# tML® - Fiber Optic TAP Module MPO/MTP® w. Pins 2x 50/125µ OM4 40GBASE-SR4 50:50





## tML® - tde Modular Link

tML® 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® 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® cabling system as a proven tML® standard system and in the highly innovative variants tML® Xtended, tML® 24 System and now tML® 32 System for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G and 400G.

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

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## Technical Data

| | |
|---|---|
| Entry | 2 x MPO/MTP® Adapter with Pins (black) front |
| Exit | 4 x MPO/MTP® 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® |
| 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<br>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® plug has a defined fiber height of 1 - 3.5µ. The max. adjacent fiber height difference is 0.2µm and for all fibers 0.3µm.

### Connector

| | |
|---|---|
| Type | MPO/MTP® Male Push Pull Locking with Elite Pins (magenta) |
| Ferrule | 12 Fiber MM Elite® ferrule, PPS |
| Boot colour | Black |
| Manufacturer | tde/US Conec |

### Optical Performance

| Fiber | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
|---|---|---|---|---|---|
| 50/125µ OM4 | MPO/MTP® | 850 /1300 nm | ≤ 0.16 dB | 0.30 dB | 30 dB |

## FO Splitter

| | |
|---|---|
| Type | Splitter |
| Port | 1x2 |
| Jumper Type | 250 µ |
| Fiber Lenght | 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-M02MPP09E-TAP50 | tML® - Fiber Optic TAP Module MPO / MTP® w. Pins 2x 9/125µ OS2 40GBASE-LR4 50:50 |
| TML-M02MPP09E-TAP70 | tML® - Fiber Optic TAP Module MPO/MTP® w. Pins 2x 9/125µ OS2 40GBASE-LR4 30:70 |
| TML-M02MPP50G4TAP50 | tML® - Fiber Optic TAP Module MPO/MTP® w. Pins 2x 50/125µ OM4 40GBASE-SR4 50:50 |
| TML-M02MPP50G4TAP70 | tML® - Fiber Optic TAP Module MPO/MTP® w. Pins 2x 50/125µ OM4 40GBASE-SR4 30:70 |


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