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Network Zone System
Part Numbers: Z23N-\*\*\*\*
Z23R-\*\*\*\*

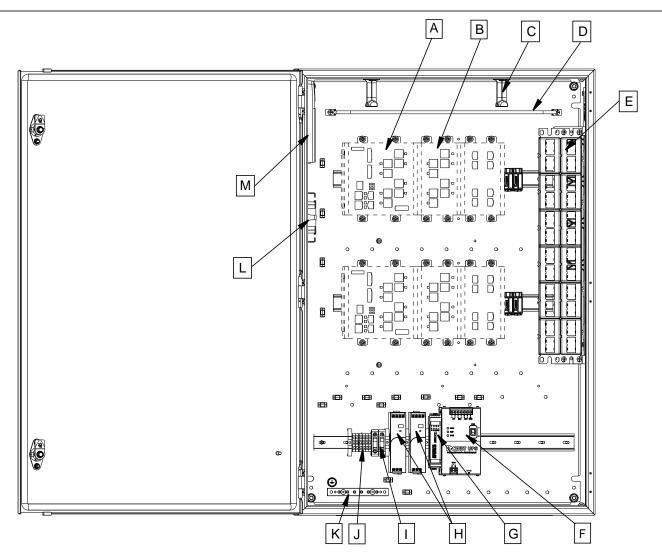




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## **TABLE OF CONTENTS**

Overview of Products	Page	3
Specs / Tools Needed	Page	4
Safety Information / Warnings	Page	5
Wall Mounting Bracket Installation	Page	6
Wall Mounting	Page	7
Removable Gland Plate	Page	7
Reversible Door	Page	8
Integrated Layout	Page	9
Recommended Installation Instructions for:		
Terminal Block Removal	Page	10
Switch Installation	Page	11
Cage Removal	Page	12
Power Entry	Page	12
Uplink Entry	Page	12
Downlink Entry	Page	12
Connect Zone SYS To Uplink	Page	13
Patch Cord Routing	Page	14



Network Zone System configurations include an enclosure with required connectivity and cable management, internal factory-connected wiring and includes partner equipment as specified on the Field Wiring Diagram supplied inside each unit.

Additional equipment may include one or more of the following DIN-Rail mountable items:

- A). Industrial automation switch\*
- B). Industrial automation switch expansion module\*
- C). Management slack L-rings.
- D). Strain relief bar
- E). Patch panel
- F). Panduit UPS (uninterruptable power supply)
- G). LSM (load sense module)
- H). Power supplies
- I). Lockout Terminal Contact Blocks
- J). Field-wiring terminal for customer-supplied power input wiring
- K). Ground bar terminal for customer-supplied ground
- L). Fiber slack spool
- M). Fiber Patch Box

<sup>\*</sup>Switch may be included or customer supplied.

Network Zone System Specifications				
Standards (May Include)	UL 508A		EN55022	
	IEC 60950-1		EN55024	
	IEC 60950-22		VCCI	
	FCC, Part 15, Subpart B		ICES-003	
Enclosure Rating (May Include)	All electrical components rated for	UL Type 4/12 and IP66 (IEC 60529), NEMA 4X available All electrical components rated for Class 1, Division 2 environments		
Environment		40°C ambient outside of enclosure or 60°C maximum within enclosure at up to 95% (non-condensing) humidity		
Installation	Wall mount with optional outside-	Wall mount with optional outside-mount flange		
Dimensions	Height V	Vidth	Depth	
	36.0"	24.0"	11.7"	
	(914 mm) (61	.0 mm)	(297 mm)	
Weight	110 lbs. (49.9 kg)			

<sup>\*\*</sup>Use Field Wiring Diagram for the Electrical Rating and Maximum Over-current Protection.\*\*

## Tools and supplies needed to complete install of Integrated Zone System (not included):

- · Fiber-optic trunk cable: FSPD504 or similar
- · LC Fiber-optic connectors: FLCDMCXAQY or similar
- · Fiber-optic termination tools: OptiCam termination kit or similar
- · Category 6 copper cable for downlinks: PUR6504BU-UY or similar
- · Wire cutters for copper cable termination
- · Power wiring: #14 AWG recommended
- · Rigid conduit for power and copper downlink cables
- · Switch (Switch ready zone only)

