



The MPX Modal Explorer



The MPX Modal Explorer is the Encircled Flux meter of choice for leading companies around the world. Simply connect your source and patchcord to the MPX, and it will measure Modal Launch Conditions in real-time.

Product highlights

- End face inspection mode with focus indicator to give better repeatability from operator to operator
- Power monitor - optimise light throughput and modal conditions simultaneously
- Real-time measurement - adjust modal conditions easily as well as increase productivity
- Internal LED with fully filled launch condition
- USB2.0 connection gives portability - with the optional carrying case plus a laptop computer
- Optional geometrical calibration artefact to enable user calibration of MPX
- API software control feature designed for use in the production environment

Applications include

- Source and patchcord characterisation for IEC11801 and TIA/EIA568 LAN testing
- VCSEL characterization for Gigabit Ethernet IEEE 802.3
- Mode-scrambler and mode-filter characterisation
- Connector inspection
- Measure sources to IEC 61280-4-1
- Alignment of pig-tailed light sources



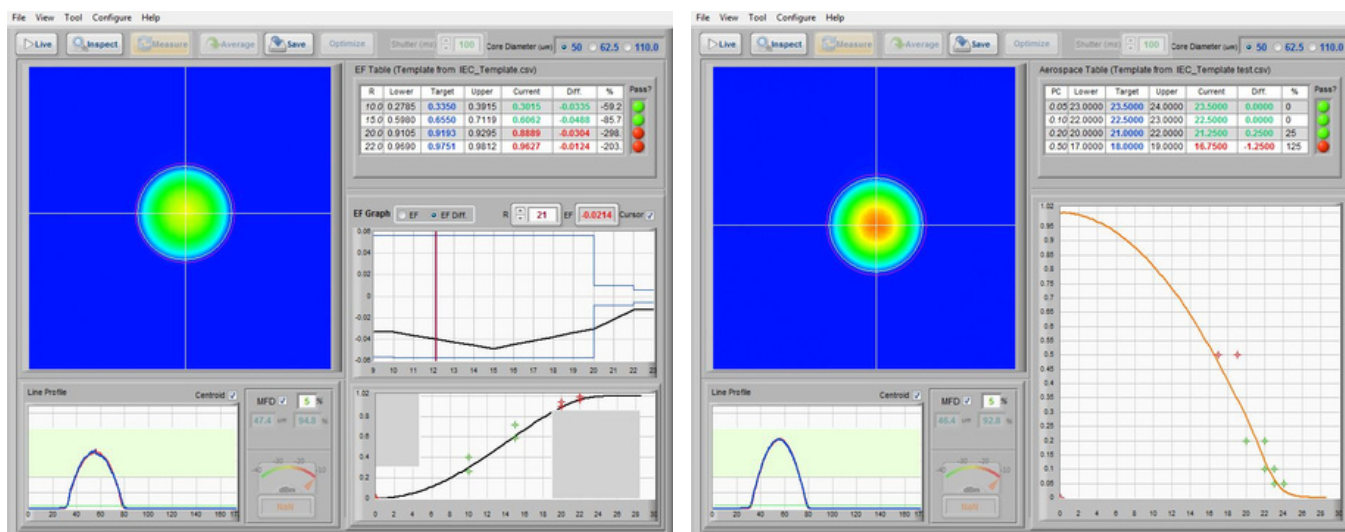
MPX Geometrical Calibration Artefact (Optional)



MPX-2 in Carrying Case (Optional)



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Screenshots of MPX Modal Explorer

