



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



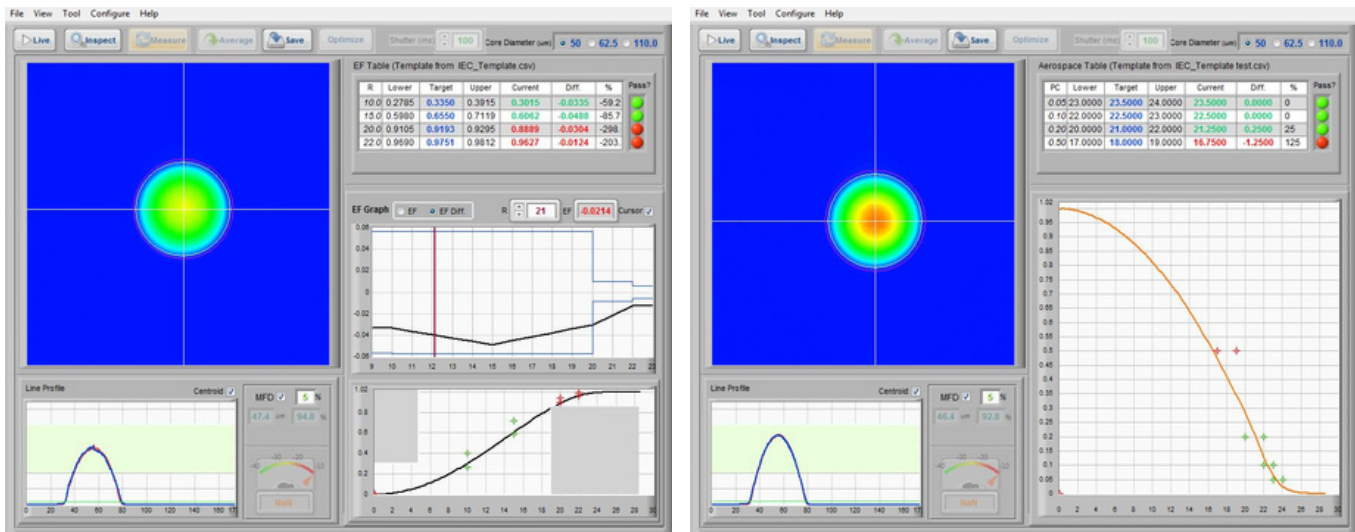
MPX Geometrical Calibration Artefact (Optional)



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 1.1	
Operating systems supported	Windows 10/11, 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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