

tML<sup>®</sup> - Fiber Optic TAP Module LC APC Duplex 2x 9 / 125µ OS2 10GBASE-LR 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 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<sup>®</sup> cabling system as a proven tML<sup>®</sup> standard system and in the highly innovative variants tML<sup>®</sup> 12, tML<sup>®</sup> 24, tML<sup>®</sup> 32 and now tML<sup>®</sup> 24+ System for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G, 400G and 800G and more.

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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## tML<sup>®</sup> - Fiber Optic TAP Module LC APC Duplex 2x 9 / 125 $\mu$ OS2 10GBASE-LR 50:50

### Technical Data

Entry	2 x LC Duplex Adapter (black) with self-closing shutter front
Exit	4 x LC APC Duplex Adapter (green) with self-closing shutter 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

When the connector is inserted into the adapter it compresses the springs, opening the internal shutter. The internal shutter opens, and due to the special design of the shutter, it will not touch the ferrule end face. As the connector is removed from the adapter, the shutter spring automatically returns the internal shutter to the closed position.

Type	LC Duplex
Application	Singlemode APC
Design	One-Piece without flange
Connector style	SC simplex
Color	Green
Housing material	Plastic
Sleeve	Zirkonia Straight Split
Self-closing shutter material	Metal
Self-closing shutter protection	Dust and laser light
Manufacturer	tde

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### FO Connectors

Connector Type	LC APC Unibody Duplex
Housing	Plastic, Green
Ferrule	Zirconia Straight Split, Spring-loaded Axially
Ferrule Hole	125.5 $\mu$
Ferrule Concentricity	$\leq 0.6 \mu$
Mating Cycles	500
Operating Temperature	-40°C up to +75°C
Strain Relief to	100 N
Manufacturer	tde
Simplex / Duplex Clip	with Duplex Clip

### Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
9/125 $\mu$	LC APC	1550 nm	$\leq 0.10$ dB	0.25 dB	75 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-M02LCADS09E-TAP50	tML <sup>®</sup> - Fiber Optic TAP Module LC APC Duplex 2x 9 / 125 $\mu$ OS2 10GBASE-LR 50:50
TML-M02LCADS09E-TAP70	tML <sup>®</sup> - Fiber Optic TAP Module LC APC Duplex 2x 9 / 125 $\mu$ OS2 10GBASE-LR 70:30
TML-M02LCDS09E-TAP50	tML <sup>®</sup> - Fiber TAP Module LC Duplex 2x 9 / 125 $\mu$ OS2 10GBASE-LR 50:50
TML-M02LCDS09E-TAP70	tML <sup>®</sup> - Fiber TAP Module LC Duplex 2x 9 / 125 $\mu$ OS2 10GBASE-LR 70:30
TML-M02LCDS50G4TAP50	tML <sup>®</sup> - Fiber Optic TAP Module LC Duplex 2x 50 / 125 $\mu$ OM4 10GBASE-SR 50:50

## tML<sup>®</sup> - Fiber Optic TAP Module LC APC Duplex 2x 9 / 125 $\mu$ OS2 10GBASE-LR 50:50

Art.-No.	Description
TML-M02LCDS50G4TAP70	tML <sup>®</sup> - Fiber Optic TAP Module LC Duplex 2x 50 / 125 $\mu$ OM4 10GBASE-SR 70:30