

PXM/LXM

DUPLEX AND MULTI-FIBER OPTICAL LOSS TEST SET (OLTS)

- Full-featured duplex and multi-fiber power meter and light source with the industry's fastest test speeds.
- Tier-1 duplex and multi-fiber certification with loss, polarity, and length measurement and on-board certification standards.



PXM: duplex and multi-fiber power meter
 ✓

LXM: duplex and multi-fiber light source (singlemode or multimode)
 ✓



KEY FEATURES

- Supports native duplex and 8/12 fiber-based testing
- Supports 16 and 24 fiber-based testing in 1 second using loopback or dual test set methods
- Click-Out adapters compatible with duplex MDC, SN and LC as well as MPO and SYSTIMAX MTP
- Leading FasTes™ performance: test duplex and multi-fiber cables at 2 wavelengths in just 1 second
- Dual wavelength on light source (850/1300 nm or 1310/1550 nm)
- Insertion loss measurement
- Polarity type validation (duplex and multi-fiber)
- Up to 25 km in length measurement
- On-board certification standards with dynamic loss calculator
- In-line visual fault locator (VFL) for fiber tracing on source (LXM)
- Comprehensive results combined on one page
- 4-inch color touchscreen
- 3-year warranty and calibration interval
- Complies with one-cord reference method

APPLICATIONS

- AI supercomputer clusters
- Hyperscaler data centers
- Enterprise
- Private networks

ON-BOARD CERTIFICATION STANDARDS

- Network standards**
- 25/50GBASE-SR
 - 40GBASE-SR4
 - 100G-PSM4 2.0
 - 100GBASE-DR/VR1/SR1/SR2/SR4
 - 200GBASE-VR2/SR2/DR4
 - 400GBASE-DR4/SR4.2/SR8
 - 128GFC-PSM4/SW4
 - 256GFC-SW4

- Cabling standards**
- ISO/IEC 14763-3:2014
 - TIA-568.3-D/E (inside plant)
 - TIA-568.3-D/E (outside plant)
 - EN50173:2011

RELATED PRODUCTS



Fiber inspection scope FIP-500



Cleaning supplies for duplex and multi-fiber connectors



Test cords



FasTesT™: DUPLEX AND MPO TESTING MADE SIMPLE AND FAST

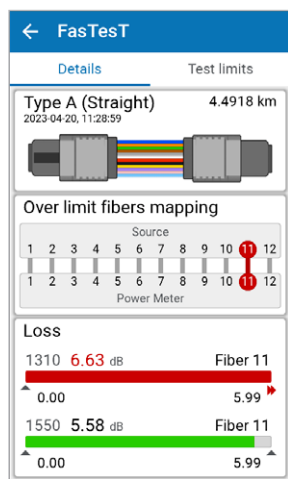
The PXM/LXM combo is a duplex and multi-fiber tester designed to efficiently qualify a large number of duplex and multi-fiber links. It tests duplex and multi-fibers (MTP/MPO-8, 12, 16, 24) cables at 2 wavelengths in just 1 second, the fastest test time in the industry. The FasTesT feature provides loss per channel at the 2 selected wavelengths, as well as the length and polarity type of the link under test automatically when continuity is detected.

COMPREHENSIVE DUPLEX OR MULTI-FIBER PASS/FAIL RESULTS, ALL ON ONE PAGE

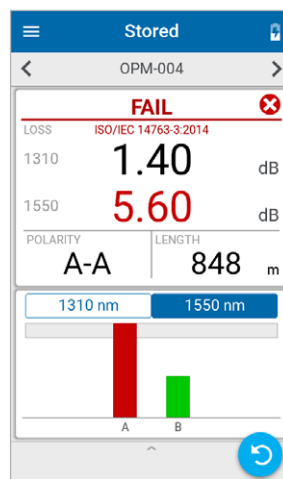
- Global pass/fail status and pass/fail per fiber with length measurement.
- Insertion loss per wavelength.
- Polarity type (A, B, C or U) for multi-fiber and polarity type (A-A, A-B) for duplex fibers with graphical representation.
- Pass/fail on actual polarity type versus expected polarity type.
-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



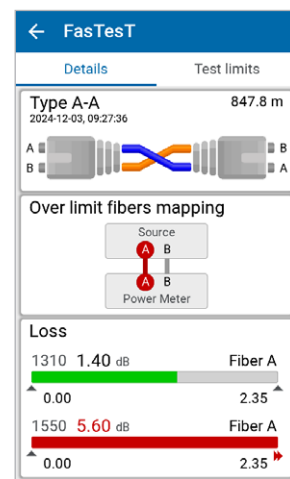
FasTesT multi-fiber main screen



Multi-fiber polarity



FasTesT duplex main screen (P12 model)



Duplex polarity (P12 model)

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.

