

# **OPT-X™ Unity Ultra Low Loss Plenum Array Cords**

#### **APPLICATION**

OPT-X Unity Plenum MPO/MTP® Array Cords are designed to cross connect from structured cabling directly into active equipment with an MPO transceiver interface. They are also used as direct interconnect cables for point-to-point connections. MPO/MTP Connectors feature ultra low loss to support maximum distance and multiple connection points while staying within IEEE low-loss limits.



#### **SPECIFICATION**

All pre-terminated solution components, including trunks, modules, harnesses, brackets, patch panels, and enclosures, shall be provided and warranted by a single manufacturer. Components with modular (8-,12-, and 24-fiber) connections shall use MPO/MTP connectors that meet TIA-604-5. Multimode array cords shall meet an optical connector insertion loss not to exceed 0.20 dB per mated pair for 8 and 12 fibers, and 0.35 dB for 24 fibers. Single-mode array cords shall meet an optical connector insertion loss not to exceed 0.35 dB per mated pair. The cords shall be compliant with ANSI/TIA-568.3-E and IEEE 802.3xx standards as applicable.

#### **FEATURES**

- Ultra-Low-Loss 8-, 12- and 24-fiber MPO/MTP connectors for maximum network design flexibility
- · Offered in OS2, OM3, OM4, and OM5
- 8-, 12-, and 24-fiber array cords offer migration path from 10 GbE to 40/100 GbE and higher data rates
- · Plenum rated cable

#### **DESIGN CONSIDERATIONS**

- For use with Leviton HDX, E2XHD, and SDX cassettes, adapter plates, panels and enclosures
- For use in connecting directly into QSFP, QSFP 28, QSFP-DD or OSFP transceivers
- Used in Base8, Base12 and Base24 cabling systems
- Array Cords can be ordered with or without pins. Leviton cassettes typically have pins inside.
- When plugging directly to transceivers, array cord connector should have no pins (female)
- Leviton 24-fiber connectors have a 20 N spring to provide max 0.35 dB insertion loss. If mated to another 24-fiber MPO connector with a 10 N spring, performance may result in >0.35 dB insertion loss.

#### **STANDARDS & REGULATIONS**

- ANSI/TIA-568.3-E
- ANSI/TIA-942
- Supports data rates identified in multiple IEEE 802.3xx standards as applicable by connector type and cable grade
- OM3, OM4, OM5 meet ITU-T G651.1
- OM5 meets TIA 492-AAAE for SWDM
- OS2 meets ITU-T 652.D and ITU-T 657.A1
- · Detailed fiber specifications in PS 0309 data sheet
- · Meets OFNP requirements

#### **MECHANICAL SPECIFICATIONS**

Length: 1, 2, 3, 5, and 10 meters

(custom lengths available)

Dimensions: 8- and 12-fiber built with 2.0 or

3.0 mm cable 24-fiber built with

3.8 mm cable

Cable Type and Color: OM3 and OM4 cable is plenum-rated

with aqua color jacket, OM5 is lime green, OS2 is a yellow colored jacket

### **WARRANTY INFORMATION**

For Leviton product warranties, go to Leviton.com/ns/warranty

## **PRODUCT SPECIFICATIONS OPT-X™ Unity Ultra Low Loss Plenum Array Cords**



COLOR CODES					
Cable Jackets					
OM3, OM4 50/125 μm	Aqua				
OM5 50/125 μm	Lime green				
OS2 9/125 μm	Yellow				
Connectors					
OM3, OM4 50/125 μm	Aqua				
OM5 50/125 μm	Lime green				
OS2 APC	Yellow				
Connector Boots					
8-fiber	Dark gray				
12-fiber	Black				
12-fiber (OM5)	Lime green				
24-fiber (OS2, OM3, OM4)	Red				

FIBER INSERTION LOSS PERFORMANCE (DB)						
Connector Mated Pairs	Max. IL Multimode	Max. IL Single-mode				
8-fiber Unity	0.20	0.35				
12-fiber Unity	0.20	0.35				
24-fiber Unity	0.35	0.35				

OPT-X UNITY PLENUM ARRAY CORDS							
Description	8-Fiber	12-Fiber	24-Fiber				
MPO/MTP (female) to MPO/MTP (female), Method B OS2, 3 meter	ULUP8MM-B003M	ULUP2LL-B003M	ULUP4JJ-B003M				
MPO/MTP (male) to MPO/MTP (male), Method B OS2, 3 meter	ULUP8NN-B003M	ULUP2KK-B003M	ULUP4HH-B003M				
MPO/MTP (female) to MPO/MTP (female), Method B OM3, 3 meter	UL5L8MM-B003M	UL5L2LL-B003M	UL5L4JJ-B003M				
MPO/MTP (male) to MPO/MTP (male), Method B OM3, 3 meter	UL5L8NN-B003M	UL5L2KK-B003M	UL5L4HH-B003M				
MPO/MTP (female) to MPO/MTP (female), Method B OM4, 3 meter	UL548MM-B003M	UL542LL-B003M	UL544JJ-B003M				
MPO/MTP (male) to MPO/MTP (male), Method B OM4, 3 meter	UL548NN-B003M	UL542KK-B003M	UL544HH-B003M				

Make to order!	OPT-X UNITY PLENUM ARRAY CORDS						
Fiber Type	Fiber Count	Cable Type	Termination		Cord Length (Mtr.)	Polarity	
• OM3 (5L) • OM4 aqua (54) • OS2 (UP) • OM5 Lime green (M5)	• 8 • 12 • 24	• Plenum 2.0 mm (F) • Plenum 3.0 mm	• 8-fiber MPO/MTP male (N) • 8-fiber MPO/MTP female (M) • 12-fiber MPO/MTP male (K) • 12-fiber MPO/MTP female (L) • 24-fiber MPO/MTP male (H) • 24-fiber MPO/MTP female (J)	• 8-fiber MPO/MTP male (N) • 8-fiber MPO/MTP female (M) • 12-fiber MPO/MTP male (K) • 12-fiber MPO/MTP female (L) • 24-fiber MPO/MTP male (H) • 24-fiber MPO/MTP female (J)	Make to order!	Method A (A)     Method B (B)     Method C (C)	

For assistance customizing your OPT-X Unity Plenum trunks, please visit Leviton.com/configurator or call Tech Support at 800-824-3005.

For further support information, visit Leviton.com/ns/support

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