

MPO LOOPBACK FOR 40G/100G

Olabs MPO Loopback is offered in female version which is suitable to mate with any MPO adapter or device port.

It is designed to mate directly to a parallel optical device such as a Quad Small Form Factor Pluggable (QSFP) transceiver for network diagnosing and testing.

Our MPO loopback offers the ability to simulate network distances within the device.



KEY FEATURES :

- Ruggedized plastic housing design
- Compact in size and easy to use
- High precision alignment with superior optical loss
- Can accommodate specific optical-routing needs
- Options for 12- or 24-Fibers MPO interface

Specifications

Fiber Channeling Options	For use with 40G on 12-Fiber MPO interface Channel #5~8 unused
	For use with 100G over 12-Fiber MPO interface Channel #1 & #12 unused
	For use with 100G over 24-Fiber MPO interface Channel #1, 12, 13, 24 unused
Fiber Type	Bend Insensitive Fiber
Connector Options	12-Fiber Standard MPO Non-pinned (Female)
	24-Fiber Standard MPO Non-pinned (Female)
	12-Fiber Low Loss MPO Non-pinned (Female)
	24-Fiber Low Loss MPO Non-pinned (Female)
Fiber Count Options	12-Fiber/24-Fiber
Available Fiber Mode	Multimode (OM3, OM4)
Jacket Material	Low Smoke Zero Halogen (LSZH)

Optical Performance

Type	Standard MPO Multimode	Low Loss MPO Multimode
Fiber Mode	850nm	1310nm
Insertion Loss	≤ 1dB	≤ 0.6dB
Return Loss	≥ 20dB	≥ 20dB

MPO LOOPBACK FOR 40G/100G

12-FIBER MPO LOOPBACK FOR 40G

Fiber Channel #5 ~ 8 unused

40G: 1 x 12F MPO Fiber Chart

Fiber colour	Optical Tranceiver		Optical Tranceiver
Blue	Tx-1	↔	Rx-1
Orange	Tx-2	↔	Rx-2
Green	Tx-3	↔	Rx-3
Brown	Tx-4	↔	Rx-4
Not used	N/A-5	.....	N/A-5
Not used	N/A-6	.....	N/A-6
Not used	N/A-7	.....	N/A-7
Not used	N/A-8	.....	N/A-8
Yellow	Rx-9	↔	Tx-9
Violet	Rx-10	↔	Tx-10
Rose	Rx-11	↔	Tx-11
Aqua	Rx-12	↔	Tx-12

40G 12-Fiber MPO connector - Channel 1-4 are Transmit (Tx)
 - Channel 9-12 are Receive (Rx)
 - Channel 5-8

Item Description			Part No.
Connector Type	Fiber Count	Fiber Mode	
Standard MPO Non-pinned (Female)	12	OM3	LBMF3M3D
	12	OM4	LBMF3M4D
Low Loss MPO Non-pinned (Female)	12	OM3	LBEF3M3B
	12	OM4	LBEF3M4B

12-FIBER MPO LOOPBACK FOR 100G

Channel #1 & #12 unused

100G: 2 x 12F MPO Fiber Chart

Fiber colour	MPO		MPO
Not used	N/A-1	.....	N/A-1
Orange	Tx-2	↔	Rx-2
Green	Tx-3	↔	Rx-3
Brown	Tx-4	↔	Rx-4
Grey	Tx-5	↔	Rx-5
White	Tx-6	↔	Rx-6
Red	Tx-7	↔	Rx-7
Black	Tx-8	↔	Rx-8
Yellow	Tx-9	↔	Rx-9
Violet	Tx-10	↔	Rx-10
Rose	Tx-11	↔	Rx-11
Not used	N/A-12	.....	N/A-12

100G 2 x 12-Fiber MPO connector - Channel 2 to 11 are Transmit (Tx) to the first connector
 - Channel 2 to 11 are Receive (Rx) to the second connector
 - Channel 1 to 12 are not used for both connectors

Item Description			Part No.
Connector Type	Fiber Count	Fiber Mode	
Standard MPO Non-pinned (Female)	12	OM3	LBMF4M3D
	12	OM4	LBMF4M4D
Low Loss MPO Non-pinned (Female)	12	OM3	LBEF4M3B
	12	OM4	LBEF4M4B

24-FIBER MPO LOOPBACK FOR 100G

Channel #1, #12, #13, #24 unused

100G: 1 x 24F MPO Fiber Chart

Fiber colour	MPO Top Row		MPO Bottom Row
Not used	N/A-1	.....	N/A-13
Orange	Rx-2	↔	Tx-14
Green	Rx-3	↔	Tx-15
Brown	Rx-4	↔	Tx-16
Grey	Rx-5	↔	Tx-17
White	Rx-6	↔	Tx-18
Red	Rx-7	↔	Tx-19
Black	Rx-8	↔	Tx-20
Yellow	Rx-9	↔	Tx-21
Violet	Rx-10	↔	Tx-22
Rose	Rx-11	↔	Tx-23
Not used	N/A-12	.....	N/A-24

100G 1 x 24-Fiber MPO connector - Channel 2 to 11 are Receive (Rx) for the top row
 - Channel 14 to 23 are Transmit (Tx) for the bottom row
 - Channel 1, 12, 23 & 24 are not used

Item Description			Part No.
Connector Type	Fiber Count	Fiber Mode	
Standard MPO Non-pinned (Female)	24	OM3	LBMF5M3D
	24	OM4	LBMF5M4D
Low Loss MPO Non-pinned (Female)	24	OM3	LBEF5M3B
	24	OM4	LBEF5M4B