Compact MPO based embedded Switch Module

All-in-one integrated switch solution automating OTDR uni-directional/bidirectional and Bidirectional IL/ORL and OTDR FiberComplete PRO tests

Perfectly suited for MPO based networks and high fiber count cables, the on-board switch allows an automated test sequence up to 12 fibers.

Characterize individual fibers within high fiber count cables. Conduct upcoming patch panel port inspections while the automated OTDR test sequence is on-going. Test more fibers within the same time frame.

Certify new installations to industry standards. Eliminate the complexities of using fanout/break-out cables for MPO/MTP native networks certifications.

Troubleshoot issues at the press of a button. Speed fiber fault location with precise localization of issues like severe bends, high-loss splices and dirty or poor connections.

Multi-Fiber MPO based Switch Module -12 ports

T-BERD/MTS-4000 V2 Two-slot handheld modular platform for testing fiber optic networks

OneAdvisor 800 Modular test platform with 3 slots, designed for use in the installation and maintenance of fiber, wireless and transport applications.

Benefits

- Simplify your test process for all native MPO/MTP network characterization, certification or troubleshooting
- Accelerate the high fiber count cable tests workflow and Transform time in money
- Measure with confidence with reduced manual process and complexity

Features

- All in one solution, on board module conveniently powered by the platform
- Replaces multi-fiber fanout patchcords where native MPO links installed
- Efficient workflow with automated switching over 12 ports through Cable-SLM software
- Compatible with OTDR 4100 series modules A, B, C, QUAD and with bidirectional IL, ORL and OTDR FiberComplete modules and with TrueBIDIR SW option

Applications

- Data Center (structured cabling, campus, interconnect)
- FTTH (fiber indexing)/Access Networks
- Mobile Fronthaul (FTTA/C-RAN)
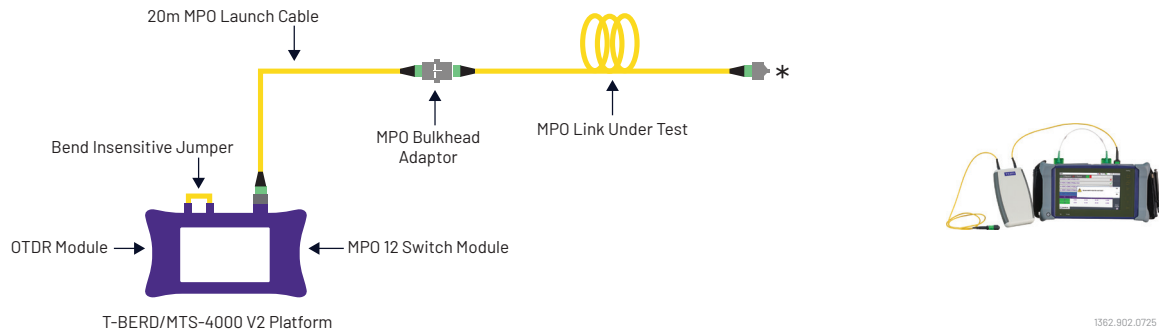
An onboard MPO based switch for certifying native multifiber MPO/MTP links
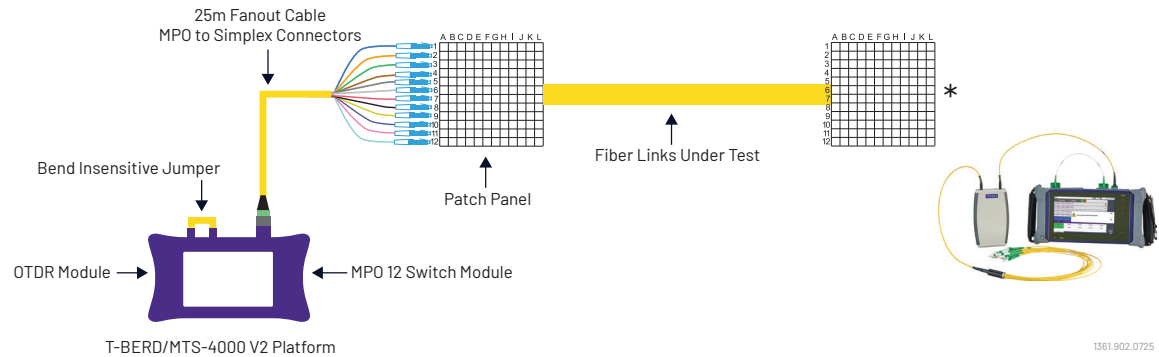
An onboard MPO based switch module with fanout/breakout cable for bulk certification of simplex fibers

