tML® HD - FO Breakout Module 2x MPO/MTP® with Pins/8x LC APC Duplex 9/125µ OS2, LR4

\*\*tML® Xtended

tML® Xtended 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® 12 fiber 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® 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.

\*\*tML® 24

tML® 24 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® 24 fiber 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 400G 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 and now tML® 32 for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G and 400G.

\*\*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.

\*\*tML® Breakout - LWL Module MPO/MTP®

The tML® HD Breakout Module is intended for the installation in the tML® Rack Mount Enclosure 1U (for 8 x Modules). The tML® HD Breakout Module can be used only in combination with the tML® HD patch cord.

\*\*TECHNISCHE\_DATEN

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. All system components (modules, trunk cables and patch cords) are co-ordinated for the reaching of the performance particularly. The module is marked with sequential serial number and article number. The modules are ROHS compliant.

|  |  |
| --- | --- |
| Entry | 2 x MPO/MTP®Male Adapter (green) front |
| Exit | 8 x LC APC Duplex Adapter (green) 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 | LC Duplex |
| Application | Singlemode OS2 APC |
| Design | One-Piece without flange |
| Connector style | SC Simplex |
| Color | Green |
| Material | Plastic |
| Sleeve | Zirkonia Staight Split |
| Shutter | -- |
| Manufacturer | tde |

\*\*\*FO Connectors

|  |  |
| --- | --- |
| Connector Type | LC APC Unibody Simplex |
| Housing | Plastic, Green |
| Ferrule | Zirconia Straight Split, Spring-loaded Axially |
| Ferrule Hole | 125.5 µ |
| Ferrule Concentricity | ≤ 0.6 µ |
| Mating Cycles | 500 |
| Operating Temperature | -40°C up to +75°C |
| Strain Relief to | 100 N |
| Manufacturer | tde |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fiber | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
| 9/125µ | LC APC | 1310 / 1550 nm | ≤ 0.10 dB | 0.18 dB | 75 dB |

\*\*\*FO Adapters

|  |  |
| --- | --- |
| Type | MPO/MTP® |
| Application | Singlemode OS2 APC |
| Design | without Flange |
| Connector style | SC Simplex |
| Key Orientation | Type A, Key up/down |
| Color | Green |
| Material | Plastic |
| Sleeve | -- |
| Shutter | -- |
| Standards | IEC 61754-7 TIA 604-5 |
| Manufacturer | US Conec |

\*\*\*FO Connectors

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.

|  |  |
| --- | --- |
| Type | MPO/MTP® APC Male Push Pull Locking with Elite Pins (green) |
| Ferrule | 12 Fiber SM Elite® ferrule, PPS |
| Boot colour | Black |
| Temperature range | -40°C bis +75°C |
| Manufacturer | tde/US Conec |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fiber | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
| 9/125µ OS2 | MPO/MTP®APC | 1310 / 1550 nm | ≤ 0.10 dB | 0.20 dB | 75 dB |