

# PXM/LXM

## MPO OPTICAL LOSS TEST SET (OLTS)

Full-featured MPO-12 power meter and light source with the industry's fastest test speeds.



PXM (MPO power meter)

LXM (MPO light source)



### KEY FEATURES AND BENEFITS

- 4-inch color touchscreen
- Native MPO-12 connector on devices
- Leading FasTesT™ performance: test MPO-12 cables at 2 wavelengths in just 1 second
- Dual wavelength on light source
- Insertion loss measurement
- Polarity type validation
- In-line visual fault locator (VFL) for fiber tracing on LXM
- Comprehensive results combined on one page

### APPLICATIONS

- Data centers
- Central offices
- Headends

### RELATED PRODUCTS



Fiber inspection scope  
FIP-500



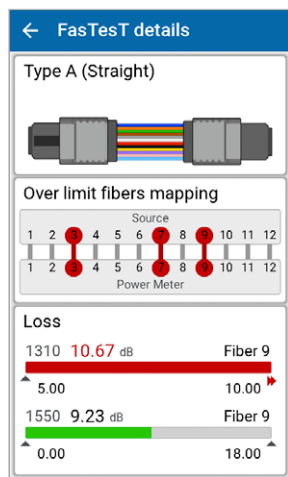
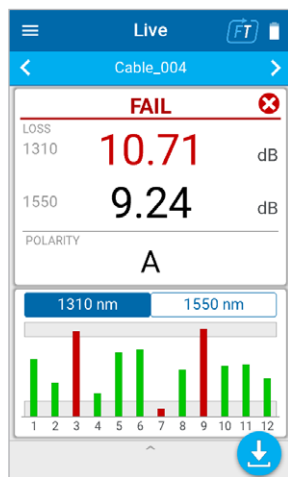
MPO cleaning kits

## FasTesT™: MPO TESTING MADE SIMPLE AND FAST

The PXM/LXM combo is an MPO tester designed to efficiently qualify a large number of MPO links. It tests MPO-12 cables at 2 wavelengths in just 1 second, the fastest test time in the industry. The FasTesT feature provides loss per channel at the 2 selected wavelengths, as well as the polarity type of the link under test automatically when continuity is detected.

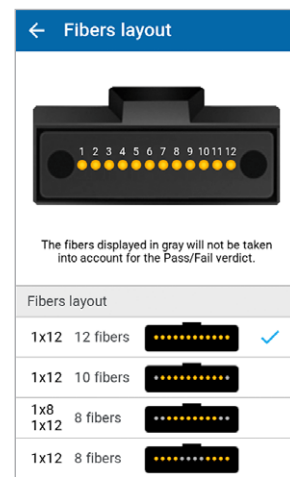
## COMPREHENSIVE PASS/FAIL RESULTS COMBINED ON ONE PAGE

- Global pass/fail status and pass/fail per fiber
- Insertion loss per wavelength
- Polarity type (A, B, C or U) with graphical representation
- Pass/fail on actual polarity type versus expected polarity type
- Full details available on FasTesT results and fiber results page



Fiber details

Fibers	1310	1550
1	8.32	7.22
2	6.49	5.47
3	10.55	8.95
4	5.58	4.76
5	8.85	7.55
6	9.07	7.83
7	2.38	2.09
8	7.49	6.48
9	10.68	9.24
10	7.71	6.58
11	7.87	6.61
12	6.73	5.63



Pass/fail thresholds according to fibers layout selection

## IN-LINE VISUAL FAULT LOCATORS

The LXM light source includes a VFL that is in-line on the same port as the MPO source itself. Combining those two features on the same port makes them convenient to use. The VFL can trace a fiber right to the other end of the link so that the technician on the other end can easily find the MPO port to which they need to connect the PXM. The VFL also makes it easy to locate macrobends or breaks in the fiber.



### Hybrid contactless connector

The PXM power meter contains a hybrid contactless connector that can accommodate both APC and UPC connectors, thus supporting multimode and singlemode link testing. This large core detector allows the PXM to give precise measurements with low uncertainty.



### Field-replaceable batteries

The battery is field-replaceable, so there's no need to send it back to the factory when the battery reaches the end of its lifecycle (counted in years).

## FastReporter Reporting

Measurements made by the PXM power meter when measuring either power or loss can be processed in FastReporter post-processing PC software to generate reports.



### Long battery life

The PXM and LXM are powered by lithium-ion rechargeable batteries that can support 8 hours of continuous use.



### Smartphone-grade touchscreen

The PXM and LXM have integrated high-quality capacitive color touchscreens designed to be visible in full sun or dark areas, from any angle.



### 3-year calibration

Cut costs related to factory returns and downtime.

## SPECIFICATIONS

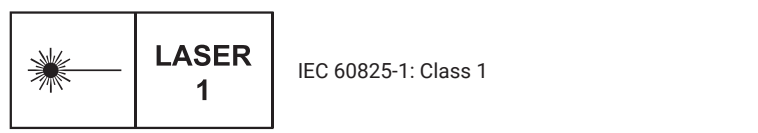
### PXM POWER METER SPECIFICATIONS<sup>a</sup>

Optical connector	Contactless MPO-12 male (pinned) supporting both APC and UPC. Connector with protective shutter.
Detector type	InGaAs
Power measurement range (dBm)	5 to -45
Power uncertainty (dB) <sup>a</sup>	±0.35
Linearity (dB) <sup>b</sup>	±0.1
Display resolution (dB)	0.01
Wavelength measurement range (nm)	850 to 1550
Calibrated wavelengths (nm)	850, 1300, 1310, 1550
Tone detection	270 Hz, 330 Hz, 1 kHz, 2 kHz
Auto-wavelength recognition and switching <sup>c</sup>	Yes
Warm up time (s)	0
Storage capacity	10,000 measurements at two wavelengths
Warranty (years)	3
Calibration interval (years)	3