VERSATILE MULTI-FIBER TESTING

AI and data center applications are driving new fiber-optic cabling requirements and the adoption of various types of multi-fiber links for a range of parallel optic applications. EXFO's versatile test solution makes it easy to test and certify a variety of trunk and fiber-optic multi-fiber cables and addresses the needs of base 8, 12, 16, and even 24, fiber applications.

UNIQUE CLICK-OUT ADAPTER SYSTEM

The PRO version offers a unique Click-Out adapter system allowing to adapt the instrument connectivity to fiber assemblies under test. Click-Out adapters are offered in a variety of connector models including duplex MDC, SN, LC as well as MPO and SYSTIMAX MTP.



PXM/LXM includes

FasTesT multi-fiber testing

Native MPO-12 fixed port

Loss measurement

Length measurement

Polarity validation

Visual fault locator



PRO version also includes

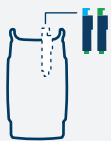
FasTesT duplex testing

Click-Out adapter port



The fastest

Measure loss, length, and polarity on duplex and multi-fiber links at 2 wavelengths in just 1 second.



Multi-connector compatibility

Switch within seconds between duplex and multi-fiber testing with patented Click-Out connectors, compatible with duplex MDC, SN, LC as well as MPO and SYSTIMAX MTP.



First-time-right polarity

The industry's only tester capable of detecting duplex and multi-fiber polarity issues hidden in trunk cabling, ensuring fibers are correctly connected before the network goes live.



Standards compliance

EXFO's Click-Out connectors enable one-cord referencing for duplex and multi-fiber cabling, eliminating adapter cords to match pinned and unpinned gender types ensuring compliance with TIA, ISO, and IEC standards.



Hybrid contactless connector

The PXM power meter's hybrid contactless connector supports APC and UPC connectors for multimode and singlemode testing, with a large-core detector for precise, low-uncertainty measurements.

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.



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).



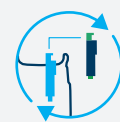
4-inch color touchscreen

The PXM and LXM feature high-quality 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.



Field-replaceable Click-Out adapters

Patented, field-replaceable Click-Out adapter allows replacing worn out connectors when and where needed.

SPECIFICATIONS

PXM POWER METER SPECIFICATIONS^c

Optical connector	Standard: Contactless MPO-12, male (pinned), supporting both APC and UPC. Connector with protective shutter. P12 models: Click-Out adapter interface.
Detector type	InGaAs
Power measurement range (dBm)	5 to -45
Power uncertainty (dB) ^a	±0.35
Linearity (dB) ^b	±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 ^c	Yes
Length measurement	Up to 25 km depending on conditions with singlemode and 1 km with multimode
Warm up time (s)	0
Storage capacity	10,000 measurements at two wavelengths
Warranty (years)	3
Calibration interval (years)	3

LXM LIGHT SOURCE SPECIFICATIONS^d

	LXM-SM1 (singlemode)	LXM-MM1 (multimode)
Optical connector	Standard: APC MPO-12 male (pinned). Connector with protective shutter. P12 models: Click-Out adapter interface.	Standard: UPC MPO-12 male (pinned). Connector with protective shutter. P12 models: Click-Out adapter interface.
Emitter type	Laser	LED
Wavelength (nm) ^e	1310 ± 20 1550 ± 20	850 ± 25 1300 ± 20
Output power (dBm)	≥ -13/ ≥ -13	≥ -33/ ≥ -33
Stability (8 h) (dB) ^f	±0.1	±0.1
Warmup time (minutes)	15	15
Tone generation	270 Hz, 330 Hz, 1 kHz, 2 kHz	270 Hz, 330 Hz, 1 kHz, 2 kHz
Warranty (years)	3	3
Calibration interval (years)	3	3

IN-LINE VFL SPECIFICATIONS (included on each LXM light source)^g

Laser type (nm) ^e	635 ± 10
Modulation	CW, 1 Hz, 4 Hz
Typical power output (mW)	≤ 0.4
Laser safety	IEC 60825-1: Class 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 only on certain channels, not all 12.

GENERAL SPECIFICATIONS

Display	4-in touchscreen
Display type	Color display with capacitive touchscreen
Size (H × W × D)	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 Bluetooth Low Energy (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: -10 °C to 45 °C (14 °F to 113 °F) Storage: -40 °C to 60 °C (-40 °F to 140 °F)



