

MTP[®] Multi Lite Trunk Assemblies

MTP[®] Multi-Lite Trunk assemblies are a neat solution for providing up to four MTP[®]-MTP[®] links within a compact, high density ruggedised cable. The cable construction consists of four ruggedized 12f tubes over-sheathed with a LSZH jacket. Two layers of Kevlar[®] form the reinforcement and provide ample mechanical resistance beyond expected installation handling. The benefit becomes the ease of installation with managing one cable rather than four cables. Also, with an outer diameter of 9mm, installing an MTP[®] Multi-Tuff trunk saves space with cable routing.

QSFP Cable Harnesses

The Multi-Lite Trunks can be configured not only as permanent links but also for QSFP cable links for SR4 and CXP parallel optics applications. As these style of assemblies cater for up to 48f, the MTP[®] connectors can be split into: 4x 12f MTP[®] to 4x 12f MTP[®], 2x 24f MTP[®] to 2x 24f MTP[®], 2x 24f MTP[®] to 4x 12f MTP[®], 2x 24f MTP[®], 2x 24

Hybrid assemblies from multi-MTP[®] connectors at one end to LC connectors at the opposite end are also available, for example 2x 24f MTP[®] to 48 LC Connectors. Manufactured within our state-of the-art termination facility where meticulous attention provides assured quality and peace of mind. From our North Wales base, fast-manufacturing turnaround is our speciality with custom length assemblies made within days of ordering.

Features & Benefits

- Exceptionally High Density Connectors 12 or 24 fibre set in a SC Simplex Format
- Higher Density Population reduces the overall cost of 1U Spacing
- Rapid deployment modular system saving overall installation and maintenance time
- Multimode OM3, enhanced OM4 and OS2 fibre grades with a LSZH jacket
- Removable housing for field change of polarity and gender (seperate tool required)
- MTP® patented elliptical guide pins are key to accurate mating alignment and determine the gender or the connector; male or female
- The oval spring provide greater fibre clearance and seats into the connector body eliminating possible trapping/breakages of bare fibre
- High Spring Force (HSF) MTP[®] connectors ensuring uniform alignment across 24x lanes and optimising the physical contact
- Choosing MTP[®] Elite provides performance for the most stringent of optical loss budget environments
- 100% interferometric testing for all MTP[®] Connectors to verify end-face geometry conformity and subsequent low losses
- Fully compatible with all MPO connectivity and QSFP+ mated interface
 solutions with the same fibre count

Specification	
ELEMENT	CHARACTERISTIC
Fibre (ISO/IEC 60793)	OS2 = Black Cable - Yellow Tails OM3 + OM4 = Black Cable - Aqua Tails
Cable (LSZH)	24f = 9mm OD, 48f = 10-11mm OD
Housing (US Conec)	Multimode Elite = Aqua Single-mode Elite = Mustard
Crush Resistance	1000N
Operation Temperature	-40 ~ +80°C
Installation Temperature	-10 ~ +70°C

Industry Standards Compliance

- Colour coding compliant to TIA/EIA-568-C.3 & ISO/IEC11801
- Connector specification to IEC-61754-7 & EIA/TIA-604-5
- Jacket materials to IEC 60332
- Compliant to Directive 2002/95/EC (RoHS) and REACH SvHC
- The geometrical characteristics compliant to IEC-60793
- End Face Cleanliness compliant to IEC 61300-3-35

Application

- Data Centre Infrastructure
- Storage Area Network Fibre Channel
- Parallel Optics
- 40Gbps, 100Gbps and emerging 400Gbps Protocols



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Optical Fibre Specifications

Multimode Fibres

Mu IEC ISC EN	ltimode Fibres 60793-2 /IEC 11801 50173 -1&2	Overall Bandwidth (MHz x km) 850nm 1300nm	Max. Link Length for 1 GBit/s (m) 850nm 1300nm (1000Base-SX) (1000Base-LX)		Max. Link Length for 10 GBit/s (m) 850nm 1300nm (10GBase-SR) (10GBase-LX4) (10GBase-SW)		Fibre At (dE 850nm	tenuation 3/km) 1300nm
	50/125 um							
	OM3	≥1500 ≥500	1000	600	300	300	<u><</u> 2.7	≤0.7
	OM4 Laser Optimised	≥3500 ≥500	1000	600	550	300	<u><</u> 2.7	≤0.7

Single-mode Fibres

Sin IEC ISC FN	gle-mode Fibres 60793-2 //IEC 11801 50173-1&2	Chror Dispe 1310nm	matic rrsion 1550nm	Cut-off-Wave Length (cabled) (nm)	Point Discontinuity (dB)	Fibre Attenuation (dB/km) 1310nm 1380-1386nm 1550nm		Fibre Geometrical Properties (um) Mode-field Cladding Coating			
2.14	9/125 um										
	OS2(ITU-T G.652.D)	<u>≥</u> 3.5	≥18.0	<u>≥</u> 1260	<u>≤</u> 0.1	<u>≤</u> 0.34	<u>≤</u> 0.31	<u>≤</u> 0.22	9.2 ±0.4	125 ±1	245 ±5
	OS2 (G.657.A2)	<u>≥</u> 3.7	≥18.5	<u>≥</u> 1260	<u>≤</u> 0.1	<u>≤</u> 0.38	<u>≤</u> 0.35	<u>≤</u> 0.25	8.8 ±0.4	125 ±1	245 ±5

Part Numbering Format



E.G. 50mtr Multi Lite Trunk MTP Elite Female - MTP Elite Male OM4 Utilising 2 x 24fibre Connectors/1mtr Tails = MLI4-MF/MM-2X24A-050/01









Connectivity Methods

All the connectivity methods shown here have the same purpose: to ensure that the transmit port of one device is connected to the receive port on another device. Each method requires a specific combination for components to maintain the system polarity. These are outlined in the below table.

Method	Connector Type	Adapter Type	Patch Cord Type	
A	MTP*	Key Up - A - Key Down	One A-to-B and One A-to-A	
В	MTP*	Key Up - B - Key Up	A-to-B	
С	MTP®	Key Up - A - Key Down	A-to-B	

А	В	А	В
connector	connector	connector	connector
connector	connector	connector	connector
В	А	В	А

MTP® Connector Performance

Connector Mating	IL Typical	IL Max	Return Loss
MTP® Multimode Elite	0.10dB	0.35dB	N/A
MTP [®] Single-mode Elite	0.10dB	0.35dB	>60dB

Certificates



ISOCAR Kristieran Certificate Number 3927 ISO 9001:2008



MTP® is a Registered Trademark of US Conec

Kevlar[®] is a Registered Trademark of Dupont ™

Available Accessories



MTP® Modular Cassette



MTP® 3U CHASSIS



EXFO Probe



MTP 1U Chassis



LC HD Switchable Uniboot



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