VIAVI

Multi-Fiber MPO based Switch Module

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

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

**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

**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 batch 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.

• Batch 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 25°C)

### Optical
- **Wavelength Range**: 1270 nm to 1650 nm
- **Insertion Loss**: 1.2 dB typical
- **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)

1. Measured at 1310, 1550 and 1625nm
2. 2.5 dB maximum

## Ordering Information

### Part Number | Description
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**MPO Switch Module and Kit**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</table>
| 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 |

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<thead>
<tr>
<th>Part Number</th>
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</table>
| 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 |

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<th>Part Number</th>
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</table>
| MPO12MODKIT2-SM | MPO 12 switch module Kit with 1x 25 m fanout test cable includes:
  - 1x E41MPO12SM
  - 1x 25 m SM test cable MPO to SC/APC |

### Software Options

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>ECABLESLM</td>
<td>Cable management software option for new modules. Allows the configuration of an automatic switch sequence.</td>
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<tr>
<td>ECABLESLM-UPG</td>
<td>Cable management software option for installed modules. Allows the configuration of an automatic switch sequence.</td>
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### Accessories

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>ELCSM25A-MPOF-MPO</td>
<td>1x 25 m SM MPO unpinned to MPO pinned launch cable</td>
</tr>
<tr>
<td>ELCSM25A-MPOF-MPOF</td>
<td>1x 25 m SM MPO unpinned to MPO unpinned launch cable</td>
</tr>
<tr>
<td>ELCSM25-MPO-SC</td>
<td>1x 25 m SM fanout launch cable MPO unpinned to SC/PC</td>
</tr>
<tr>
<td>ELCSM25-MPO-SCA</td>
<td>1x 25 m SM fanout launch cable MPO unpinned to SC/APC</td>
</tr>
<tr>
<td>ELCSM25-MPO-LCA</td>
<td>1x 25 m SM fanout launch cable MPO unpinned to LC/PC</td>
</tr>
<tr>
<td>ELCSM25-MPO-LC</td>
<td>1x 25 m SM fanout launch cable MPO unpinned to LC/PC</td>
</tr>
<tr>
<td>ECLKCLEANERMPO</td>
<td>IBC Cleaning Tool for MTP/MPO connectors</td>
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<tr>
<td>EMPOTERM-F</td>
<td>SM MPO unpinned reflective terminal (for ORL referencing with FiberComplete bi-directional modules)</td>
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<tr>
<td>EMPOTERM-M</td>
<td>SM MPO pinned reflective terminal (for ORL referencing with FiberComplete bi-directional modules)</td>
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