Optical Power Expert

CONNECTED OPTICAL POWER METER

■ State-of-the-art power meter with Bluetooth connectivity, a wide touchscreen and best-in-class optical performances. In a pocket-sized form factor. Turns on instantly for use on the go.

COMPATIBLE WITH

EXchange

Bluetooth®

KEY FEATURES

Connect to smart app via Bluetooth for data reporting from the field

User-friendly: Compact, color touchscreen and intuitive interface

Robust and rugged: IP54 design for dust and water protection

Time-saving features: no offset nulling, lightning-fast boot-up

Visual fault locator (PRO model)

Onboard data storage of 1000 test results

Error-free, automated wavelength recognition and switching (PRO model)

3-year warranty and calibration interval

APPLICATIONS

Measuring optical power (dBm) and insertion loss (dB)

Fiber tracing
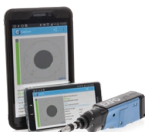
All telecom networks including:
- Passive optical networks (PON)
- 5G rollouts
- FTTx
- LAN/WAN access and enterprise
- CATV
- Military applications

Applicative bundles of wavelengths for PON (GPON, XGS-PON, NG-PON2, RFoG, etc.), CWDM and DWDM ITU channels

RELATED PRODUCTS

Light source
FLS-600

Fiber inspection scope
FIP-400B wireless

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OPTICAL POWER EXPERT

The Optical Power Expert is an essential device in today's field toolkit to measure the optical signal power (dBm) or link loss (dB). With the Optical Power Expert, save field test results on the device and share reports through your smartphone [a]. Leverage the mobile app to simplify your workflow and test results management, while also receiving field updates that enable new features. The Optical Power Expert enables technicians to close more jobs, better and more efficiently through industry-leading features such as bundled wavelengths or instant boot up for use on the go. The device comes with built-in expertise with automation that avoids human error (smart features such as auto-wavelength recognition and switching).

The power meter comes with best-in-class performances, a wide color touchscreen and an intuitive graphical interface. Pocket-sized and rugged, the device is designed for extensive use in the field. It has a high capacity data storage for test results.

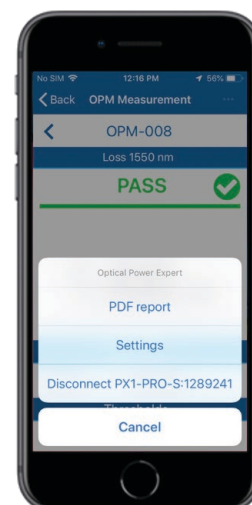*The compact Optical Power Expert fits neatly into your pocket.*

FLEXIBLE REPORTING

From your PC

Test results can be transfered to a PC via the USB port on the unit. From there, reports can be generated with EXFO's FastReporter data post-processing software.

From your smart device

Pair the device with the mobile app and leverage your smart device for PDF reporting from the field to share on the go via email, text message or your favorite messaging app.
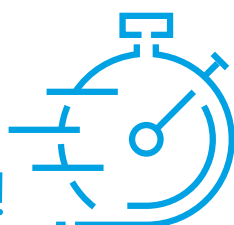
FOR USE ON THE GO

Lightning-fast boot-up, intuitive graphical user interface (GUI), no offset nulling or warm-up required. The Optical Power Expert boots up and is ready for use when you need it.
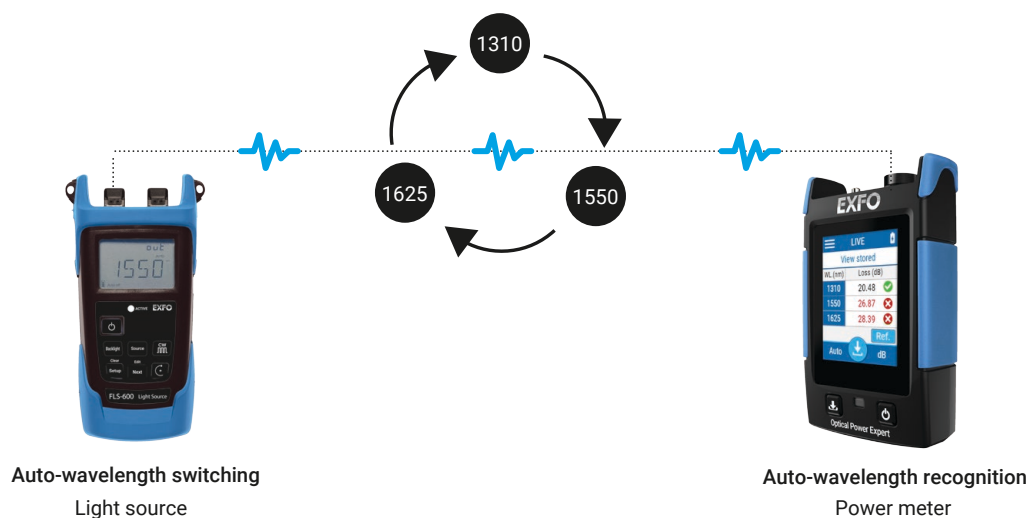
Ready,
Set,
Good to go!