GP-3151



GP-10-061



GP-151



GP-153



GP-2293



GP-3257



GP-3157



GP-3198



GP-3199



GP-3150

ACCESSORIES

Carrying pouches and cases	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
Cleaning supplies	GP-151	IBC™ brand cleaner, 1.25 mm ferule
	GP-153	IBC™ brand cleaner, MPO
	GP-165	One-click smart cleaner, CS
	GP-168	One-click smart cleaner, SN
	GP-169	IBC™ brand cleaner, MMC-12 or MMC-24
	GP-170	IBC™ brand cleaner, MMC-16
	GP-3272	IBC™ brand cleaner, MDC
	GP-2293	Electro-wash MX pen
Test cords	MPO-12-SM-TJ-KIT1	Singlemode MPO-12 test jumper kit
	MPO-24-SM-TJ-KIT1	Singlemode MPO-24 test jumper kit
	MPO-12-MM-TJ-KIT1	Multimode MPO-12 test jumper kit
	MPO-24-MM-TJ-KIT1	Multimode MPO-24 test jumper kit
	MDCU-SM-TJ-KIT	Singlemode MDC/UPC duplex test jumper kit
	SNU-SM-TJ-KIT	Singlemode SN/UPC duplex test jumper kit
	LCU-SM-TJ-KIT	Singlemode LC/UPC duplex test jumper kit
	LCA-SM-TJ-KIT	Singlemode LC/APC duplex test jumper kit
LCU-MM-TJ-KIT	Multimode LC/UPC duplex test jumper kit	
Wrist strap	GP-3157	Wrist strap
Data transfer cable	GP-3257	USB-A to USB-C cable
Power adapters	GP-3199	USB AC adapter
	GP-3198	USB-C to USB-C cable
Battery	GP-3150	Battery

ORDERING INFORMATION

PXM-XX-XX-XX

- Model** ■ PXM = Multi-fiber power meter
- Optical port** ■
 - 00 = Fixed MPO port
 - P12 = PRO version with Click-Out
- Example: PXM-P12-LC-NRF
- PXM-P12 Click-Out**
 - LC = Duplex LC
 - MPO12M = MPO-12 male (pinned)
 - MPO12F = MPO-12 female (unpinned)
 - SN = Duplex SN
 - MDC = Duplex MDC
 - MPO12FI = MPO-12 female inverted (unpinned)
- Bluetooth**
 - 00 = With Bluetooth
 - NRF = Without Bluetooth hardware

LXM-XX-XX-XX-XX

- Model** ■ LXM = Multi-fiber light source
- Configuration** ■
 - SM1 = Singlemode multi-fiber light source 1310/1550 nm
 - MM1 = Multimode multi-fiber light source 850/1300 nm
- Optical port** ■
 - 00 = Fixed MPO port
 - P12 = PRO version with Click-Out
- Example: LXM-SM1-P12-SM-LCA-NRF
- LXM-P12 Click-Out**
 - SM-LCA = Duplex LC/APC
 - SM-LCU = Duplex LC/UPC
 - SM-MPO12AM = MPO-12 APC male (pinned)
 - MM-LCU = Duplex LC/UPC
 - MM-MPO12UM = MPO-12 UPC male (pinned)
- Bluetooth**
 - 00 = With Bluetooth
 - NRF = Without Bluetooth hardware

TK-XM-XX-XX-XX-XX

- Models** ■
 - SM = Multi-fiber multimode kit
 - MM = Multi-fiber singlemode kit
 - Q = Multi-fiber quad kit
- Optical port** ■
 - 00 = Fixed MPO port
 - P12 = PRO version with Click-Out
- Bluetooth** ■
 - 00 = With Bluetooth
 - NRF = Without Bluetooth hardware
- Example: TK-XM-SM-P12-MPO12M-SM-MPO12AM
- PXM-P12 Click-Out**
 - LC = Duplex LC
 - MPO12M = MPO-12 male (pinned)
 - MPO12F = MPO-12 female (unpinned)
 - SN = Duplex SN
 - MDC = Duplex MDC
 - MPO12FI = MPO-12 female inverted (unpinned)
- LXM-P12 Click-Out**
 - SM-LCA = Duplex LC/APC
 - SM-LCU = Duplex LC/UPC
 - SM-MPO12AM = MPO-12 APC male (pinned)
 - MM-LCU = Duplex LC/UPC
 - MM-MPO12UM = MPO-12 UPC male (pinned)

CLICK-OUT™ ADAPTERS

LXM-SM1-P12 adapters	ALXM12-SM-LCA	LC/APC duplex, singlemode
	ALXM12-SM-LCU	LC/UPC duplex, singlemode
	ALXM12-SM-MPO12AM	MPO-12 APC male (pinned), singlemode
LXM-MM1-P12 adapters	ALXM12-MM-LCU	LC/UPC duplex, multimode
	ALXM12-MM-MPO12UM	MPO-12 UPC male (pinned), multimode
PXM-P12 adapters	APXM12-LC	LC duplex, singlemode and multimode
	APXM12-MPO12M	MPO-12 male (pinned), singlemode and multimode
	APXM12-MPO12F	MPO-12 female (unpinned), singlemode and multimode
	APXM12-SN	SN duplex, singlemode and multimode
	APXM12-MDC	MDC duplex, singlemode and multimode
	APXM12-MPO12FI	MPO-12 female inverted (unpinned), singlemode and multimode

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