* Receive cable can be installed at the far end to characterize the last connector.

The automated switch sequence is managed with Cable-SLM application. Its intuitive interface provides an overview of a high fiber count project with pass/fail status of each fiber/connector tested.

A "Test All Fibers" function initiates a fully automated test sequence and delivers a visual verdict of each individual fiber of a 12-fiber MPO connector.

Bulk certify simplex fibers within high fiber count cables, manage groups of 12 fibers with a switch sequence starting at any fiber number needed with the Cable-SLM "simplex fiber" project management.

Possibility to troubleshoot a specific fiber and get a precise diagnostic of the fault.

Specifications (Typical at 25ºC)

Optical	
Number of Ports	12 ports
Wavelength Range	1270 nm to 1650 nm
Insertion Loss[1,2]	1.2 dB typical
Return Loss with Connector	55dB
Input Port	SC/APC
Output Port	MPO 12 APC (pinned)
General	
Dimensions (w x h x d)	128 x 134 x 40 mm (5 x 5.28 x 1.58 in)
Weight	450 g (1 lb)
Operating Temperature	–10 to +50°C (14 to 122°F)
Storage Temperature	–20 to +60°C (–4 to 140°F)
Power Supply	automatically powered by the platform

1. Measured at 1310, 1550 and 1625nm

2. 2.5 dB maximum

30cm bend insensitive jumper, to connect the switch module with the 4100 OTDR of FiberComplete Modules

E41MPO12SM: on board switch module

Front view

Front view

Back view
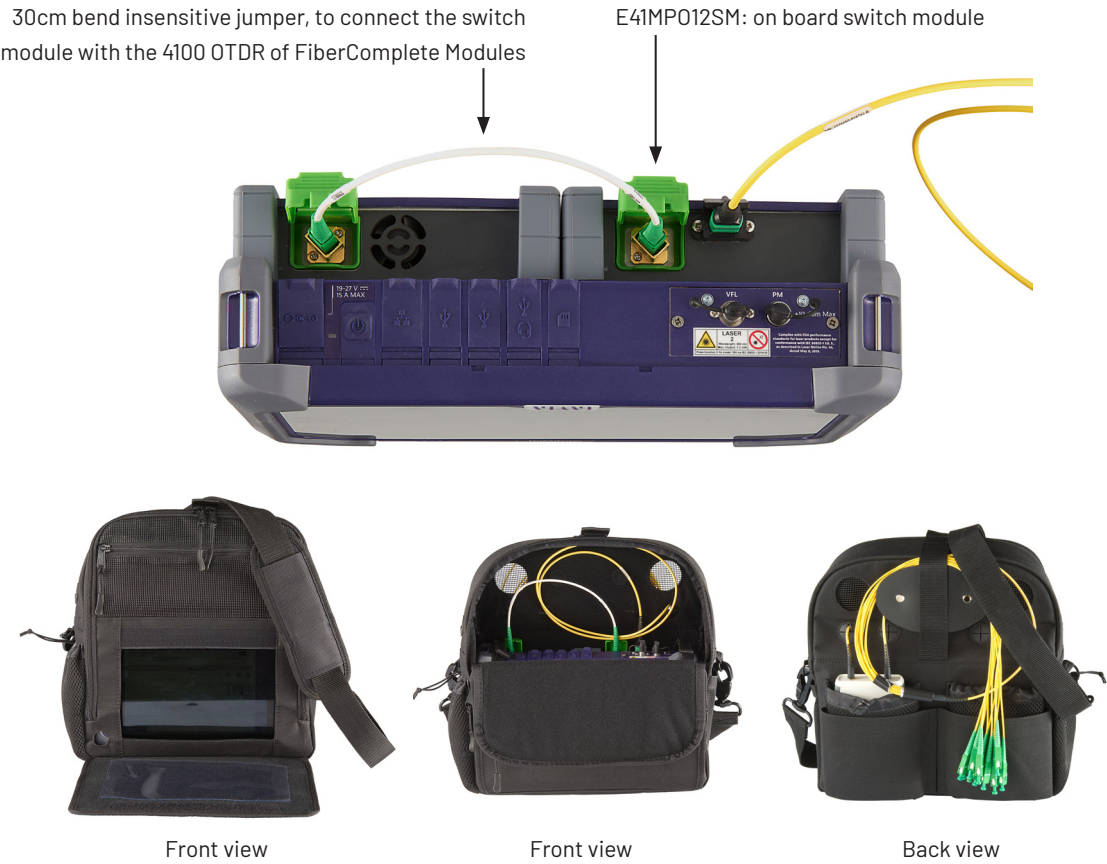
Best use with: Hands-free with neck strap for permanent fiber launch cable connection: E40GLOVE2
(not included as standard)