Lightning-fast boot-up
No nulling
No warm-up
Intuitive GUI

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AUTOMATED TESTING = ERROR-FREE TESTING

When used in combination with an EXFO light source[a] in auto-switching mode, the power meter automatically recognizes the wavelength in use and switches to the proper calibration parameter. At the press of a button, you can store results for all wavelengths at once.
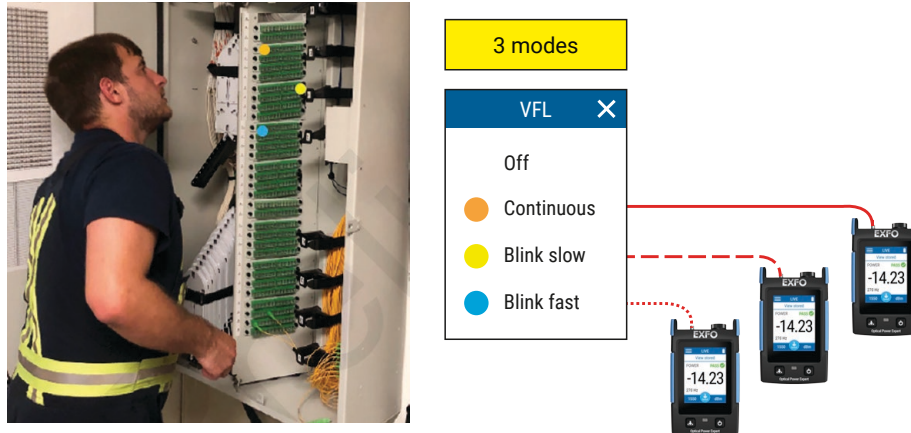
Auto-wavelength switching
Light source

Auto-wavelength recognition
Power meter

FIBER TRACING

When it comes to fiber tracing, the Optical Power Expert can detect four different tones emitted from a source[a]: 270 Hz, 330 Hz, 1 kHz and 2 kHz.

270 Hz

330 Hz

1 kHz

2 kHz

Light source

The PRO configuration includes a visual fault locator that emits light in three different modes (continuous, slow blink and fast blink) to trace fibers and identify breaks and macrobends.

LOW COST OF OWNERSHIP

Designed for extended use in the field, the Optical Power Expert delivers best-in-class optical performances day in, day out. EXFO's track-record of robustness, backed with IP54 design for water and dust protection, makes this device extremely reliable and a long-lasting investment.

Long-lasting LiPo rechargeable and field-replaceable battery

Designed for field use

EXFO's proven robustness

3-year calibration
Cut costs related to factory returns and downtime

IP54 design
Water and dust protection

CONFIGURATIONS AVAILABLE

The Optical Power Expert is available in two configurations: PX1 and PX1-PRO.

Both the PX1 and PX1-PRO are available with either standard detector (10 to −70 dBm) or high-power detector (26 to −50 dBm).

PX1	PX1-PRO
Features	**Features**
Measure absolute power (dBm) and loss (dB)	Measure absolute power (dBm) and loss (dB)
Pass/fail status	Pass/fail status
11 calibrated wavelengths	45 calibrated wavelengths organized in bundles
Tone detection	Tone detection
	Applicative bundle of wavelengths for PON (GPON, XGS-PON, NG-PON2, RFoG), CWDM and DWDM ITU channels
	Add up to 24 wavelengths to favorite list
	Wavelengths adjustable by 1 nm steps
	Visual fault locator (VFL)
	Auto-wavelength recognition and switching
	Soft-pouch included

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MANAGE FIELD TESTS.
STREAMLINE WORKFLOWS.
UNLOCK INSIGHTS.