- · Tools to cut enclosure sidewalls: Greenlee punch or similar
- · External Power Disconnect
- · 5/16" bolts for wall mounting of steel enclosure
- · #6 AWG Infrastructure ground cable: RGEJ660PF or similar
- · Screw drivers: #2 Phillips, 3/16", and 2.5mm flathead
- · 3/8" bolts for wall mounting of stainless steel enclosure
- · 3/8" socket or box wrench ground bar

<sup>\*\*</sup>For customer supplied switch use manufacture instructions for installing and wiring.\*\*

# SAFETY INFORMATION

The information and instructions contained in this document are not intended to be utilized as a substitute for proper training and experience in the safe installation and operation of product. Prior to installation, it is the Buyer's responsibility to consult with the appropriate local Authority Having Jurisdiction (AHJ) for all applicable codes, permits, regulations and standards.

This product, including any equipment that may be installed inside, should only be installed and serviced by a licensed electrical contractor, or competent technician, that meets the following qualifications;

- Is thoroughly familiar with this product and the instructions for installation and operation
- Is trained (accredited) in industry-accepted safe operating practices and procedures regarding identification and mitigation of high- and low- voltage hazards and situations.
- Is trained to identify and install appropriately-sized Branch Circuit Disconnect(s) with appropriately-sized Branch-Circuit Protective Rating and Short-Circuit Current Rating (SCCR), before connecting Panduit product to the branch circuit.
- Is trained and authorized to energize, de-energize, clear and ground power distribution equipment.
- Is trained in the care and use of PPE (personal protective equipment) including, but not limited to; arc-flash protective clothing, safety glasses, face shield, hard hat, gloves, and non-conductive tools (clamp stick, hot stick, etc



# Be sure wall is capable of supporting cabinet and equipment.

#### DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITIES

The practices contained herein are designed as a guide for use by persons having technical skill at their own discretion and risk. Panduit does not guarantee any favorable results or assume any liability in connection with these instructions. Local, State, Federal, and Industry Codes and Regulations, as well as manufacturers requirements, must be consulted before proceeding with any project. Panduit Corp. makes no representations of nor assumes any responsibility for the accuracy or completeness set forth herein. Panduit disclaims any liability arising from any information contained herein or for the absence of same.

# Wall Mounting Bracket Installation

Note: The enclosure may be mounted to the wall without the mounting brackets

Step 1: Turn enclosure on its side with the locks orientated towards the top. Using Latch Tool, turn both locks towards each other to open door.

Step 2: Install Wall Mounting Brackets into back of the enclosure aligning threaded studs on brackets to holes located in back of the enclosure. Be sure obround mounting holes on the wall mounting bracket align outward.

Step 3: Secure wall mounting brackets using the supplied sealing washers use (1) per threaded stud.

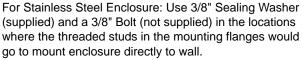
#### Torque spec:

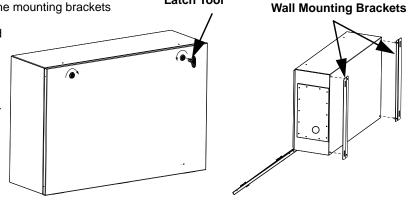
secure the door.

Steel Enclosure: 5/16" washers = 30 in-lbs Stainless Steel Enclosure: 3/8" washers = 40 in-lbs Step 4: Close Door. Using Latch Tool, turn both locks to

#### If Mounting Flanges are not used:

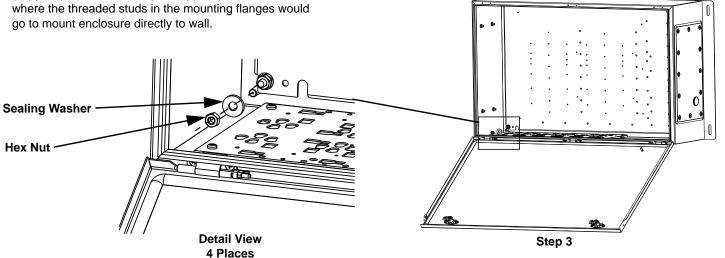
For Steel Enclosure: Use 5/16" Sealing Washer (supplied) and a 5/16" Bolt (not supplied) in the locations where the threaded studs in the mounting flanges would go to mount enclosure directly to wall.

