

PRODUCT SPECIFICATIONS

OPT-X Unity Ultra Low Loss MTP Trunk Cables

OPT-X™ Unity Ultra Low Loss MTP® Trunk Cables

APPLICATION

Factory-terminated and tested OPT-X Unity MTP Trunk Cables connect central patching locations to zones or pods. MTP Connectors feature ultra low loss to support maximum distance and multiple connection points while staying within IEEE low-loss limits. All trunks are custom built in any length to meet specific application needs. Optional pulling eyes protect fiber connectors on 8- through 144-fiber trunk cables. This high-tensile load solution pulling eye completely covers the breakout length, transferring any pulling force from the assembly to the pulling-eye sleeve.



SPECIFICATION

All pre-terminated components, including arrays, trunks, cassettes, modules, harnesses, brackets, patch panels, and enclosures, shall be provided and warranted by a single manufacturer. Trunks will be CPR rated to B2ca, s1a, d1, a1 and available in MTP configurations in 8, 12, 24, 48, 72, 96, and 144 fiber counts. Components with a modular (8-, 12- or 24-fiber) connection shall use MTP connectors rather than MPO. Multimode trunks 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 trunks shall meet an optical connector insertion loss not to exceed 0.35 dB per mated pair. Trunks will be available in custom lengths of 0.3 m increments. Total trunk length shall be specified from connector to connector. A pulling eye is optional on the pulling end of all trunks to safeguard fibers during installation. Trunks shall be pre-terminated and pre-tested with test documentation provided with each trunk.

LABELING

- Standard labeling:
 - Trunk label on each end detailing end, length, polarity, and serial number
 - Leg label on each leg detailing the leg number and end
- Custom labeling also available and can be configured

FEATURES

- Ultra-Low-Loss 8-, 12-, and 24-fiber MTP discrete connectors for maximum network design flexibility
- 0.20 dB maximum IL for 8- and 12-fiber Multimode MTP
- Pre-terminated fiber eliminates the need for complicated and craft-sensitive field terminations and splices
- Every fiber component is factory terminated and pre-tested using automated procedures to ensure product quality
- Allow easy migration from 10 GbE to 40 GbE, 100 GbE or higher data rates
- Connector boots are color-coded for easy identification
- Highest performing LSZH Euroclass B2ca, s1a, d1, a1 to meet the requirements of the Construction Product Regulation (CPR)
- Available in 8, 12, 24, 48, 72, 96, 144, or custom fiber counts
- Fiber types include OS2, OM3, OM4, and OM5
- Standard breakout lengths can be staggered to ease installation
- Pulling eyes are provided as an option along with robust connector protection on both ends to safeguard fiber connectors during installation
- Trunk cables have a sturdy breakout point, yet are flexible enough to allow for smooth curving of breakout cordage without kinking or creating sharp bends
- Fiber-on-demand manufacturing and logistics allows Leviton to deliver plug-n-play solutions with significantly reduced lead times

DESIGN CONSIDERATIONS

- For use with Leviton MTP cassettes, adapter plates, panels, and brackets
- Standard breakout length is 0.5 m, other lengths can also be configured
- Total trunk length is from connector to connector
- Shorter lengths are supplied in a coil and packed in an individual bag. Longer lengths are shipped on spools
- Standard polarity is ANSI/TIA Method B. Method A and C polarities are also available
- Pulling eye is typically on first-end termination, if selected
- Breakout must be staggered for applications requiring small diameter through conduit
- If staggers are configured, MTP's are staggered in 51 mm pairs
- 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
- Method B trunk required for Universal Polarity Cassettes

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Network Solutions

STANDARDS & REGULATIONS

- ISO/IEC 11801-1
- ANSI/TIA-568.3-D
- 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 meet TIA 492-AAAE for SWDM
- OS2 meet ITU-T 652.D and ITU-T 657.A1
- Detailed Fiber Specifications in PS 0309 Data Sheet

WARRANTY INFORMATION

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

OPT-X Unity Ultra Low Loss MTP Trunk Cables

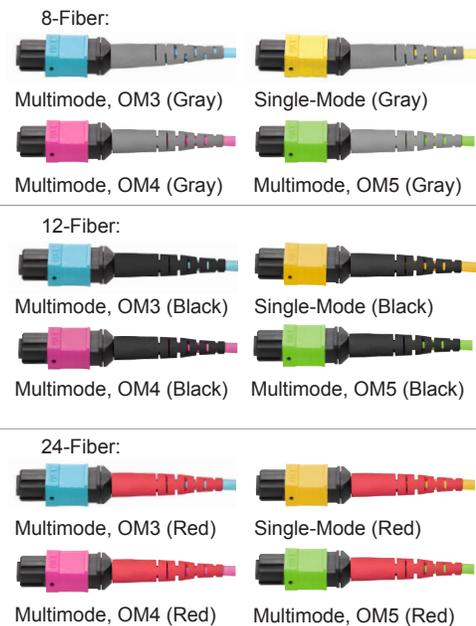
FIBER INSERTION LOSS PERFORMANCE (DB)			
Connector Mated Pairs	Max. IL Multimode	Max. IL Single-Mode	Min. RL Single-Mode
8-fiber Unity	0.20	0.35	>60 dB
12-fiber Unity	0.20	0.35	>60 dB
24-fiber Unity	0.35	0.35	>60 dB

TRUNK LENGTH TOLERANCE	
Length (m)	Tolerance (m)
1.0 – 3.0	+0.1/-0
3.1 – 10.0	+0.2/-0
10.1 – 50.0	+0.3/-0
50.1 – 150.0	+0.6/-0
150.1 – 550.0	+1.0/-0

