

# Cable Assemblies

For use with the high density, pre-terminated fiber systems, viaPhoton offers a wide range of fiber trunk cables, multi-fiber array assemblies, and jumpers designed for ease of installation and economy of space, while delivering value and high performance.

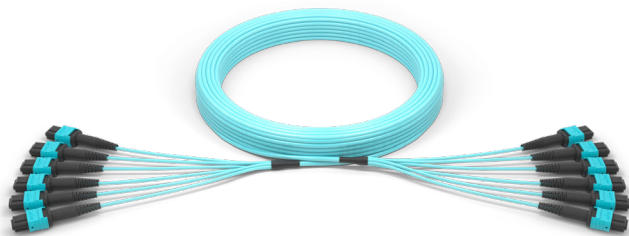
**100%**  
factory tested &  
pre-terminated to  
specified length

Fiber counts from 12 to 96 per module using OM4 and OM5 multi-mode and OS2 single-mode

Features high-performance Corning ClearCurve® optical fiber in a compact cable design

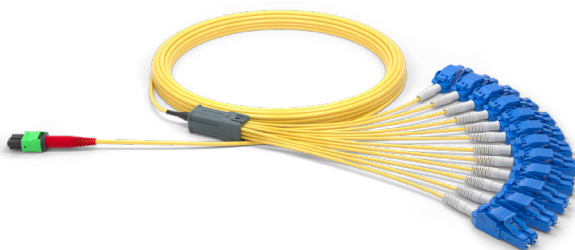
All popular connector and fiber types available, as well as multiple polarities

Compliant to the latest TIA 568-C.3, ISO/IEC 11801 and Telcordia GR-409 standards



## MPO/MTP Trunk Cables

- Plenum & Riser Rated
- 100% Factory Tested
- 0.35 dB Max Single-mode Insertion Loss
- 0.25 dB Max Multi-mode Insertion loss



## Multi-Fiber Array Assemblies

- Plenum Rated
- Modular Transition Sleeve Design
- 100% Factory Tested
- Uniboot LC Duplex Connectors



## LC Fiber Jumpers

- 100% Factory Tested
- LC and SC UPC and APC Connectors

# Ordering Information & Specifications

## Fiber Trunk Modules

FTM-AAABBCC-DDDEEEFG-HJJJ (Example: FTM-96M5P-M12MM12MBY-M100)

FTM	AAA	BB	CC-	DDD	EEE	F	G-	H	JJJ
Application	Fiber Count	Fiber Type	Jacket Rating	Module End 1	Module End 2	Polarity	Pulling Eye	Measure	Length
FTM - Fiber Trunk Module	12	SM - OS2	P - Plenum	LCU - LC Uniboot	LCU - LC Uniboot	A - Method A	Y - Yes	F - Feet	xx
	16	M4 - OM4	R - Riser	LCA - LC APC	LCA - LC APC	B - Method B	N - No	M - Meters	
	24	M5 - OM5	PA - Plenum Armor	M8M - MPO8 Male	M8M - MPO8 Male	U - Universal			
	36			M8F - MPO8 Female	M8F - MPO8 Female	C - A / B (LC Only)			
	48			M12M - MPO12 Male	M12M - MPO12 Male				
	72			M12F - MPO12 Female	M12F - MPO12 Female				
	96			M24M - MPO24 Male	M24M - MPO24 Male				
	144			M24F - MPO24 Female	M24F - MPO24 Female				
	192								

## Superior Density

Module	Fibers Per 1U	Product Config	
12 Fiber LC	144	Height	41mm (1.6in)
16 Fiber LC	192	Width	33mm (1.3in)
24 Fiber CS/SN	288	Length	192mm (7.5in)
24 Fiber MDC	288		
64 Fiber MPO/MTP (8 Fiber MPO/MTP X 8 ports)	768		
96 Fiber MPO/MTPO (12 fiber MTP/MPO X 8 ports)	1,152		
128 Fiber MPO/MTPO (16 fiber MTP/MPO X 8 ports)	1,536		
192 Fiber MPO/MTPO (24 fiber MTP/MPO X 8 ports)	2,304		
256 Fiber MPO/MTP (32 fiber MPO/MTP X 8 ports)	3,072		

