

FIBER MANAGEMENT HARDWARE FOR THE CISCO ONS 15454 SONET/SDH MULTISERVICE TRANSPORT PLATFORMS

The Cisco® ONS 15454 SONET/SDH Multiservice Transport Platform (MSTP) provides a comprehensive, intelligent dense wavelength-division multiplexing (DWDM) solution for expanding bandwidth on metropolitan and regional networks.

PRODUCT OVERVIEW

The Cisco ONS 15454 MSTP provides an intelligent DWDM solution engineered to reducing DWDM complexity and speeding the deployment of next-generation networking solutions. The Cisco ONS 15454 fiber management hardware provides the necessary supporting equipment to efficiently manage the fiber jumper cables used within a Cisco ONS 15454 MSTP deployment.

The Cisco ONS 15454 fiber management hardware is made up of two components: a fiber storage shelf and a patch panel shelf.

The Cisco ONS 15454 Fiber Storage Shelf (FSS), illustrated in Figures 1 and 2, provides slack storage for single patch-cords and ribbon fiber cables for Cisco ONS 15454 MSTP deployments. It is used to maintain orderly fiber slack storage for intrashelf cabling as well as for system-level cables. The FSS is engineered by Cisco Systems® to protect both single and ribbon fiber cables from bend-induced losses by using large radius fiber storage reels and bend-limiting fiber entrance hardware. A pull-out drawer allows access to the fiber storage area and, when closed, protects the fiber jumpers from accidental damage. Table 1 outlines fiber storage capacity. The Cisco FSS is equipped with a dual screw grounding point for bonding to the facility ground.

Figure 1
Cisco ONS 15454 Fiber Storage Shelf

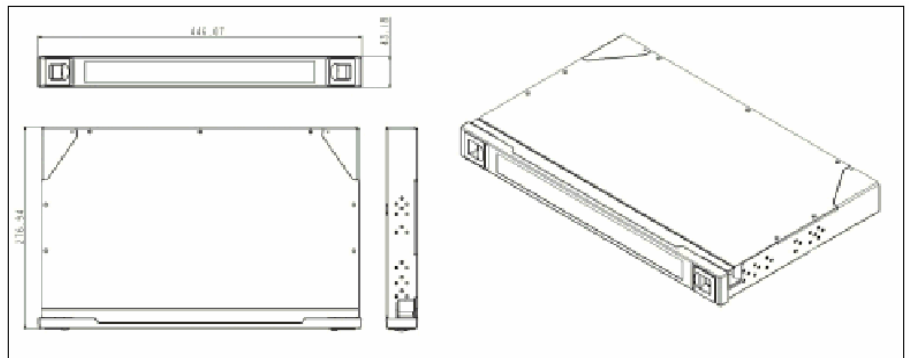


Figure 2
Open-Drawer View of Cisco ONS 15454 Fiber Storage Shelf

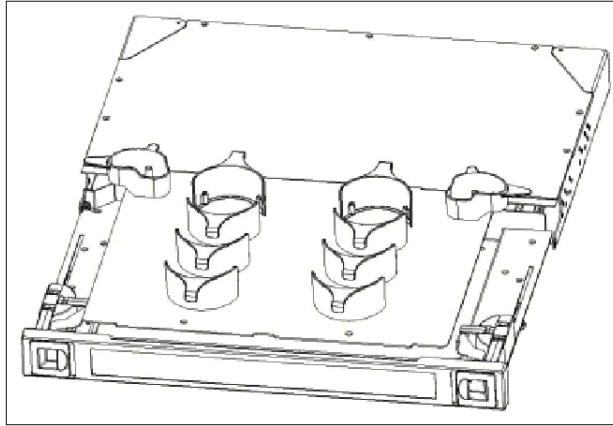


Table 1 Fiber Storage Shelf Capacity

Fiber Cable Type	Capacity
2 mm diameter	64 cables 2 meters long
3 mm diameter	30 cables 2 meters long
Multipath Optical (MPO) ribbon plus 2 mm	8 ribbon cables 2 meters long plus 40 2 mm cables 2 meters long

The Cisco ONS 15454 Fiber Patch Panel Shelf (FPPS), illustrated in Figures 3 and 4, is designed to enable easy user access to single channels from the multifiber connectors that are used on the 32-channel multiplexer and demultiplexer cards for Cisco ONS 15454 MSTP deployments. The Cisco FPPS supports the coupling of 64 LC-to-LC connections, providing the transition from up to eight 8-fiber MPO-to-LC cable assemblies from 2 multiplexer or demultiplexer cards to 64 client interface jumper cables (Figure 5). The Cisco FPPS is engineered to protect both single and ribbon fiber cables from bend-induced losses by using large radius fiber routing reels and bend-limiting fiber entrance hardware. A pull-out drawer allows access to the fiber connector and routing areas and, when closed, protects the fiber connections from accidental damage or disconnection. The Cisco FPPS is equipped with a dual screw grounding point for bonding to the facility ground.