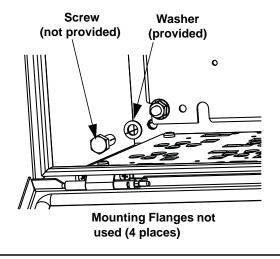




**Latch Tool** 

Step 1 Step 2





## **Wall Mounting**

Enclosure may be mounted on any wall utilizing Unistrut or by drilling directly into any concrete wall. There are two mounting hole locations on the top flange and two locations at the bottom flange.

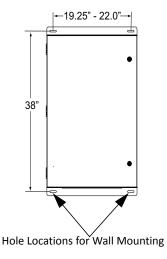
#### Step 1:

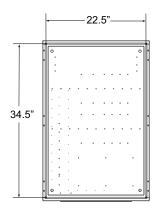
Drill holes 19.25"-22" apart horizontally and 38" apart vertically. **Step 2**:

Mount the enlosure with the locks to the right and secure.

#### If mounting flanges are not used:

The holes in the wall will be 22.5" apart horizontally and 34.5" apart vertically.



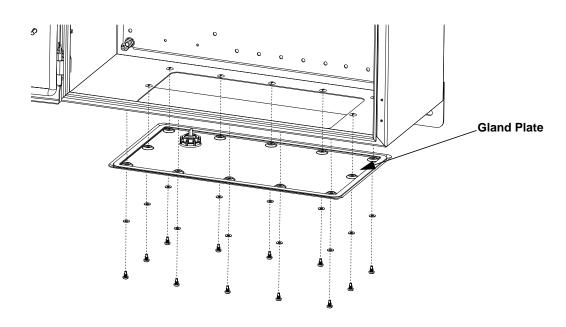


Dimensions for Wall Mounting without Flanges

## **Removable Gland Plate**

Remove the gland plate prior to drilling holes for conduit entry. Accommodations for incoming conduit have been supplied on the enclosure. This will help prevent metal shavings from entering the electronic components in the enclosure.

Recommend installation of IP66 rated conduit fittings that comply with the IEC codes that are applicable to the intended application. The Gland Plate, located on bottom of the enclosure, is removable for machining to accept bulkhead connectors or compression fittings. To remove gland plate, (12) screws and (12) flat washers attached to the threaded studs of the gland plate and remove plate from the enclosure. When reinstalling the gland plate, ensure the nuts are tightened until the gland plate flanges make contact with the enclosure surface.