Interconnect all parts of your field test
ecosystem through EXFO Exchange,
our open collaborative software platform.

KEY BENEFITS

**Connect
operations with
real-time visibility**

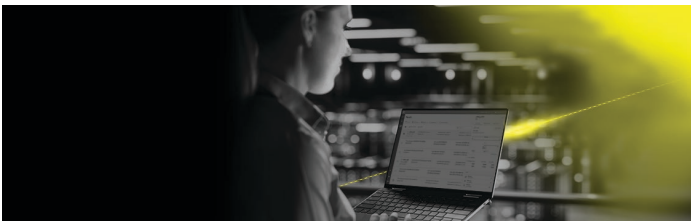**Increase collaboration
and build trust with
business partners**

**Boost efficiency
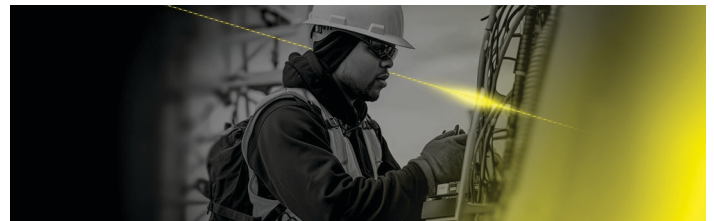with automated
processes**

**Reduce
maintenance
costs**

**Unlock
insights to see
what matters**

From the office

Invite your workforce and contractors to join your
organization's workspace on EXFO Exchange.
This will help you better organize projects and gain
unprecedented visibility in real time over job progress
and MoP compliance. Optimize closeout package
generation to close jobs rapidly and monetize/get
paid faster.

From the field

Request an invitation from your team manager
to complete jobs faster and better, save results
automatically and share them in real time.

KEY FEATURES

| Centralized and
organized data | Easy
integration | Consolidated
reporting service | Process
automation | Collaboration |

**Get
started >**

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SPECIFICATIONS [a]

CONFIGURATIONS	PX1		PX1-PRO	
	PX1-S	**PX1-H**	**PX1-PRO-S**	**PX1-PRO-H**
Power measurement range (dBm)	10 to −70	26 to −50 [b]	10 to −70	26 to −50 [b]
Power uncertainty	±5 % [c]			
Measurement units available	dB, dBm, Watt (W, mW, nW, pW)			
Wavelength measurement range (nm)	830 to 1625		780 to 1650	
Calibrated wavelengths (nm)	11 calibrated wavelengths: 830, 850, 980, 1300, 1310, 1450, 1490, 1550, 1577, 1590, 1625		45 calibrated wavelengths: 800, 820, 830, 840, 850, 860, 870, 880, 910, 980, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1370, 1390, 1410, 1430, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1577, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650	
Auto-wavelength recognition	No		Yes [d]	
Auto-wavelength switching	No		Yes [e]	
Wavelength bundles	No		Yes	
Visual fault locator	No		Yes (3 modes—continuous, 1 Hz, 4 Hz)	
Tone detection	270 Hz, 330 Hz, 1 kHz, 2 kHz			

GENERAL SPECIFICATIONS	
Dimension	133 mm x 78 mm x 30 mm (5 ¼ in x 3 in x 1 ¹/₈ in)
Display size	71 mm (2.8 in)
Weight (with battery)	225 g (0.5 lb)
Display type	Color display with capacitive touchscreen
Interface languages	Chinese (Simplified and Traditional), English, French, German, Russian, Spanish
Battery charging	< 3 hours charging time, when unit is off USB Type C charging port connector AC/DC charger/adapter input: ∼ 100 - 240 V; 50/60 Hz; 1.0 A max, output: ⎓ 5 V; 2 A
Battery autonomy	10 h (continuous use)
Interfaces	Bluetooth 5.0 with BLE USB Type C
Storage capacity	1000 test results for local reading
Reporting	Two methods available: • Connect PX1 to smartphone via Bluetooth. Generate and share PDF reports via EXFO application. • Transfer results to a PC via USB cable and generate reports with FastReporter software.
Warranty	3 years
Calibration interval	3 years
Temperature Storage [f] Operating	−40 °C to 70 °C (−40 °F to 158 °F) −10 °C to 50 °C (14 °F to 122 °F)

