

tML<sup>®</sup> - Fiber Optic TAP Module MPO/MTP<sup>®</sup> w. Pins 1x 50/125 $\mu$  OM4 100GBASE-SR10 50:50



## tML<sup>®</sup> - tde Modular Link

tML<sup>®</sup> is a patented, modular cabling system consisting of the three key components module, trunk cable and rack mount enclosure. The system components are 100 percent manufactured, pre-assembled and tested in Germany. They enable plug-and-play installation on site – especially in data centres, but also in industrial environments – within the shortest possible time. Heart of the system are the rear MPO/MTP<sup>®</sup> and Telco connectors, which can be used to connect at least six or twelve ports at a time. Depending on the module configuration, transfer rates of up to 200G are currently possible with SR4. The fibre optic and TP modules can be used together in a module carrier with a very high port density. The tde offers its tML<sup>®</sup> cabling system as a proven tML<sup>®</sup> standard system and in the highly innovative variants tML<sup>®</sup> Xtended, tML<sup>®</sup> 24 System and now tML<sup>®</sup> 32 System for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G and 400G.

The tML<sup>®</sup> - FO TAP Module is intended for the installation in the tML<sup>®</sup> Rack Mount Enclosure 1U (for 8 x Modules).



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## Technical Data

Entry	1 x MPO/MTP <sup>®</sup> Adapter with Pins (black) front
Exit	2 x MPO/MTP <sup>®</sup> Adapter with Pins (purple) front
Tests	Interferometer, Insertion Loss, Return Loss and Visual Final Inspection; all measured values are electronically archived
	QS-Managementsystem ISO 9001, ISO 14001 and TL 9000

Box	Galvanized steel sheet
Front Panel	Stainless steel
Dimensions	110 x 108 x 20 mm

## FO Adapters

Type	MPO/MTP <sup>®</sup>
Application	Multimode OM4
Design	without Flange
Connector style	SC Simplex
Key Orientation	Type A, Key up/down
Color	Magenta
Material	Plastic
Sleeve	--
Shutter	--
Standards	IEC 61754-7 TIA 604-5
Manufacturer	US Conec

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## FO Connectors

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The end faces of the connectors are optimized by means of Lasercleaving and machine polish. The MPO/MTP<sup>®</sup> plug has a defined fiber height of 1 - 3.5 $\mu$ m. The max. adjacent fiber height difference is 0.2 $\mu$ m and for all fibers 0.3 $\mu$ m.

### Connector

Type	MPO/MTP <sup>®</sup> Male Push Pull Locking with Elite Pins (magenta)
Ferrule	24 Fiber MM Elite <sup>®</sup> ferrule, PPS
Boot colour	Red
Temperature range	-40°C to +75°C
Manufacturer	tde/US Conec

### Optical Performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125 $\mu$ OM4	MPO/MTP <sup>®</sup>	850 nm	≤ 0.16 dB	0.30 dB	30 dB

### FO Splitter

Type	Splitter
Port	1x2
Jumper Type	250 $\mu$
Fiber Length	1 m
Operating Wavelength	1260 ~ 1650 nm
Max. Insertion Loss	4 dB
Uniformity	0.4 dB
Max. PDL	0.2 dB
WDL	0.3 dB
Min. Return Loss	55 dB
Min Directivity	55 dB
Operating temperature	-40°C to +85°C
Dimensions	4x4x40 mm (WxHxL)

### Product variants & accessories

Art.-No.	Description
TML-M01M2P09E-TAP50	tML <sup>®</sup> - Fiber Optic TAP Module MPO/MTP <sup>®</sup> w. Pins 1x 9/125 $\mu$ OS2 100GBASE-LR10 50:50
TML-M01M2P09E-TAP70	tML <sup>®</sup> - Fiber Optic TAP Module MPO/MTP <sup>®</sup> w. Pins 1x 9/125 $\mu$ OS2 100GBASE-LR10 30:70
TML-M01M2P50G4TAP50	tML <sup>®</sup> - Fiber Optic TAP Module MPO/MTP <sup>®</sup> w. Pins 1x 50/125 $\mu$ OM4 100GBASE-SR10 50:50
TML-M01M2P50G4TAP70	tML <sup>®</sup> - Fiber Optic TAP Module MPO/MTP <sup>®</sup> w. Pins 1x 50/125 $\mu$ OM4 100GBASE-SR10 30:70