

# VIAVI Solutions

### **VIAVI**

## High Capacity MPO Based External Switches

Enable high capacity automated bulk fiber testing for high fiber count cables

The high capacity external switches portfolio is optimized for high fiber count cables or many FTTP service points such as PON and DAA/DWDM networks.

For increased versatility, it offers 48, 96, 144 or 192 ports.

Data Centers high fiber count cables acceptance tests (OTDR or Bi-directional OTDR) can be performed with an automatic bulk sequence in order to accelerate the whole test's workflow. Network operators can rapidly test many fibers remotely from a single point, such as local office with a fully cost-effective solution.



High Capacity External Switch with Connecting Kit



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



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

#### **Benefits**

- Save time:
  - Automatically run OTDR tests in a bulk sequence (up to 192) and get rid of idle time
  - Automatically generate and archive files results, fiber and cable reports
- Measure with confidence:
  - Answer to all test needs with one START : OTDR or Bi-directional OTDR on simplex or multi-fibers networks
  - Ensure reliable testing of MPO native networks with reduced manual process and complexity.

#### **Features**

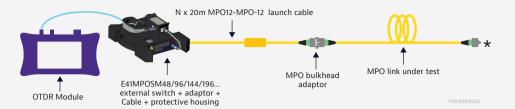
- High capacity external switches with connecting kit from 48 up to 192 ports
- Field solution, conveniently powered by the platform
- Efficient workflow with automated switching up to 192 ports through Cable-SLM software
- Compatible with OTDR A, B, C, QUAD 4100 series modules and with Cable-SLM and TrueBIDIR software options
- External connection to T-BERD/MTS-4000V2 and OneAdvisor 800 via USB

#### **Applications**

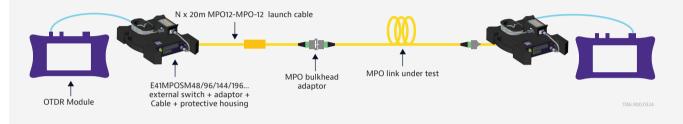
- Construction High fiber count cables certifications:
  - DataCenter interconnect (Campus, Metro)
  - FTTH/Access: point to multipoint
  - Native MPO fiber links

#### High Capacity External Switch for Certifying Native Multifiber MPO/MTP Links

#### **OTDR Tests**

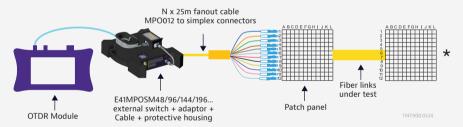


#### Bi-directional OTDR Tests with TrueBIDIR SW Option

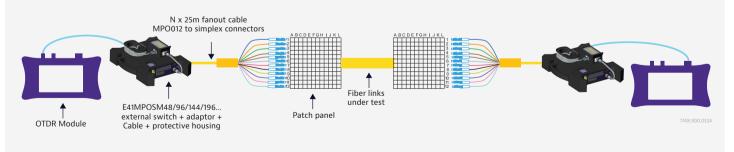


### High Capacity External Switch With Fanout/Breakout Cable – Bulk Certification of Simplex Fibers

#### **OTDR Tests**



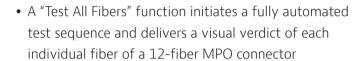
#### Bi-directional OTDR Tests with TrueBIDIR SW Option



<sup>\*</sup> Receive cable can be installed at the far end to characterize the last connector.

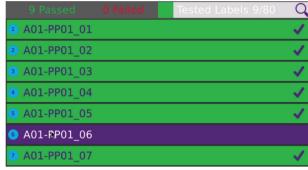
#### Bulk Certify Up To 192 Fibers in One Automatic Sequence

 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 (dedicated cable view within Expert OTDR or FiberComplete PRO applications).



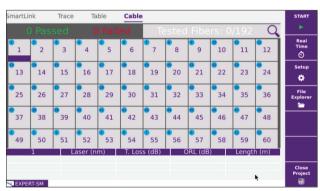
 Manage group up to 192 with a switch sequence starting at any fiber number needed with the Cable-SLM project management

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

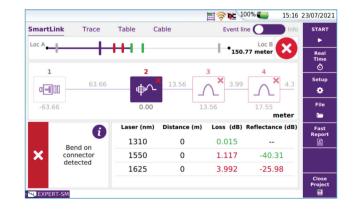


Cable view: Project with label option





Cable view: Project without label option



#### Specifications – (typical at 25°C)

| General  |  |  |
|--|--|--|
| Dimensions   | Depth: 292 mm Height: 80 mm Length: 230 mm Weight: 1.5 kg                                  |  |
| Operating temperature  | -20°C to +60°C   |  |
| Storage temperature  | -20°C to +60°C   |  |
| Interfaces   | RS485  |  |
| Power supply   | Powered by the mainframe unit via USB port cable (supplied with the switch connecting kit) |  |
| Optical Specifications                                       |  |  |
| Number of Ports  | 48, 96, 144, 192 ports + one common port   |  |
| Operating Wavelength Range                                   | 1270 nm - 1670 nm  |  |
| Insertion Loss (excluding connectors) for 48 ports           | <1.2 dB from 1600 nm to 1670 nm<br><1.6 dB from 1528 nm to 1600 nm                         |  |
| Insertion Loss (excluding connectors) for 96, 144, 192 ports | <1.8 dB from 1600 nm to 1670 nm<br><2.6 dB from 1528 nm to 1600 nm                         |  |
| Return Loss with connectors                                  | >50 dB   |  |
| Connector Type   | Common Port: LC/APC<br>Output ports: MPO-12 APC (pinned)                                   |  |

The part numbers listed below include 1x external switch mounted in a protective carrying kit, with 1x 3m jumper LC/APC to SC./APC, with RS485 to USB adapter including 1x USB and x1 RS485 cable, all packed in a carrying case.

| Description   | Part Number |
|---|-------------|
| High-Capacity external switch with connecting kit - 48 ports  | E41MPO48SM  |
| High-Capacity external switch with connecting kit - 96 ports  | E41MPO96SM  |
| High-Capacity external switch with connecting kit - 144 ports | E41MPO144SM |
| High-Capacity external switch with connecting kit - 192 ports | E41MPO192SM |

#### Accessories

| Description   | Part Number        |
|---|--------------------|
| 1x 25 m SM MPO unpinned to MPO pinned launch cable    | ELCSM25A-MPOF-MPOM |
| 1x 25 m SM MPO unpinned to MPO unpinned launch cable  | ELCSM25A-MPOF-MPOF |
| 1x 25 m SM fanout launch cable MPO unpinned to SC/PC  | ELCSM25-MPO-SC     |
| 1x 25 m SM fanout launch cable MPO unpinned to SC/APC | ELCSM25-MPO-SCA    |
| 1x 25 m SM fanout launch cable MPO unpinned to LC/APC | ELCSM25-MPO-LCA    |
| 1x 25 m SM fanout launch cable MPO unpinned to LC/PC  | ELCSM25-MPO-LC     |
| IBC Cleaning Tool for MTP/MPO connectors              | ECLIKCLEANERMPO    |

#### **Software Options**

| Description  | Part Number   |
|--|---------------|
| Cable management software option for new platforms. Allows the configuration of an automatic switch sequence       | ECABLESLM     |
| Cable management software option for installed platforms. Allows the configuration of an automatic switch sequence | ECABLESLM-UPG |



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