## Super Low-loss Performance

Component	Insertion Loss	Return Loss	Insertion Loss	Return Loss
LC Trunk Modules	0.20 dB max 0.10 dB typ	20 dB	0.20 dB max 0.10 dB typ	60 dB
MPO/MTP Trunk Modules	0.35 dB max 0.10 dB typ	20 dB	0.35 dB max 0.10 dB typ	60 dB
MPO/MTP to LC Modules	0.55 dB max 0.20 dB typ	20 dB	0.55 dB max 0.20 dB typ	60 dB

## Fiber Trunk Assemblies

FT-AAABBCC-DDDEEEFG-KKLL-HJJJ (Example: FT-72M4P-M12MM12MBY-M100)

FT-	AAA	BB	CC -	DDD	EEE	F	G -	KK	LL -	H	JJJ
App	Fiber Count	Fiber Type	Jacket Rating	Module End 1	Module End 2	Polarity	Pulling Eye	Breakout 1	Breakout 2	Measure	Length
FT - Fiber Trunk	8	SM - OS2	P - Plenum	LCU - LC Uniboot	LCU - LC Uniboot	A - Method A	Y - Yes	Blank - Standard	Blank - Standard	F - Feet	xx
	12	M4 - OM4	R - Riser	LCA - LC APC	LCA - LC APC	B - Method B	N - No	Custom > 32"	Custom > 32"	M - Meters	
	16	M5 - OM5	PA - Plenum Armor	M8M - MP08 Male	M8M - MP08 Male	U - Universal					
	24		RA - Riser Armor	M8F - MP08 Female	M8F - MP08 Female	C - A-B (LC Only)					
	36			M12M - MPO12 Male	M12M - MPO12 Male						
	48			M12F - MPO12 Female	M12F - MPO12 Female						
	72			M24M - MPO24 Male	M24M - MPO24 Male						
	96			M24F - MPO24 Female	M24F - MPO24 Female						
	144										
	192										

## Fiber Array Assemblies

FA-AABB-DDDEEFF-KKLL-GHHH (Example: FA-8SM-M8FLCUB-F10)

FT-	AAA	BB	DDD	EEE	F	KK	LL -	H	JJJ
App	Fiber Count	Fiber Type	Conn End 1	Conn End 2	Polarity	Breakout 1	Breakout 2	Measure	Length
FA - Fiber Array	8	SM - OS2	LCU - LC Uniboot	LCU - LC Uniboot	A - Method A	Blank - Standard	Blank - Standard	F - Feet	xx
	12	M4 - OM4	LCA - LC APC	LCA - LC APC	B - Method B	Custom > 32"	Custom > 32"	M - Meters	
	16	M5 - OM5	M8M - MP08 Male	M8M - MP08 Male	U - Universal				
	24		M8F - MP08 Female	M8F - MP08 Female	C - A / B (LC Only)				
			M12M - MPO12 Male	M12M - MPO12 Male					
			M12F - MPO12 Female	M12F - MPO12 Female					
			M24M - MPO24 Male	M24M - MPO24 Male					
			M24F - MPO24 Female	M24F - MPO24 Female					

## Copper Trunk Module

CTM-ABCDx-RJRJ-EFGGG (Example: CTM-4P6P-RJRJY-F10)

CTM -	A	B	C -	D	x	RJ	RJ	E -	F	GGG
App	# of Bundles	Performance Level	Category 6	Cable Type	Color	End 1	End 2	Pulling Eye	Measure	Length
CTM - Copper Trunk Module	1	P - Permanent Link	6 - Cat6	P - Plenum	BU - Blue	RJ - RJ45 Jack	RJ - RJ45 Jack	Y - Yes	F - Feet	xx
	2			R - Riser	BK - BK		PT - Pigtailed	"Blank" No	M - Meter	
	3				WH - White					
	4				YL - Yellow					

## Fiber Jumpers

FJ-AA-BBBCCC-DEEE (Example: FJ-SM-LCLC-F3)

FJ -	AA -	BBB	CCC -	D	E
Application	Fiber Type	Conn End 1	Conn End 2	Measure	Length
FJ - Fiber Jumper	SM - OS2	LC - LC Duplex	LC - LC Duplex	F - Feet	xx
	M4 - OM4	LCA - LC APC	LCA - LC APC	M -Meters	
		SC - Duplex	SC - Duplex		
		SCA - SC APC	SCA - SC APC		