Figure 3
Cisco ONS 15454 Fiber Patch Panel Shelf

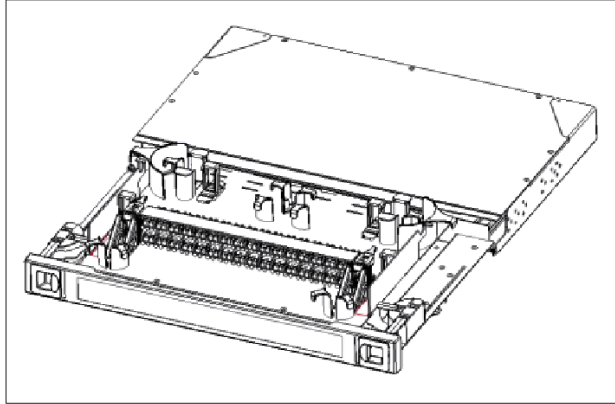


Figure 4
Drawer-Top View of Cisco ONS 15454 Fiber Patch Panel Shelf

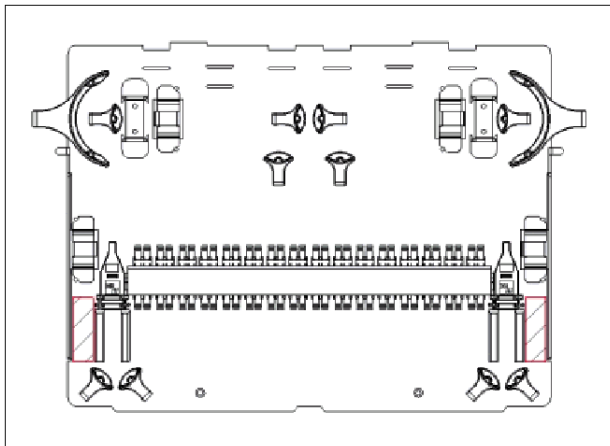
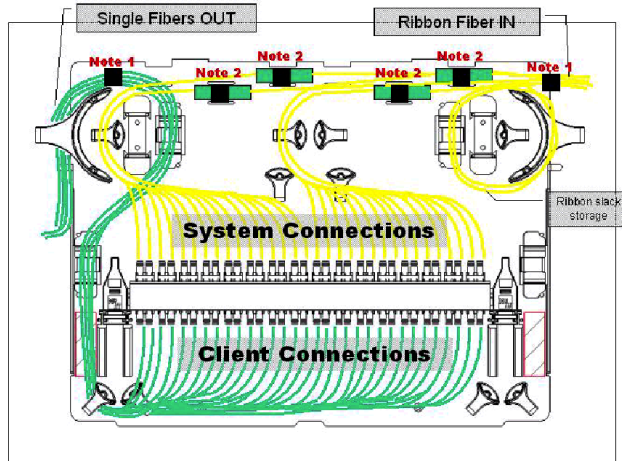


Figure 5
Example of Fiber Patch Panel Shelf Transition



*Notes 1 and 2 indicate tie-down straps for fiber cables

CISCO ONS 15454 FIBER MANAGEMENT HARDWARE SPECIFICATIONS

Tables 2 and 3 provide specifications for the Cisco ONS 15454 fiber management hardware.

Table 2 Regulatory Compliance

<i>Safety</i>
• UL 94V-0 (flammability)
<i>Environmental</i>
• GR-63-CORE
<i>Structural dynamics</i>
• GR-63-CORE

Table 3 Fiber Management Hardware Specifications

Specification	Fiber Patch Panel Shelf	Fiber Storage Shelf
Physical		
Dimensions without mounting hardware (W x H x D)	17.56 x 1.7 x 10.9 in. (446.07 x 43.18 x 276.94 mm)	17.56 x 1.7 x 10.9 in. (446.07 x 43.18 x 276.94 mm)
Weight	8 lb (3.6 kg)	8 lb (3.6 kg)

Table 3 Fiber Management Hardware Specifications (Continued)

Specification	Fiber Patch Panel Shelf	Fiber Storage Shelf
Operating and storage environment		
Temperature	23 to 131°F (-5 to 55°C)	23 to 131°F (-5 to 55°C)
Humidity	5 to 95% noncondensing	5 to 95% noncondensing

ORDERING INFORMATION

Table 4 provides ordering information for the Cisco ONS 15454 fiber management hardware.

Table 4 System Ordering Information

Part Number	Description
15454-PP-64-LC=	Fiber patch panel shelf, LC-to-LC connectors, 32 duplex (64) LC adapters; supports up to 8 ribbon cable assemblies (1 MPO to 8 LC) plus 64 2-mm cable assemblies; includes 2 MPO to 8x LC/PC 2.3-meter cable assemblies (uninstalled), 19-inch or 23-inch EIA/WECO mounting hardware
15454E-PP-64-LC=	Fiber patch panel shelf, LC-to-LC connectors, 32 duplex (64) LC adapters; supports up to 8 ribbon cable assemblies (1 MPO to 8 LC) plus 64 2-mm cable assemblies; includes 2 MPO to 8x LC/PC 2.3-meter cable assemblies (uninstalled), 600-mm ETSI mounting hardware
15454-FBR-STRG=	Fiber storage shelf; supports up to 64 2.0-meter-long 2-mm fiber cables; 19-inch or 23-inch EIA/WECO mounting hardware
15454E-FBR-STRG=	Fiber storage shelf; supports up to 64 2.0-meter-long 2-mm fiber cables; 600-mm ETSI mounting hardware



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