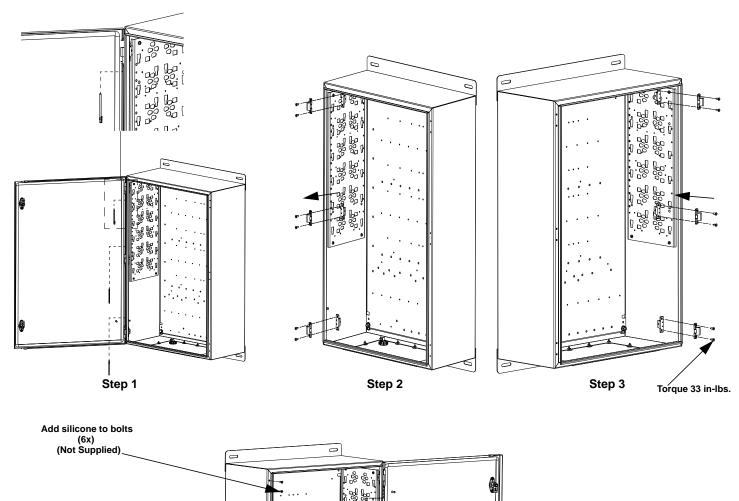


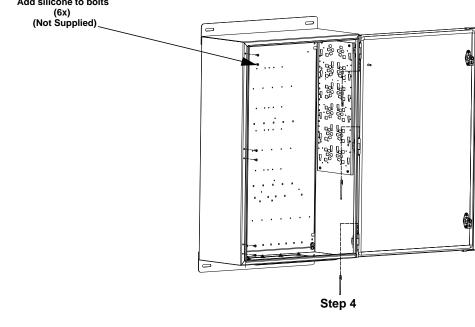
## **Reversible Door**

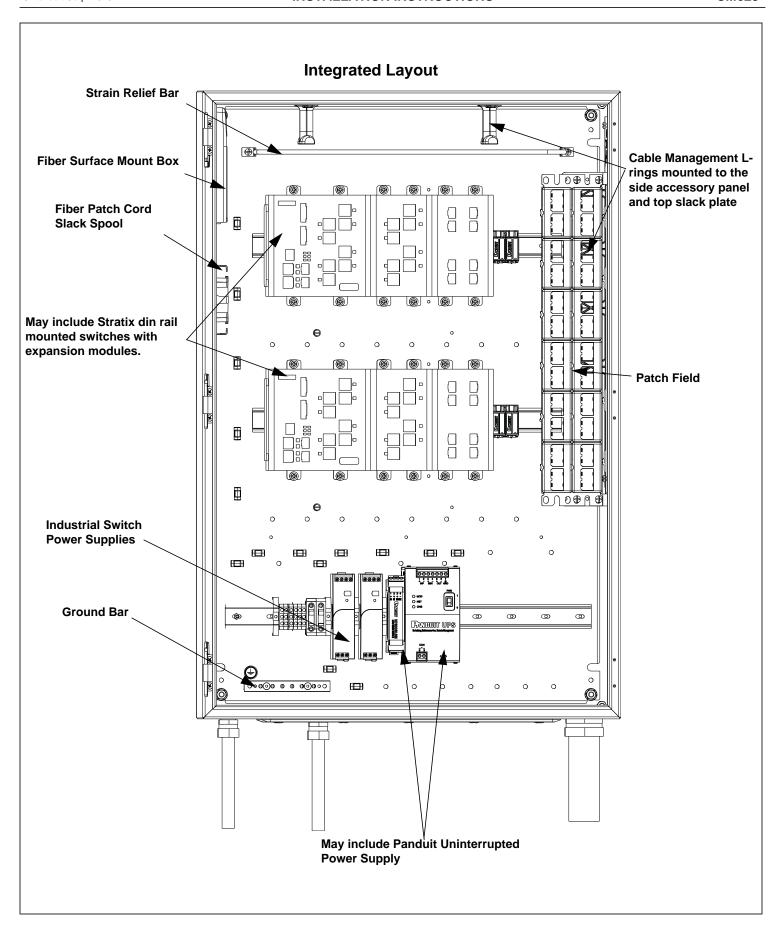
The enclosure comes with the door opening to the left.

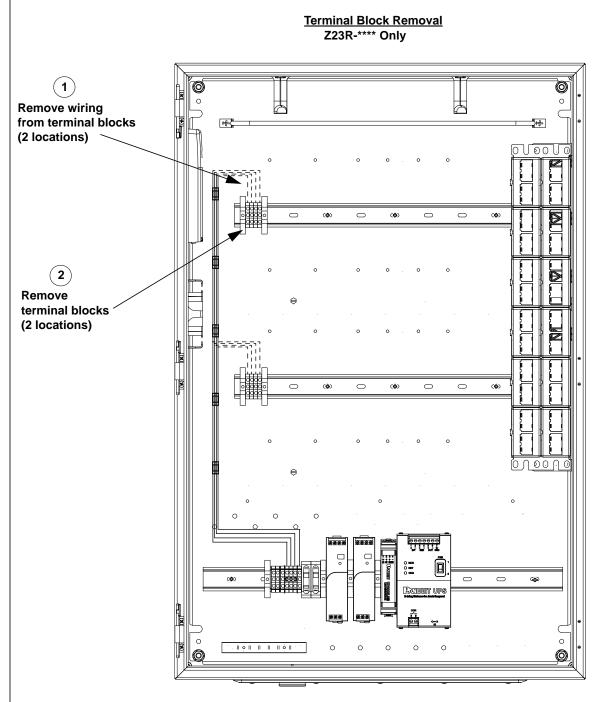
The door may be reversed to open to the right.

- Step 1: Remove pins from the door hinges.
- Step 2: Remove screws and door hinges
- Step 3: New Hole locations will have to be drilled or punched out. Reinstall hinges and screws on opposite side.
- Step 4: Turn door 180 degrees and mount to the opposite side of the enclosure. Insert the same pins to secure the door.