## Superior Optical Performance

Fiber Type	Max Attenuation (dB/Km)		Min OFL Bandwidth (Mhz-Km)		Min EMBC Bandwidth (Mhz-Km)	
	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
OM4 multit-mode	2.8	1.0	3500	500	4700	N/A
OM5 multi-mode	2.8	1.0	3500	500	4700	N/A
Fiber Type	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	155 nm
OS2 single-mode	0.5	0.5	N/A	N/A	N/A	N/A

## Cable Temperature Ranges

Storage: -40° to 70°C (-40° to 158°F)

Installation: 0° to 60°C (32° to 140°F)

Operating: 0° to 70°C (32° to 158°F)

## Mechanical Specifications

Bend radius, no load = 10x cable overall diameter

Bend radius, load = 15x cable overall diameter

TIA 568-C.3, ISO/IEC 11801 & Telcordia GR-409

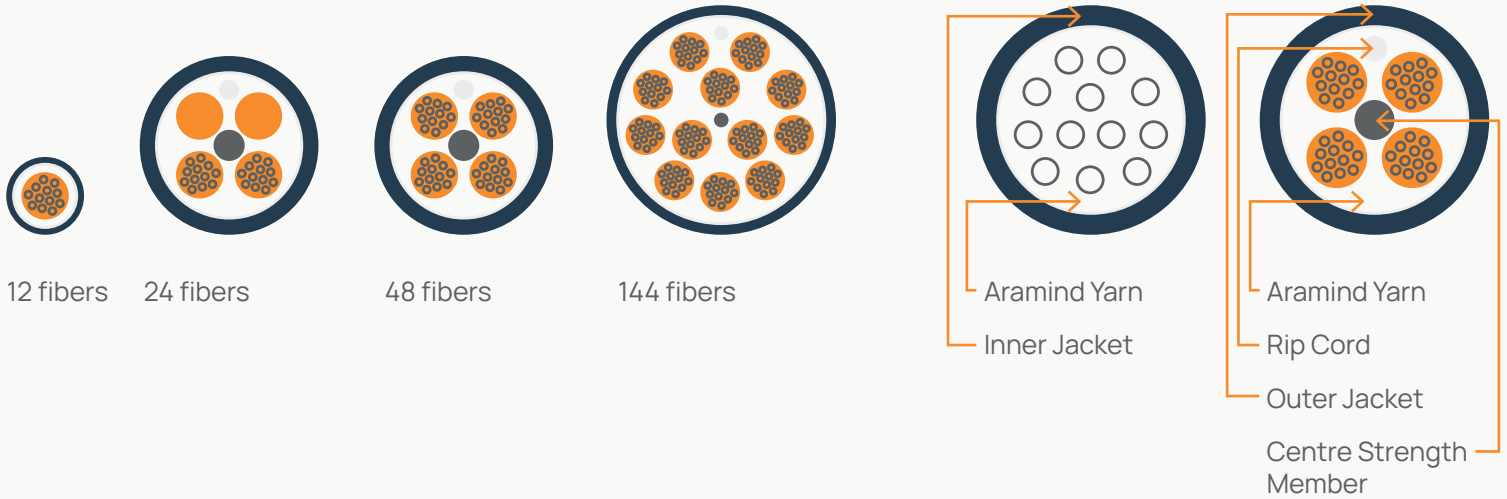
## Specifications By Fiber Count

Fiber Count	Fibers / Tube	Tube Layout	Tube OD		Cable OD		Max Load Install		Max Load Operation		Cable Weight	
			in	mm	in	mm	lbs	N	lbs	N	lbs/kft	Kg/Km
12	12	single tube	0.118	3.0	0.189	4.8	150	668	45	200	15.56	23.2
24	12	2+2FxCSM	0.079	2.0	0.296	7.5	150	668	45	200	36.4	54.2
36	12	3+1FxCM	0.079	2.0	0.296	7.5	150	668	45	200	37.4	55.7
48	12	4xCSM	0.079	2.0	0.296	7.5	150	668	45	200	38.3	57.0
72	12	6xCSM	0.079	2.0	0.332	8.4	150	668	45	200	48.3	71.9
96	12	8xCSM	0.079	2.0	0.433	11.0	150	668	45	200	83.8	124.7
144	12	9x3xCSM	0.079	2.0	0.458	11.6	150	668	45	200	88.9	132.3
192*	24	8+4FxCSM	0.118	3.0	0.624	15.8	150	668	45	200	157.36	234.18

F= Filler CSM = Central Strength Member

\*This cable designs utilizes a colored thread to separate fibers into bundles of 12.

## Compact Cable Design



## Flex Ribbon Cable Design

