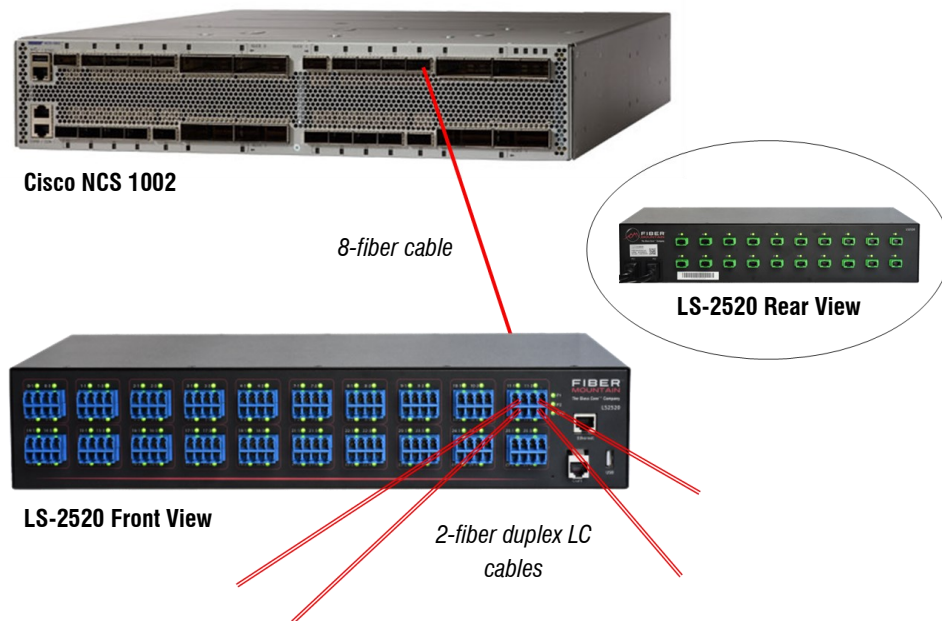


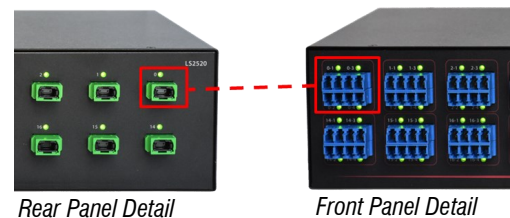
## QSFP Breakout and port mapping for Cisco® NCS 1002

Fiber Mountain's LS-2520 is designed as the ideal fiber breakout interface for the Cisco NCS 1002. The NCS 1002 provides eight DWDM trunk ports and 20 QSFP ports which are able to accept either QSFP+ transceivers for 40 Gbps & 10 Gbps applications or QSFP28 transceivers for 100 Gbps applications. This provides up to 2 Tbps capacity for transport both within and between data centers or Points-of-Presence (PoP).



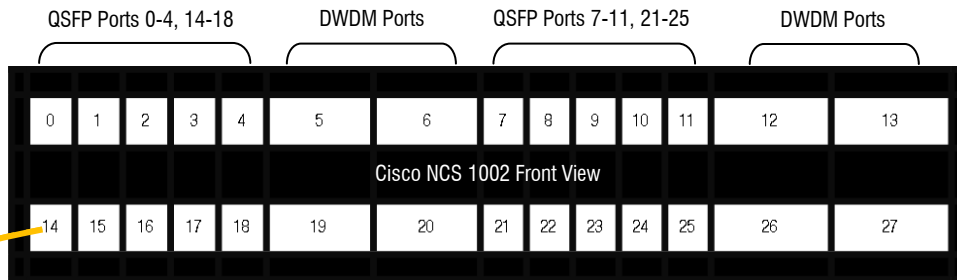
Occupying only two RU, the LS-2520 enables the orderly breakout of all 20 NCS 1002 QSFP ports into 80 duplex single mode LC ports. All ports and labels correspond directly to the NCS 1002 port labeling for simplified installation and ongoing maintenance. Controlled by the NCS 1002, LED indicators are associated with each MPO and duplex LC port. Dual power supplies provide for redundancy, port numbering matched to the NCS 1002 simplifies cable management, and the LED indicators enable technicians to verify port status at a glance. MPO connection cables that go between the Cisco NCS 1002 and the LS-2520 are available from Fiber Mountain in bundles of five, in various lengths. (see *Accessories*)

The rear faceplate MPO ports of the LS-2520 map directly to the front faceplate, terminating into LC adaptors. The front faceplate port numbering is consistent with rear port numbering, mapping each rear MPO connector to a block of four duplex LC ports (eight LC connectors).

