

# VIAVI Solutions

## **VIAVI**

# SmartClass™ Fiber MPOLx MPO Optical Loss Test Sets

#### **Power Meter**

| Specification                                |  |
|--|--|
| Optical interface                            | MPO-12 Interface pinned. Compatible with 50/125 μm/PC Multimode MPO-12, 9/125 μm/APC Singlemode MPO-12. MTP Adapter with Shutter |
| Detector type                                | InGaAs   |
| Wavelength range                             | 850 to 1550nm  |
| Wavelength settings                          | 850nm, 1300nm, 1310nm, 1550nm  |
| Calibrated wavelengths                       | Multimode: 850nm, 1300nm<br>Singlemode: 1310nm, 1550nm   |
| Power measurement range                      | -50 to +3 dBm  |
| Max. permitted input level                   | +3 dBm   |
| Overall measurement uncertainty <sup>1</sup> | Multimode: ± 0.7 dB ± 1 nW<br>Singlemode: ± 0.6 dB ± 1 nW  |
| Linearity                                    | ±0.15dB  |
| Measurement units                            | dB, dBm  |
| Display resolution                           | 0.01 dB  |
| Power meter functions                        | Absolute, relative, pass/fail,   |
| Warm-up time                                 | 20 minutes   |

<sup>1.</sup> Under reference conditions at calibrated wavelengths, -5 to  $\pm 45^{\circ}\text{C}$ .

## **Light Source**

| Specification   | Multimode   | Single-Mode  |
|---|---|--|
| Optical interface   | MPO-12 Interface<br>pinned, 50/125 µm/<br>PC Multimode. MTP<br>Adapter with Shutter | MPO-12 Interface<br>pinned, 9/125 μm/<br>APC Singlemode. MTP<br>Adapter with Shutter |
| Source type and wavelengths   | LED source<br>850 nm ± 20 nm<br>1300 nm ± 20 nm                                     | Fabry-Perot laser diode<br>1310 nm ± 20 nm<br>1550 nm ± 20 nm                        |
| Spectral width<br>(FWHM)  | <170nm  | <5nm   |
| Launch<br>condition   | Encircled Flux compliant<br>to TIA-526-14B and<br>IEC 61280-4-11                    |  |
| Output power <sup>2</sup>   | -26 dBm   | -6 dBm   |
| Stability³<br>15 min/8 hr   | ±0.05 / 0.25 dB   |  |
| Source mode   | CW  |  |
| At the output of the FE-TRC Variations between FE measurement equipment may occur |   |  |

- At the output of the EF-TRC. Variations between EF measurement equipment may occur but EF compliance can be expected with a 95% confidence factor. Valid for IEC 61280-4-1 at 850 nm.
- 2. Typical output
- 3. Single Channel, +5 to +45°C with  $\Delta T$  =  $\pm 0.3$  K after a 20-minute warm-up



#### **Loss/Length Application**

| Specification                               | Multimode  | Single-Mode             |
|---|--|-------------------------|
| Testing speed for 12 channels <sup>1</sup>  | 6 seconds max  |                         |
| Pass/fail limit standards                   | Link validation<br>40 GBASE SR4<br>100 GBASE SR4<br>100 GBASE SR10 | Link validation<br>PSM4 |
| Fiber types                                 | 50/125 μm  | 9/125 μm                |
| Nominal test wavelengths                    | 850/1300 nm  | 1310/1550 nm            |
| Maximum length<br>measurement               | 1 km   | 10 km                   |
| Length measurement accuracy                 | ±1.5 m ±1% of length   |                         |
| Loss measurement uncertainty <sup>2,3</sup> | ±0.15dB  |                         |

- 1. Excludes referencing and connection times
- 2. Excluded fiber connector uncertainties
- 3. After 20 min warm up, at constant temperature, no charging. For multimode loss measurements with 50/125  $\mu$ m fibers (NA = 0.20). For single-mode loss measurements with 9/125  $\mu$ m fibers (NA = 0.10)

### Patchcord Microscope (PCM)<sup>1</sup>

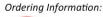
| Specification                              |            |   |  |  |
|--|------------|---|--|--|
| Interface                                  |            | FMAE MPO <sup>2</sup> (many other adapters available) |  |  |
| Auto pass/fail analysis standards          |            | IEC 61300-3-35 and custom limits                      |  |  |
| Live image                                 |            | 320 x 240 x 8 bit grey, 10 fps                        |  |  |
| Light source                               |            | Blue LED, 100.000+ hours life                         |  |  |
| Lighting technique                         |            | Coaxial   |  |  |
| Magnification<br>field-of-view<br>low/high | Horizontal | 740/370 μm  |  |  |
|  | Vertical   | 550/275 μm  |  |  |

External USB connected P5000i digital inspection probe supported

#### General

| Specification                      | without PCM   | with PCM                                  |  |
|------------------------------------|---|---|--|
| Display                            | High-contrast 3.5" color LCD with touch-screen functionality                      |   |  |
| Data memory                        | Up to 10.000 loss test results (>1000 including inspection)                       |   |  |
| Data readout                       | Via client USB interface, and wireless via USB<br>WiFi/Bluetooth adapter (option) |   |  |
| Electrical interfaces              | 2 x USB host, 1x micro USB, Ethernet  |   |  |
| Power supply                       | 12 V, 2A with interchangeable wall plug<br>for EU, UK, US, and AU                 |   |  |
| Battery                            | Li-ion pack 3.7 V, 20 Wh<br>(optional 8 NiMH/dry batteries)                       |   |  |
| Battery life (Li-ion battery pack) | >12 hr  |   |  |
| Recommended recal. interval        | 3 years   |   |  |
| Dimensions<br>(H x W x D)          | 208 x 112 x 64 mm<br>(8.2 x 4.4 x 2.5 in)   | 208 x 153 x 64 mm<br>(8.2 x 6.0 x 2.5 in) |  |
| Weight <sup>1</sup>                | 600 g (1.6 lb)  | 750 g (1.85 lb)                           |  |
| Operating temperature range        | −5° to +45°C<br>(23° to 113°F)  |   |  |
| Storage<br>temperature range       | −25° to +55°C<br>(−13° to 131°F)  |   |  |

<sup>1.</sup> Includes rechargeable battery





800 Village Walk #316 Guilford, CT 06437 Ph: 203-401-8093

Email orders to: <a href="mailto:sales@xsoptix.com">sales@xsoptix.com</a>
Fax orders to: 800-878-7282



Contact Us

**+1 844 GO VIAVI** (+1 844 468 4284)

To reach the VIAVI office nearest you, visit viavisolutions.com/contacts.

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<sup>1.</sup> PCM models include 2330/11S, 2330/01S and 2330/31

<sup>2.</sup> Single-Mode ships with MPO APC adapter and Multimode ships with MPO adapter