Ordering Information

Part Number	Description
MPO Switch Module and Kit	
E41MPO12SM	MPO 12 switch module. Includes: • 1x 30 cm SC/APC to SC/APC bend insensitive jumper • 1x 30 cm SC/APC to SC/PC bend insensitive jumper
MPO12MODKIT-SM	MPO 12 switch module kit with 2x 25 m MPO test cables. Includes: • 1x E41MPO12SM • 2X 25 m SM launch and receive MPO to MPO cables (pinned-unpinned) • 2x MTP/MPO bulkhead adapter with opposed key
MPO12MODKIT2-SM	MPO 12 switch module kit with 2x25m MPO to SC fanout test cables. Includes: • 1x E41MPO12SM • 1x 25m SM test cable MPO unpinned to SC/APC • 1x 25m SM test cable MPO unpinned to SC/PC
Software Options	
ECABLESLM	Cable management software option for new platforms. Allows the configuration of an automatic switch sequence.
ECABLESLM-UPG	Cable management software option for installed platforms. Allows the configuration of an automatic switch sequence.
Accessories	
ELCSM25A-MPOF-MPOM	1x 25 m SM MPO unpinned to MPO pinned launch cable
ELCSM25A-MPOF-MPOF	1x 25 m SM MPO unpinned to MPO unpinned cable
ELCSM25-MPO-SC	1x 25 m SM fanout launch cable MPO unpinned to SC/PC
ELCSM25-MPO-SCA	1x 25 m SM fanout launch cable MPO unpinned to SC/APC
ELCSM25-MPO-LCA	1x 25 m SM fanout launch cable MPO unpinned to LC/APC
ELCSM25-MPO-LC	1x 25 m SM fanout launch cable MPO unpinned to LC/PC
ECLIKCLEANERMPO	IBC Cleaning Tool for MTP/MPO connectors
EMPOTERM-F	SM MPO unpinned reflective terminal (for ORL referencing with FiberComplete bi-directional modules)
EMPOTERM-M	SM MPO pinned reflective terminal (for ORL referencing with FiberComplete bi-directional modules)
EFJ30SCAPC	1x 30 cm spare part bend insensitive jumper SC/APC to SC/APC
EFJ30SCUPCAPC	1x 30 cm spare part bend insensitive jumper SC/APC to SC/UPC

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