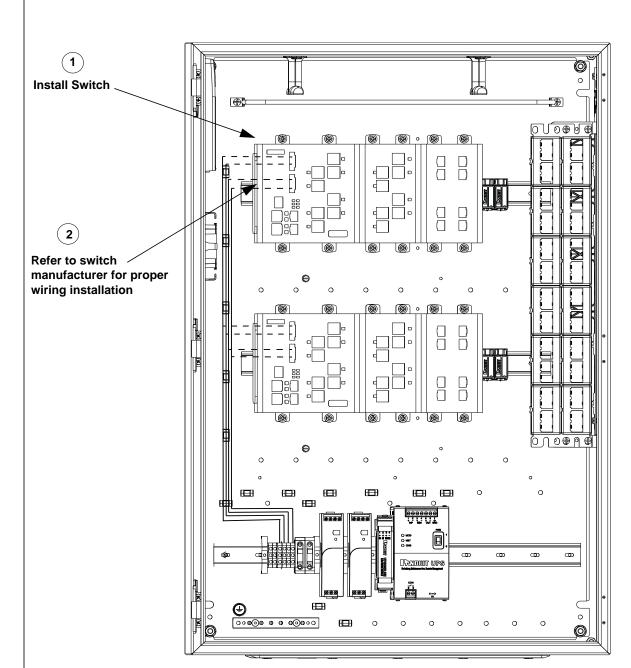


#### **Terminal Block Removal**

- 1. Remove wiring from terminal blocks
- 2. Remove terminal blocks

\*Note: Do not apply power prior to terminal block removal on the switch ready network zone system.

## Switch Installation Z23R-\*\*\*\* Only

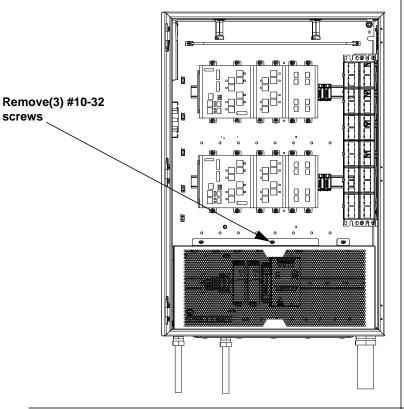


#### **Switch Installation**

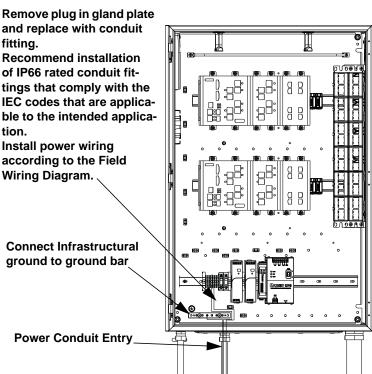
- 1. Install switch
- 2. Wire switch Refer to switch manufacturer's instructions for proper wiring technique.

\*Note: Install switch before applying power to switch ready network zone system.

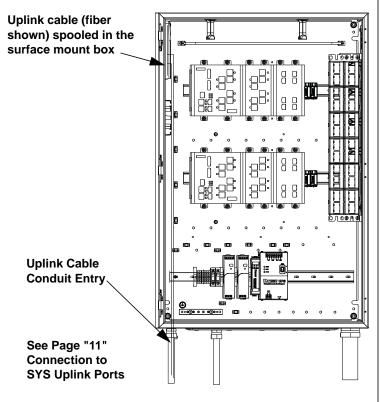
## **Cage Removal**



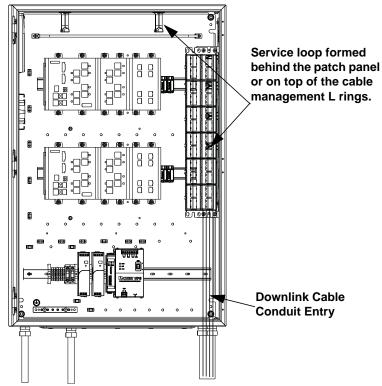
# Recommended Installation Instructions for Power Entry



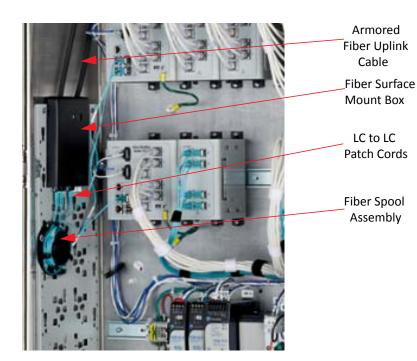
# Recommended Installation Instructions for Uplink Entry



# Recommended Installation Instructions for Downlink Entry



# **Connecting to Zone System Uplink Ports**



The Zone Enclosure can have either a fiber or copper uplink. Copper uplinks are limited to 330ft (100m) distance and relatively noise free environments. It is recommended to use a structured cabling approach, terminating the horizontal cable to an RJ-45 jack or LC connector and adapter. Then using factory

made patch cords to connect to the switch.

