



OPTICAL FIBER MEASUREMENT SPECIALISTS



Brand New
Encircled
Flux Meter

MPX-1A

Encircled Flux Meter

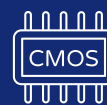
The MPX-1A Encircled Flux Meter is the top choice for industry leaders worldwide, known for its adherence to international standards and repeatable results, setting the industry gold standard. Precise encircled flux measurements are vital for evaluating multimode network solutions and ensuring optimal optical system performance.

The MPX-1A simplifies this process: simply connect your source and patchcord, and the system automatically measures Modal Launch Conditions in real-time. It employs the latest CMOS camera technology, which enables rapid and accurate measurements, whilst its newly-integrated auto-focusing and auto-exposure systems ensure fast, precise, and user-independent results.

Experience the repeatability and reproducibility of the MPX-1A Encircled Flux Meter, and elevate your validation process to meet the highest industry standards including IEC, IEEE and aerospace requirements.



Automatic focus and exposure for consistent and user-independent results



Accurate and rapid measurements using latest CMOS camera technology



Real-time encircled flux measurement



Standards compliant:
TIA-526-14-A
IEC 61280-4-1
TIA/EIA-455-203
IEC 61280-1-4
IEEE 802.3

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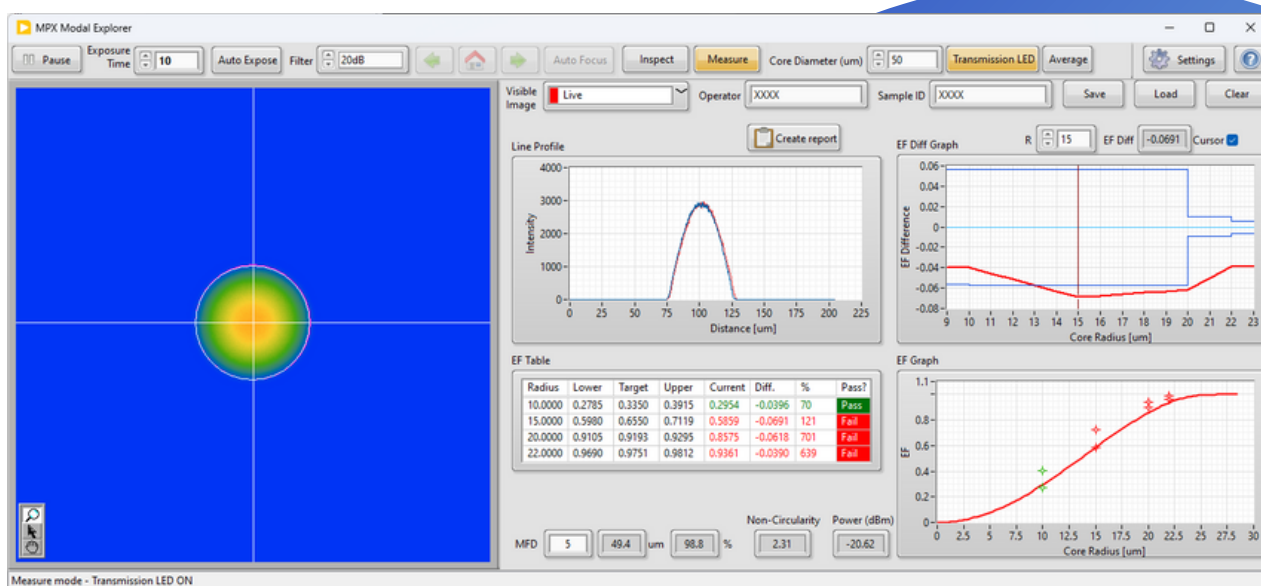
The Encircled Flux meter for precise EF measurements for evaluating multimode network solutions and ensuring optimal optical system performance.

Product highlights

- Automatic Focus System & Optimal Exposure Filter ensures rapid, accurate, and consistent data capture with minimal operator training required.
- Latest CMOS camera technology enables accurate and rapid measurements.
- Real-Time Measurement for easy adjustment of modal conditions and boosts productivity.
- Standards compliant including TIA-526-14-A, IEC 61280-4-1, TIA/EIA-455-203, IEC 61280-1-4, IEEE 802.3
- USB 3.0 Connectivity provides easy portability and seamless deployment across various sites.
- Optional Geometrical Calibration Artifact for easy calibration.
- API Software Control for integration to 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
- Measure sources to IEC 61280-4-1
- Alignment of pig-tailed light sources



Screenshot of MPX-1A (Measure Mode)

Manufactured by
Arden Photonics Ltd

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MPX-1A

Encircled Flux Meter

Technical Specification

Measurement Capabilities

Maximum core diameter	110 μ m
Measurement time	Real-time
Source power range	Approx. -40 to 10 dBm (depends on power density, fiber type, etc)
Input connector adaptors available	Universal 2.5 mm ferrule, LC, FC, ST, SC, MTP, Bare fiber

Optical

End Face Inspection and Focusing	850 nm LED
Sensor Wavelength Range	850 nm (Encircled Flux measurement range is from 400 to 1,100 nm)
Image Sensor	CMOS array, 3.45 μ m square pixels
Dynamic range	73 dB
Built-in reference source	850 nm LED, FC connector, over-filled (110 μ m core; diameter; 0.37 N.A.)

Physical

Size	155 mm (W) x 330 mm (D) x 125 mm (H)
Weight	4.0 kg
Operating Temperature	5° – 35°C
Humidity	5% – 95%, relative, non-condensing
Computer requirements (minimum specification)	2.5G Hz or higher processor, 8 GB RAM
Connection to computer	1 X USB 3.0 (USB B to USB A: 2m cable supplied)
Power	15 V / 30 W (external power supply supplied)
Operating systems supported	Windows 10/11, 64 bit



MPX-1A

Encircled Flux Meter

Ordering Information

Part Number	Description
MPX-1A	MPX-1A system for real-time, semi-automated measurement of Encircled Flux at 850 nm. Fitted with 1 x 10dB and 1 x 20dB filters. Including MPX optical unit and following accessories: MPX-CK cable kit, MPX-SFT software package, MPX-PC 1.5 m patch cord, MPX-CAU250 universal 2.5 mm ferrule insert and MPX1A-CC rigid carry case.
MPX-1A-V	MPX-1A system for real-time, semi-automated measurement of Encircled Flux at 850 nm. Fitted with 2 x 20dB filters. Including MPX optical unit and following accessories: MPX-CK cable kit, MPX-SFT software package, MPX-PC 1.5 m patch cord, MPX-CAU250 universal 2.5 mm ferrule insert and MPX1A-CC rigid carry case.

Part Number	Description
MPX-API	MPX API software add on
MPX-CP01	Chrome-on-Glass calibration artefact and software package
MPX-CAU250	Input connector adaptor for 2.5 mm diameter ferrule connectors, universal
MPX-CALC	Input connector adaptor for LC connectors
MPX-CAFC	Input connector adaptor for FC connectors
MPX-CASC	Input connector adaptor for SC connectors
MPX-CAST	Input connector adaptor for ST connectors
MPX-CAMTP	Input connector adaptor for MTP
MPX-CAPTRJ	Input connector adaptor for MTRJ connectors
MPX1A-UEW3	MPX extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera.
MPX1A-UEW5	MPX extended warranty covering parts and labour for 5 years from purchase, return to base. Cover excludes camera.
MPX-CC-01	MPX-1 rigid carrying case



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