Important Note

Guaranteed compatibility with recommended cabling, including N820- and N821-Series cables.

40/100Gb Fiber Breakout Patch Panel, 40Gb to 4 x 10Gb, 100Gb to 4 x 25Gb, 42 MTP QSFP to 168 LC Duplex OM4 50/125 Multimode Ports, 2U

MODEL NUMBER: **N48K-42M8L168-B**

Highlights

- Total of 42 12-fiber MTP/MPO switch ports and 168 LC ports
- Base8 wiring uses all LC ports—no dead ports as in Base12
- Base-8 Fiber compatible with both QSFP+ 40GBASE-SR4 to SFP+ 10GBASE-SR and QSFP28 100GBASE-SR4 to SFP28 25GBASE-SR connections
- Hardwired cassettes for 30% improvement in insertion loss
- Easily identifiable color-coded magenta OM4 cables

System Requirements

Package Includes

- N48K-42M8L168-B 50/125 Breakout Fiber Patch Panel

High-density 50/125 multimode breakout panel seamlessly and conveniently integrates 10G equipment with 40G networks or 25Gb equipment with 100Gb networks to meet current connectivity needs and future-proof your network in a cost-effective manner.

Description

The N48K-42M8L168-B 50/125 Breakout Fiber Patch Panel not only integrates equipment with 10G and 40G speeds, but also provides a simple, flexible path from 25Gb to 100Gb, as well as upcoming 50Gb to 200Gb speeds and beyond. The 2U chassis features 14 breakout cassettes. Each cassette contains 12 LC duplex ports and three built-in two-meter MTP multimode cables for a total of 42 QSFP fiber switch ports breaking out to 168 LC ports.

Base8 wiring with built-in MTP trunks maximizes rack space and link performance, while enabling simple cable deployment and optimized harness mapping. The N48K-42M8L168-B uses all 168 LC ports, meaning no dead ports as in Base12 wiring, with streamlined 1-to-1 port mapping. Eliminating the need for 12-fiber conversion modules results in a reduction of up to 50 percent in link attenuation.

Hardwired cassettes offer a 30-percent improvement in insertion loss with no separate MTP connection in the rear, resulting in longer duplex link distances. Color-coded magenta OM4 cables are easily distinguished from traditional aqua OM3 multimode fiber. Base-8 Fiber compatible with both QSFP+ 40GBASE-SR4 to SFP+ 10GBASE-SR and QSFP28 100GBASE-SR4 to SFP28 25GBASE-SR connections.

The front panel folds down to protect the LC patch cords, as well as provide wire mapping by matching each cassette's labeled MTP cables to the LC clusters. Writing space on the inside panel lets you custom-label each port. Each panel is serialized and insertion loss data is available upon request via the unit's serial number.

Features

Integrates Equipment with 10Gb and 40Gb Speeds, or 25Gb and 100Gb, to Meet Current Connectivity Needs Also future-proofs your network for eventual 50Gb and 200Gb speeds and beyondBase-8 Fiber compatible with both QSFP+ 40 GBASE-SR4 to SFP+ 10GBASE-SR and QSFP28 100GBASE-SR4 to SFP28 25GBASE-SR connectionsOM4 fiber for highest throughput

14 Breakout Cassettes12 LC duplex ports and 3 built-in 2-meter MTP multimode cables per cassetteTotal of 42 12-fiber MTP/MPO switch ports and 168 LC ports100% fiber utilizationStreamlined 1:1 port mappingUp to 50% reduction in link attenuationColor-coded magenta cables easily distinguishable in crowded switch

Base8 Wiring No unused LC ports as in Base12 wiringSimple patch cable deploymentOptimized harness mappingHardwired cassette modules offer 30% improvement in insertion loss

Fold-Down Front PanelLC patch cables protectedProvides wire mapping by matching each cassette's labeled MTP cables to LC clustersWriting space on inside panel for custom-labeling of portsInsertion loss data available via unit's serial number

Mounts in 2U of EIA-Standard 19 in. Rack Maximizes rack space and link performance

Specifications

OVERVIEW	
UPC Code	037332200839
Product Type	Breakout
Technology	Multimode
Optical Mode	OM4

PHYSICAL	
Color	Black
Shipping Dimensions (hwd / in.)	5.00 x 21.30 x 18.70
Shipping Dimensions (hwd / cm)	12.70 x 54.10 x 47.50
Shipping Weight (lbs.)	13.90
Shipping Weight (kg)	6.30

CONNECTIONS	
Side A - Connector 1	MTP/MPO (FEMALE)
Side B - Connector 1	LC DUPLEX (FEMALE)

FEATURES & SPECIFICATIONS	
All-in-One Kit	Yes
Built-in Cables	Yes

STANDARDS & COMPLIANCE	
Product Compliance	RoHS

WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	Lifetime limited warranty