

# 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

## 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<sup>a</sup>. 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

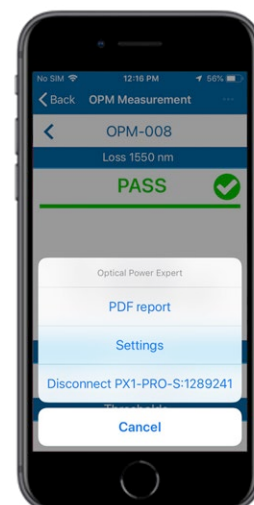
### From your PC

Test results can be transferred 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.

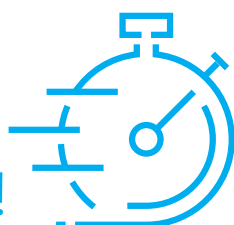
# FastReporter



## 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.

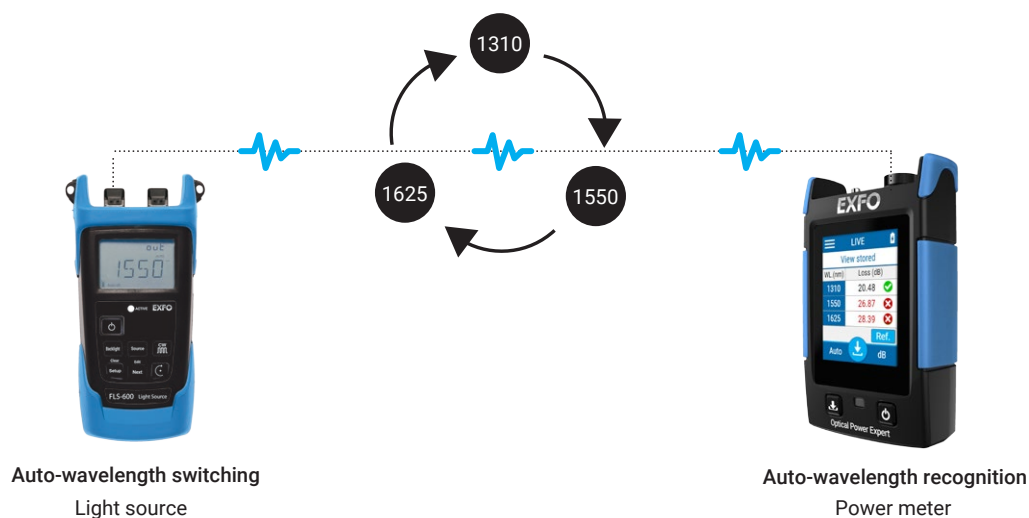
Ready,  
Set,  
Good to go!



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

## AUTOMATED TESTING = ERROR-FREE TESTING

When used in combination with an EXFO light source<sup>a</sup> 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.



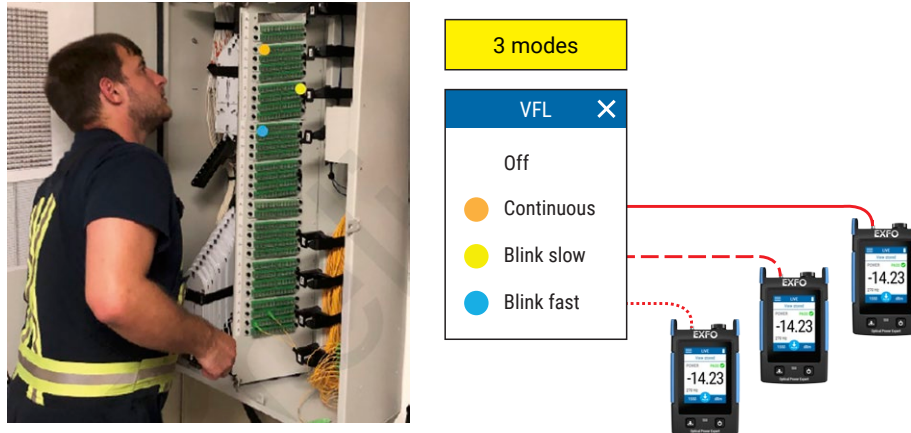
## FIBER TRACING

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



a. See compatibility details in the technical specifications.