#### Copper Uplink

There are 2 copper RJ-45 uplink ports that can be configured for a star, ring, or linear topology. The copper horizontal cable can be brought straight into the enclosure via conduit.

The uplink copper horizontal cables should be terminated to the Patch Panel (48 ports) or single port din mount adaptor. May be used if patch box or patch panel are full. The provided Panduit Patch Cords connect the horizontal cable jack to the Stratix.

#### Fiber Uplink

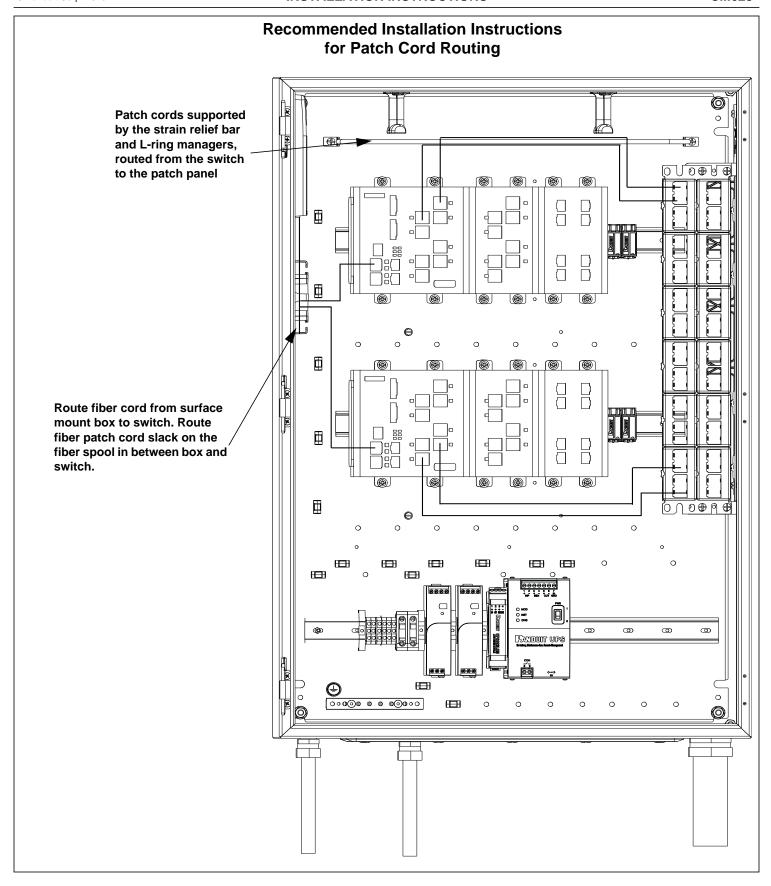
The Stratix has 2 SFP uplink ports that can accommodate 2 Fiber SFP transceiver modules. Either Multi-mode or Single Mode SFPs can be used. Fiber uplinks can be brought into the zone enclosure via conduit, using fiber distribution cable or Panduit armored fiber, DCF, or PCF, as needed.

The fiber strands are terminated inside the provided Fiber Surface Mount Box (CBXF6BL-AY). The Fiber Surface Mount Box features internal slack management along with provided Panduit LC adapters (FADJAQLCZBL). Fibers will be terminated to LC connectors (Panduit Opticam FLCDMCXAQY recommended, not included). For instructions on Panduit LC termination, see instruction sheet *LC OptiCam Connector: FS014* available on at <a href="https://www.Panduit.com">www.Panduit.com</a>.

When armored fiber cable is used, the outer casing is connected to the enclosure using Panduit's Armored Cable Grounding Kit (See www.Panduit.com for the applicable part no.) The inner distribution cable is exposed and terminated in the same manner as other distribution cable. If a metal clad armor casing is used, it will need to be grounded. See T-PMPI-292-PC for armor cable grounding details.

From the Fiber Surface Mount Box, the provided LC to LC duplex patch cords (FZE10-10M1) are used to connect from the fiber adapter modules to the SFP transceiver module on the switch.

Fiber patch cord slack is stored in the included fiber spool. It is important to wind the fiber patch cord slack on the spool to prevent sharp bends or snag that can degrade transmission.



For Instructions in Local Languages and Technical Support:

For Technical Support: http://www.panduit.com/wcs/Satel-lite?pagename=PG\_Wrapper&friendlyurl=/en/support/contact-us



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