

# Spine-Leaf MPO Panel with Key-Up to Key-Down MTP/MPO Adapter - 12F MTP/MPO-APC M/M, 8F OS2 Singlemode, 32 x 32 Ports, 1U

MODEL NUMBER: N48LSS-32X32



1U network panel replaces a standard MTP/MPO-to-LC cross-connect with MTP/MPO ports to eliminate rack clutter.

## Features

### 1U Spine Leaf Panel Simplifies Your Rack Connections and Helps You Keep Costs Down

This network patch panel is designed for spine and leaf architecture, which replaces a standard MTP/MPO-to-LC cross-connect with MTP/MPO ports and helps eliminate significant rack clutter. This data center network technology provides high-bandwidth, low-latency, non-blocking server-to-server connectivity, which saves you money, simplifies your rack cabling and improves network performance.

### All-in-One Solution Consists of 2 Switch Layers: Spine and Leaf

The groundbreaking N48LSS-32X32 contains a complete spine leaf mesh topology, resulting in less labor, less troubleshooting and fewer errors. It features spine ports in the front that mate with a spine switch, as well as leaf ports in the rear that mate with a leaf switch. No LC-to-LC patching, double cassette or user cable shuffling is required with spine-and-leaf architecture, which improves link performance.

### Easy to Mount in Just 1U of Rack Space

This aluminum panel with key-up to key-down MTP/MPO adapter features 64 12-fiber MTP/MPO-APC male ports: 32 front spine ports and 32 rear leaf ports. The N48LSS-32X32 mounts into 1U of space in an EIA-standard 19-inch rack. Cable managers in both front and rear help organize cabling and eliminate unsightly clutter.

## Highlights

- 1U patch panel designed for cost-effective spine and leaf cabling
- Replaces standard MTP/MPO-to-LC cross-connect to reduce troubleshooting and labor
- All-in-one solution for 9/125 singlemode OS2 8-fiber network cabling
- Front and rear wire managers help organize cables and eliminate clutter
- Mounts easily into 1U of space in your EIA-standard 19 in. rack or cabinet

## Package Includes

- N48LSS-32X32 Spine-Leaf MPO Panel, 32 x 32 Ports, 1U
- Owner's manual

## Specifications

| OVERVIEW     |              |
|--------------|--------------|
| UPC Code     | 037332268792 |
| Product Type | Spine-Leaf   |
| Technology   | Fiber        |
| Optical Mode | OS2          |



Powering Business Worldwide

TRIPP LITE  
SERIES

|                                 |                              |
|---------------------------------|------------------------------|
| Panel Dimensions                | 17.56" X 1.73" X 14.76"      |
| Mode Type                       | Singlemode                   |
| <b>Firmware / Software Docs</b> |                              |
| Offset Ports                    | No                           |
| <b>CONNECTIONS</b>              |                              |
| Number of Ports                 | 64                           |
| Side A - Connector 1            | (32) 12F MTP/MPO (MALE)      |
| Side B - Connector 1            | (32) 12F MTP/MPO (MALE)      |
| Endface Polish                  | APC                          |
| <b>PHYSICAL</b>                 |                              |
| Primary Form Factor             | Rackmount                    |
| Color                           | Black                        |
| Rack Height                     | 1U                           |
| Connector Color                 | Black                        |
| Clad Diameter (microns)         | 125                          |
| Core Diameter (microns)         | 9                            |
| Number of Fibers                | 8                            |
| Total Number of Ports           | 64                           |
| Shipping Dimensions (hwd / in.) | 3.50 x 15.10 x 21.00         |
| Shipping Weight (lbs.)          | 8.10                         |
| Unit Dimensions (hwd / in.)     | 1.730 x 14.760 x 18.970      |
| Panel Style                     | Spine-Leaf                   |
| <b>ENVIRONMENTAL</b>            |                              |
| Operating Temperature Range     | -4° to 140°F (-20° to 60°C)  |
| Storage Temperature Range       | -4° to 140°F (-20° to 60°C)  |
| Operating Humidity Range        | 5% to 85% RH, Non-Condensing |
| Storage Humidity Range          | 5% to 85% RH, Non-Condensing |
| <b>COMMUNICATIONS</b>           |                              |
| Network Compatibility           | 100 Gbps; 40 Gbps; 400 Gbps  |
| Wavelength                      | 1310nm; 1550nm               |
| Attenuation @ 1310NM            | 0.36 dB / km                 |
| Attenuation @ 1550NM            | 0.22 dB / km                 |
| Insertion Loss                  | 0.70 dB                      |



Powering Business Worldwide

TRIPP LITE  
SERIES

| FEATURES & SPECIFICATIONS           |                             |
|-------------------------------------|-----------------------------|
| All-in-One Kit                      | Yes                         |
| Network Speed Support               | 100 Gbps; 40 Gbps; 400 Gbps |
| Push/Pull Tabs                      | No                          |
| Breakout                            | No                          |
| Trunk                               | No                          |
| Numbered Ports                      | Yes                         |
| Keystone Jacks                      | No                          |
| Built-in Cables                     | Yes                         |
| Color-Coded Connections             | No                          |
| EIA/TIA 2/32 Spacing                | No                          |
| Labeled Ports                       | Yes                         |
| Optical Port                        | MPO/MTP                     |
| Down-Angled Ports                   | No                          |
| STANDARDS & COMPLIANCE              |                             |
| Product Compliance                  | RoHS; CE (Europe); REACH    |
| WARRANTY & SUPPORT                  |                             |
| Product Warranty Period (Worldwide) | Lifetime limited warranty   |

1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
<https://tripplite.eaton.com>

© 2025 Eaton. All Rights Reserved.  
Eaton is a registered trademark. All other trademarks  
are the property of their respective owners.