PERFORMANCE SPECIFICATIONS	MULTIMODE SYSTEM (OM3)		MULTIMODE SYSTEM (OM4)		MULTIMODE SYSTEM (OM5)		SINGLE-MODE SYSTEM (OS2)	
	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm	1310 nm	1550 nm
Maximum Attenuation (dB/km)	2.8	1.5	2.8	1.5	2.8	1.0	0.4	0.4

COLOR CODES	
Cable Jackets	
OS2	Yellow
OM3	Aqua
OM4	Heather Violet
OM5	Lime Green
Connectors	
OS2	Yellow
OM3	Aqua
OM4	Heather Violet
OM5	Lime Green
MTP Connector Boots	
8-fiber	Gray
12-fiber	Black
24-fiber	Red

Color-Coded Boots on MTP



PRODUCT SPECIFICATIONS
OPT-X™ Unity Ultra Low Loss MTP®-MTP Trunk Cables

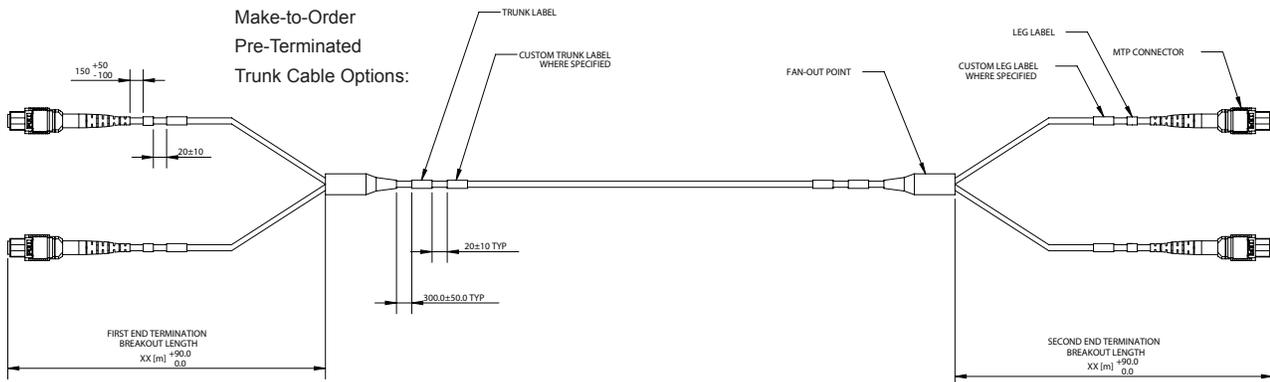
OPT-X Unity Ultra Low Loss MTP-MTP Trunk Cables

MTP-TO-MTP TRUNKS (12F MTP)

Description	Part Number	
	OS2	OM4
12F OPT-X Unity SJZ Trunk, 12F Female MTP to 12F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ012LL015005B05BN-NNBS	FTU-FZ012LL015005B05BN-NNBS
24F OPT-X Unity SJZ Trunk, 12F Female MTP to 12F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ024LL015005B05BN-NNBS	FTU-FZ024LL015005B05BN-NNBS
48F OPT-X Unity SJZ Trunk, 12F Female MTP to 12F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ048LL015005B05BN-NNBS	FTU-FZ048LL015005B05BN-NNBS
72F OPT-X Unity SJZ Trunk, 12F Female MTP to 12F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ072LL015005B05BN-NNBS	FTU-FZ072LL015005B05BN-NNBS
96F OPT-X Unity SJZ Trunk, 12F Female MTP to 12F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ096LL015005B05BN-NNBS	FTU-FZ096LL015005B05BN-NNBS
144F OPT-X Unity SJZ Trunk, 12F Female MTP to 12F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ144LL015005B05BN-NNBS	FTU-FZ144LL015005B05BN-NNBS

MTP-TO-MTP TRUNKS (8F MTP)

Description	Part Number	Part Number
	OS2	OM4
8F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ008MM015005B05BN-NNBS	FTU-FZ008MM015005B05BN-NNBS
12F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ012MM015005B05BN-NNBS	FTU-FZ012MM015005B05BN-NNBS
24F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ024MM015005B05BN-NNBS	FTU-FZ024MM015005B05BN-NNBS
48F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ048MM015005B05BN-NNBS	FTU-FZ048MM015005B05BN-NNBS
72F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ072MM015005B05BN-NNBS	FTU-FZ072MM015005B05BN-NNBS
96F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ096MM015005B05BN-NNBS	FTU-FZ096MM015005B05BN-NNBS
144F OPT-X Unity SJZ Trunk, 8F Female MTP to 8F Female MTP, Euroclass B2ca, 15.0 m	FTU-AZ144MM015005B05BN-NNBS	FTU-FZ144MM015005B05BN-NNBS



Make-to-order!		OPT-X UNITY MTP TRUNK CABLE OPTIONS						
Fiber Type	Fiber Count	CPR Rating	Termination	Cable Length (m)	Breakout Length (m)	Pulling Eye	Polarity	Labeling
• OS2 (A)	• 8	• B2ca	FIRST END	• 3-550*	• 0.5	• Yes	• MTP Method A (A)	• Standard (S)
• OM3 (E)	• 12	• Cca	• 8F MTP Male (N)					
• OM4 (F)	• 24		• 8F MTP Female (M)		• 0.6	• No	• MTP Method B (B)	
• OM5 (5)	• 48		• 12F MTP Male (K)		• 0.9			
	• 72		• 12F MTP Female (L)		• 1.0			
	• 96		• 24F MTP Male (H)		• 1.5			
	• 144		• 24F MTP Female (J)					
			• Blunt End (Z)					

For assistance customizing your trunk cables, please visit levitonemea.com/mto or call Tech Support at +44 (0) 1592 778494.

*12F Multimode MTP Unity products limited to 100 m

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

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