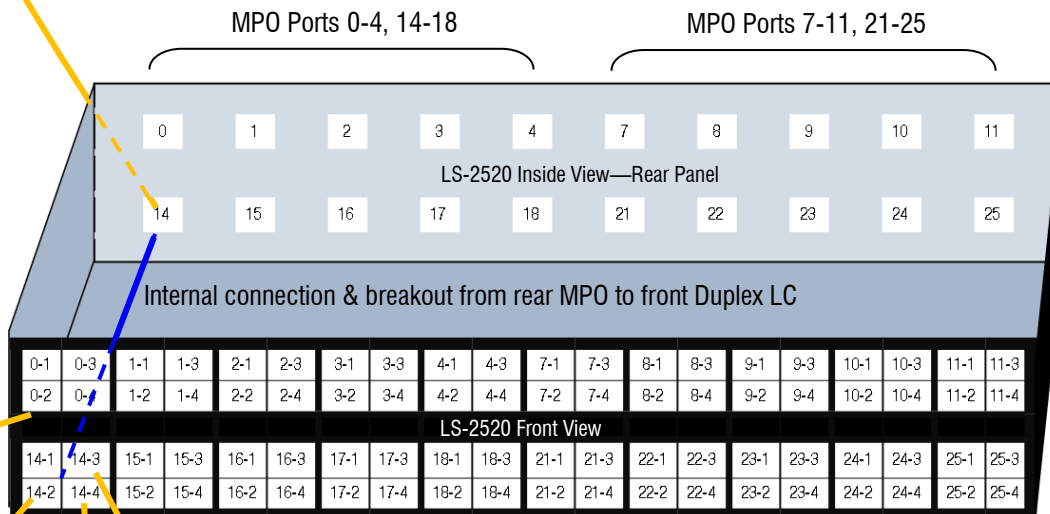


## How to connect LS-2520 with Cisco NCS 1002:

Fiber Mountain's LS-2520 provides breakout for all 20 of the NCS 1002's QSFP ports in two RU of space, while maintaining the same port numbering scheme. MPO-MPO cables are used to connect the NCS 1002 QSFP ports to the rear MPO ports of the LS-2520.



Twenty of: OS2 single mode 12-fiber high density Type B cable  
**Fiber Mountain Part Number: FNS12-MF12-MF12-PYC-B0**  
 Bundles of five cables available in standard lengths of 3, 5 or 10 meters  
 Inquire for custom lengths.



Eighty of: OS2 single mode duplex LC-LC, Type A-B cable  
**Fiber Mountain Part Number: FNS02-LCU-LCU-PYC-B0**  
 Bundles of 20 cables available in standard lengths of 5, 10, 15 or 20 meters  
 Inquire for custom lengths

**Contact Fiber Mountain, Inc. to order: Email: [Sales@FiberMountain.com](mailto:Sales@FiberMountain.com) - Phone: 1-800-480-9424**

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# AllPath® Connect LS-2520

Datasheet



	Characteristic	Single Mode MPO	Single Mode LC
<b>Fiber Specifications:</b> Internal fiber is single mode OS2. The rear MPO connectors are green, the front LC connectors are blue.	Insertion Loss (Max.)	.35dB	.3db
	Insertion Loss (Typ.)	.10db (All Fibers)	.15dB
	Return Loss (Max.)	-55dB 8° angle polish	-50dB
<i>Test Methods: IL per TIA/EIA-455-171 Method B. RL per TIA/EIA 107 Method 1.</i>			

<b>LS-2520 Chassis Specifications:</b>	
Catalog Number	LS-2520-001
Weight	10.4 lbs
Rack Mounting	Fits 19", 21" and 23" racks
Dimensions (H/W/D)	3.46" x 17.65" x 8.72" (8.79 cm x 44.83 cm x 22.15 cm)
Redundant AC Power	<25 Watts
Regulatory and Certifications	Test EMI as per B class EN55022 Safety compliance with all country relevant standards. Safety marking & CB report Safety compliance with UL60950. Safety marking and CB report Electrical verification in the operating temperature range (-5 to 55C). USB/ETHERNET compliance verification GR63 mechanical shock and vibration testing Humidity testing (as per Bellcore GR63/GR1089) Power supply Surge/EFT testing ESD (human body test level)
Chassis Fiber Guides	Front and rear chassis fiber guides are included with the LS-2520

Management Interfaces	Description
Craft Port (RS232)	Front Faceplate (RJ45). CLI access to kernel. CURL for API calls from CLI.
Ethernet Port	Front Faceplate (RJ45). LAN interface for management
USB Port	Front Faceplate. Can be used for software upgrades.
Graphical WEB Interface	Embedded Graphical Interface
API RESTful Interface	HTML JSON Format. GET and POST for LED control, LED status, power supply and processor status. Digest authentication.
HTTP WEB Server	For software updates via ETH connection. Digest authentication. SSL/TSL.
SNMP	Trap forwarding for trap listeners

<b>Accessories:</b>	
Catalog Number	Description
FNS12-MF12-MF12-PYC-B0-003M-05B FNS12-MF12-MF12-PYC-B0-005M-05B FNS12-MF12-MF12-PYC-B0-010M-05B	OS2 single mode 12-fiber high density type B cable. Available in bundles of five. Standard lengths: 3, 5 or 10 meters. Inquire for custom lengths.
FNS02-LCU-LCU-PYC-B0-005M-20B FNS02-LCU-LCU-PYC-B0-010M-20B FNS02-LCU-LCU-PYC-B0-015M-20B FNS02-LCU-LCU-PYC-B0-020M-20B	OS2 single mode duplex LC-LC, Type A-B cable. Available in bundles of twenty. Standard lengths: 5, 10, 15 or 20 meters. Inquire for custom lengths.

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