Technical Specification

| | MPX-1 | MPX-2 |
|--|---|---|
| Wavelength | 850 nm (Encircled Flux measurement range is from 400 to 1,100 nm but End Face Inspection and Focusing is at 850 nm) | 1,300 nm (Encircled Flux measurement range is from 900 to 1,700 nm but End Face Inspection and Focusing is at 1,300 nm) |
| Size | 260 mm (W) x 270 mm (D) x 90 mm (H) 10" (W) x 10.5" (D) x 3.5" (H) | 260mm (W) x 390mm (D) x 110mm (H) 10" (W) x 15" (D) x 4.5" (H) |
| Weight | 2.5 kg / 5.5 lb | 7.0 kg / 15.5 lb |
| Dynamic range | 60 dB | >60 dB |
| Image Sensor | CCD array, 12 bit, 4.65µm square pixels | InGaAs array, 12 bit, 30.0µm square pixels |
| Maximum core diameter | 110 µm | |
| Maximum source power | Approx 10 mW (depends on power density, fiber type etc.) | |
| Input connector adaptors available | Universal 2.5 mm ferrule; LC (both supplied as standard) FC, ST, SC, MTP, Bare fiber (optional) | |
| End Face Inspection and Focusing | 850 nm LED | 1300 nm LED |
| Built-in reference source | 850 nm LED, FC connector, over-filled (110 µm core; diameter; 0.37 N.A.) | 1,300 nm LED, FC connector, over-filled (110 µm core; diameter; 0.37 N.A.) |
| Power | External switched mode power supply (supplied) | |
| Connection to computer | USB 2.0 (USB B to USB A: 2m cable supplied) | |
| Computer requirements (minimum specification) | 2GB RAM ; USB 2.0 port - NOTE system may not work with USB 3.0 | |
| Operating systems supported | Windows 7 / 8 / 10, 32 bit or 64 bit | |
| Operating Temperature | 0° - +50°C | |
| Humidity | 5% - 95%, relative, non-condensing | |



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Ordering Information

| Part Number | Description |
|--------------|--|
| MPX-1 | MPX-1 system for modal analysis of multi-mode fibers at 850 nm, including optical unit, cables, software package and user manual. System is supplied with a universal 2.5 mm connector adaptor and an LC connector adaptor. Computer not included. See product specification for information about computer configuration. |
| MPX-2 | MPX-2 system for modal analysis of multi-mode fibers at 1,300 nm, including optical unit, cables, software package and user manual. System is supplied with a universal 2.5 mm connector adaptor and an LC connector adaptor. Computer not included. See product specification for information about computer configuration. |

| Part Number | Description |
|------------------------|--|
| MPX-API | MPX API software add on, designed for accessing and controlling the MPX for automated testing (additional license required) |
| MPX-CC-01 | Rigid carrying case for MPX-1 |
| MPX-CC-02 | Rigid carrying case for MPX-2 |
| MPX-CP01 | Chrome-on-Glass calibration artefact and software package for MPX-1 and MPX-2 to enable user calibration traceable to NPL standards. Includes Chrome-on-Glass artefact, software CD and operation instructions |
| MPX-CAU250 | Input connector adaptor for 2.5 mm diameter ferrule connectors, universal (supplied as standard with MPX-1 and MPX-2) |
| MPX-CALC | Input connector adaptor for LC connectors (supplied as standard with MPX-1 and MPX-2, CMC/MPX compatible) |
| MPX-CAFC | Input connector adaptor for FC connectors (CMC/MPX compatible) |
| MPX-CASC | Input connector adaptor for SC connectors (CMC/MPX compatible) |
| MPX-CAST | Input connector adaptor for ST connectors (CMC/MPX compatible) |
| MPX-CAMTP | Input connector adaptor for MTP connectors (CMC/MPX compatible) |
| MPX-CAMTRJ | Input connector adaptor for MTRJ connectors (CMC/MPX compatible) |
| MPX-SR3-OM12-FC | Fiber shaker with 2 fibers (1 x OM1 and 1 x OM2); FC/PC connectors on input and output |
| MPX-SR3-OM12-LC | Fiber shaker with 2 fibers (1 x OM1 and 1 x OM2); LC/PC connectors on input and output |
| MPX-SR3-OM34-FC | Fiber shaker with 2 fibers (1 x OM3 and 1 x OM4); FC/PC connectors on input and output |
| MPX-SR3-OM34-LC | Fiber shaker with 2 fibers (1 x OM3 and 1 x OM4); LC/PC connectors on input and output |
| MPX-SR3-OM44-FC | Fiber shaker with 2 fibers (2 x OM4); FC/PC connectors on input and output |
| MPX-UEW3 | MPX extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera |
| APL-LC | Laptop computer, pre-installed with application software |
| APL-DC | Desktop computer, pre-installed with application software |

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