VISUAL FAULT LOCATOR (VFL) (PX1-PRO ONLY)
Laser, 650 nm ± 10 nm
CW/Modulate 1 Hz/Modulate 4 Hz
Typical P_{out} in 62.5/125 µm: > −1.5 dBm (0.7 mW)
Laser safety: Class 2

LASER SAFETY

IEC/CEI 60825-1: 2014
LASER RADIATION
DO NOT STARE INTO THE BEAM
CLASS 2 LASER PRODUCT
RAYONNEMENT LASER
NE PAS REGARDER DANS LE FAISCEAU
APPAREIL À LASER DE CLASSE 2
λ : 650 nm ± 10 nm, Pout / Psortie max < 2 mW

a. Specifications valid at (23 ± 1 °C), 1550 nm, with an FOAS-22 adapter and FC/UPC connector.

b. Typical.

c. Singlemode fiber or a 50 µm fiber. Bluetooth ON. Charge OFF. Brightness at 75 %. Between 17 dBm to −35 dBm for high-power model. Between 5 dBm to −50 dBm for standard model.

d. Auto-wavelength recognition with FLS-300, FLS-600, FOT-300, FOT-600.

e. Auto-wavelength switching with FLS-600, FOT-600.

f. Without battery.

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| GP-2267 | GP-3157 | GP-2227 | GP-2269 | FOAS-22 | FOAS-32 | FOAS-54 | FOAS-98 | FOAS-U12 | FOAS-U25 | GP-1008 |

ACCESSORIES	
Carrying pouches	
GP-2267	Soft pouch carrying case
Wrist strap	
GP-3157	Wrist strap
Power adapters	
GP-2227	USB AC adapter (includes interchangeable plugs for North America, Europe, UK and Australia)
GP-2269	USB-A to USB-C cable
Battery	
GP-2295	Rechargeable battery
Connectors adapters	
FOAS-22	FC connector adapter
FOAS-32	ST connector adapter
FOAS-54	SC connector adapter
FOAS-98	LC connector adapter
FOAS-U12	Universal 1.25 mm connector adapter (suitable for 1.25 mm ferrule connectors including LC, MU)
FOAS-U25	Universal 2.5 mm connector adapter (suitable for 2.5 mm ferrule connectors including SC, FC, ST, E2000)
GP-1008	VFL adapter for 1.25 mm ferrule

WHAT'S IN THE BOX?

Included accessories—PX1
- Calibration certificate
- GP-2295—Rechargeable battery
- FOAS-U25—Universal 2.5 mm connector adapter [a]
- GP-2269—USB cable (compatible with any AC USB charger)

Included accessories—PX1-PRO
- Calibration certificate
- GP-3157—Wrist strap
- GP-2295—Rechargeable battery
- FOAS-U25—Universal 2.5 mm connector adapter [a]
- GP-2269—USB cable (compatible with any AC USB charger)
- GP-2227—USB AC adpater
- GP-2267—Soft carrying pouch

PX1

GP-2269

FOAS-U25

PX1-PRO

GP-2227

GP-2269

GP-2267

GP-3157

FOAS-U25

a. Universal 2.5 mm connector adapter included by default unless otherwise specified upon ordering

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ORDERING INFORMATION

PX1-XX-XX-XX

Configurations
S = Standard power measurement range
H = High power measurement range
PRO-S = Pro configuration with standard power measurement range
PRO-H = Pro configuration with high power measurement range

Options
NRF = Version of the PX1 without the Bluetooth hardware

Example: PX1-S-FOAS-22

Connector adapter
FOAS-22 = FC connector adapter
FOAS-32 = ST connector adapter
FOAS-54 = SC connector adapter
FOAS-98 = LC connector adapter
FOAS-U12 = Universal 1.25 mm connector adapter
FOAS-U25 = Universal 2.5 mm connector adapter

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EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to **www.EXFO.com/contact**.

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