### LXM LIGHT SOURCE SPECIFICATIONS<sup>d</sup>

<b>LXM-SM1 (singlemode)</b>	
Optical connector	APC MPO-12 male (pinned). Connector with protective shutter.
Source wavelengths (LED source) (nm) <sup>e</sup>	1310 ± 20 1550 ± 20
Output power (dBm)	≥ -13/ ≥ -13
Stability (8 h) (dB) <sup>f</sup>	±0.1
Warmup time (minutes)	15
Tone generation	270 Hz, 330 Hz, 1 kHz, 2 kHz
Warranty (years)	3
Calibration interval (years)	3

### LASER SAFETY



### IN-LINE VFL SPECIFICATIONS (included on each LXM light source)<sup>g</sup>

Laser type (nm) <sup>e</sup>	635 ± 10
Modulation	CW, 1 Hz, 4 Hz
Typical power output (mW)	≤ 1
Laser safety	IEC 60825-1: Class 1

a. For calibrated wavelengths.

b. For the range -5 dBm to -40 dBm.

c. When used with an LXM MPO light source in FasTesT mode.

d. At 23 °C ± 2 °C.

e. Typical.

f. After a 15-minute warm-up.

g. VFL is on channels 2, 5, 8, 10 and 12.

## GENERAL SPECIFICATIONS

Display	4-in touchscreen
Display type	Color display with capacitive touchscreen
Dimensions	171 mm × 93 mm × 48 mm (6 3/4 in × 3 11/16 in × 1 7/8 in)
Weight (with battery)	0.5 kg (1 lb)
Interfaces	Bluetooth 5.1 with BLE
Data sharing	Via USB interface to PC (reporting via FastReporter 3)
Test speed	Loss and polarity measurement for MPO-12 cable at 2 wavelengths in 1 second
Temperature	Operating Storage
	-10 °C to 45 °C (14 °F to 113 °F) -40 °C to 70 °C (-40 °F to 158 °F)



GP-3151



GP-10-061



GP-2249



GP-3157



GP-3157



GP-3198



GP-3199



GP-3150

## ACCESSORIES

<b>Carrying pouches and cases</b>	GP-3151	Soft pouch
	GP-10-061	Medium soft carrying case • Can contain a pair of PXM and LXM with related accessories and test cords
<b>Cleaning kits</b>	GP-2249	MPO cleaning supplies including: • ½ size QbE™ cube (qty: 1) • MX cleaning pen (qty: 1) • IBC™ brand cleaner for 1.25 mm connectors (qty: 1) • IBC™ brand cleaner for 2.5 mm connectors (qty: 1) • IBC™ brand cleaner for MPO style connectors (qty: 1)
	GP-153	IBC™ brand cleaner for MPO style connectors
<b>MPO test cord kits</b>	MPO-12-SM-TJ-KIT1	Singlemode MPO-12 test jumper kit • Covers pinned and unpinned configurations  Includes: • TJ-B92F-12-92F MPO-12 singlemode test jumper APC connectors unpinned/unpinned (qty: 2) • TJ-B92F-12-92M MPO-12 singlemode test jumper APC connectors pinned/unpinned (qty: 1) • TJ-B92M-12-92M-A MPO-12 singlemode adapter cord test jumper APC connectors pinned/pinned (qty: 1) • RAC-MPO-12-TypeA MPO-12 bulkhead type A: opposite key (key up to key down) (qty: 3)
<b>Wrist strap</b>	GP-3157	Wrist strap
<b>Power adapters</b>	GP-3199	USB AC adapter
	GP-3198	USB-C to USB-C cable
<b>Battery</b>	GP-3150	Battery (qty: 1)

## ORDERING INFORMATION

**PXM (MPO power meter)**

**Model** ——— **PXM**  
PXM = Multi-fiber power meter

**LXM (MPO light source)**

**Configuration** ——— **LXM-XX**  
**SM1** = Singlemode multi-fiber light source 1310/1550 nm  
Example: LXM-SM1

**TK-PXM-LXM-SM1:**  
MPO singlemode Tier-1 certification kit



PXM



LXM-SM1



MPO-12-SM-TJ-KIT1



GP-10-061

## ORDERING INFORMATION (KIT)

**TK-PXM-LXM-SM1:**  
**MPO singlemode Tier-1 certification kit**

Includes:

- PXM: multi-fiber power meter
- LXM-SM1: singlemode multi-fiber light source 1310/1550 nm
- MPO-12-SM-TJ-KIT1: singlemode MPO-12 test jumper kit
- GP-10-061: medium soft carrying case

**EXFO headquarters** T +1 418 683-0211 **Toll-free** +1 800 663-3936 (USA and Canada)

EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to [www.EXFO.com/contact](http://www.EXFO.com/contact).

For the most recent patent marking information, please visit [www.EXFO.com/patent](http://www.EXFO.com/patent). EXFO is certified ISO 9001 and attests to the quality of these products. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit [www.EXFO.com/recycle](http://www.EXFO.com/recycle). **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.**

For the most recent version of this spec sheet, please go to [www.EXFO.com/specs](http://www.EXFO.com/specs).

In case of discrepancy, the web version takes precedence over any printed literature.