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

Features

- Measure absolute power (dBm) and loss (dB)
- Pass/fail status
- 11 calibrated wavelengths
- Tone detection



PX1-PRO

Features

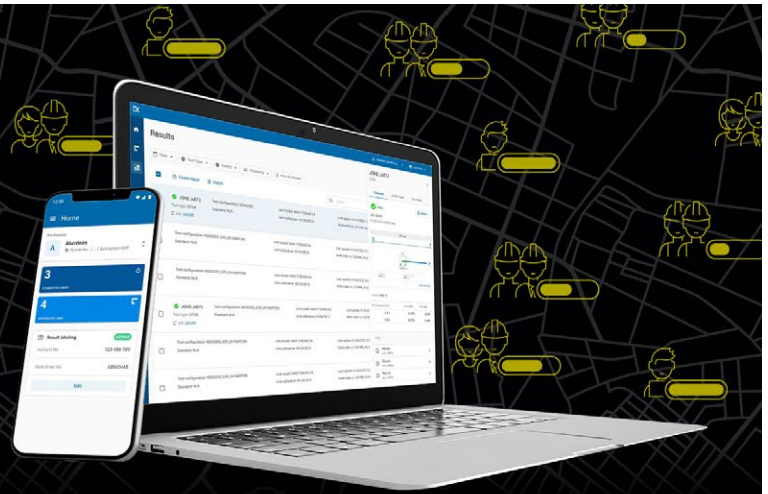
- Measure absolute power (dBm) and loss (dB)
- Pass/fail status
- 45 calibrated wavelengths organized in bundles
- Tone detection
- Applicative bundle of wavelengths for PON (GPON, XGS-PON, NG-PON2, RFoG), CWDM and DWDM ITU channels
- Add up to 24 wavelengths to favorite list
- Wavelengths adjustable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



## SHARE TEST RESULTS. BOOST COMPLIANCE. UNLOCK INSIGHTS.

**Cloud-hosted solution for sharing test results and ensuring compliance.**

Paired with EXFO's leading test instruments, EXFO Exchange drives an entire ecosystem, while integrating seamlessly with existing operation processes.



## KEY BENEFITS



**Automate test results management**



**Boost compliance and efficiency**



**Improve collaboration and visibility**



**Access comprehensive reporting**



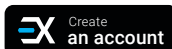
**Unlock insights to see what matters**

## SIMPLE SETUP IN THREE STEPS

**1**

### Create your free EXFO Exchange account

Begin your journey by creating an EXFO Exchange account. Setting up your account is quick and easy.



**2**

### Install the mobile app

Download the EXFO Exchange app to allow test data from compatible EXFO devices to be uploaded securely to the cloud (free of charge).



For MaxTester and FTB users, install the native app.



**3**

### Save time and boost efficiency

Once your account created—and the mobile app installed and paired with compatible EXFO devices—all test results will be sent to the cloud. On the web app, you will see field test results from all invited testers.



Get started >



SPECIFICATIONS<sup>a</sup>

CONFIGURATIONS	PX1		PX1-PRO	
	PX1-S	PX1-H	PX1-PRO-S	PX1-PRO-H
Power measurement range (dBm)	10 to −70	26 to −50 <sup>b</sup>	10 to −70	26 to −50 <sup>b</sup>
Power uncertainty	±5 % <sup>c</sup>			
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 <sup>d</sup>	
Auto-wavelength switching	No		Yes <sup>e</sup>	
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 <sup>f</sup>			

## GENERAL SPECIFICATIONS

Dimension	133 mm x 78 mm x 30 mm (5 ¼ in x 3 in x 1 ⅛ 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/adaptor 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 <sup>g</sup> -40 °C to 70 °C (-40 °F to 158 °F) Operating -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 <sub>out</sub> in 62.5/125 µm: > -1.5 dBm (0.7 mW)
Laser safety: Class 2

## LASER SAFETY



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. Wavelength measurement range up to 1650 nm.

g. Without battery.



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-3257	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-96B	E-2000 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<sup>a</sup>
- GP-3257—USB cable (compatible with any AC USB charger)

PX1



Included accessories—PX1-PRO

- Calibration certificate
- GP-3157—Wrist strap
- GP-2295—Rechargeable battery
- FOAS-U25—Universal 2.5 mm connector adapter<sup>a</sup>
- GP-3257—USB cable (compatible with any AC USB charger)
- GP-2227—USB AC adapter
- GP-2267—Soft carrying pouch

PX1-PRO



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

## 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-96B = E-2000 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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