288 fibers) and medium (72-432 fibers) cabinets	FMS-ACE100-KIT-A
48" x 60" Hand Hole and cover kit for extra small (24-144 fibers), small (72-288 fibers) and medium (72-432 fibers) cabinets	FMS-FD3EG-LKIT-A
48" x 60" Hand Hole and cover kit for large (72-864 fibers) cabinets	FMS-FD3J-KIT-A

Ordering Information

Description			Catalog Number
216 Tools – Can Wrench Keys	Nickel plated brass can wrench key For use in loosening/tightening security screws		OSP-216BKEY1
	Aluminum can wrench key For use in loosening/tightening security screws		OSP-216BKEY2
	Plastic can wrench key For use in loosening/tightening security screws		OSP-216BKEY3
Cleaning Kits	Alcohol cleaning kit for connector end faces		FPC-CLNKIT1
	Almond touch up paint		ACE-ACC-PTALMD
Risers All FDH 3000 cross-connect cabinets ship with one riser.	6" ground spacer/riser for small (72-288 fibers) and; medium (72-432 fibers) cabinets; Raises cabinet an additional 6"		FD3-RSRE06
	6" ground spacer/riser for large (72-864 fibers) cabinets; Raises cabinet an additional 6"		FD3-RSRJ06
Cable Clamps	Small clamp		FD3-ACCSMCLMP
	Large clamp		FD3-ACCLGCLMP
	Spiral clamp		FD3-ACCMSPCLMP
	500 foot feeder cable for FDH 3000		FD3-ACCMPOCBL500
	750 foot feeder cable for FDH 3000		FD3-ACCMPOCBL750
Hand Hole Kits	Hand Hole and cover kit for small (72-288 fibers) and medium (72-432 fibers) cabinets		FMS-ACE100-KIT-A
	Hand Hole and cover kit for large (72-864 fibers) cabinets		FMS-FD3J-KIT-A
Pad Mount Frames	Small (72-288 fibers) and medium (72-432 fibers) pad mount frame		FD3-PMFE06
	Large (72-864 fibers) pad mount frame		FD3-PMFJ06
Additional Panel Options Additional configurations are available, please contact CommScope's Technical Assistance Center.	Single armor loose tube 72 position APC SC		FD3MOD-072JGAB
	Dielectric loose tube 72 position APC SC		FD3MOD-072JJAB
	Single armor ribbon 72 position APC SC		FD3MOD-072JLAB
	Dielectric ribbon 72 position APC SC		FD3MOD-072JTAB
Miscellaneous and Legacy Accessories	Hex Key to open cabinet door Tamper resistant hex key (allen wrench), ACE cabinet		OSP-SECKEY1
	Replacement Door Handles	Door Latch kit (latch only) FDH 3000, FONS 1, 2 and 3 cabinets	FDH-ACCHNDLKT-3
		Handle replacement PFP cabinets	FDH-ACCPFP-HNDL-1
	CSX3/CSX2 cabinet adapter bracket for PNP splitters	Standard Bracket and cables for smaller CSX2 and CSX3 cabinets	FPS-ACCCSX3RETRO
		Standard Bracket with longer feeder cable for 576 and 864 CSX3/CSX2 cabinets	FPS-ACCCSX3/2F12

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