

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^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

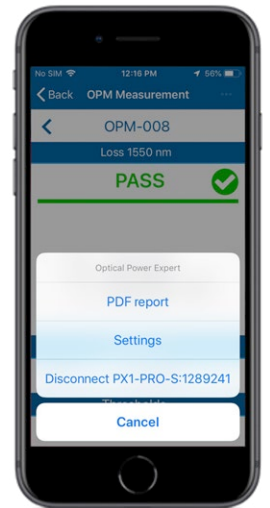
From your PC

Test results can be 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.

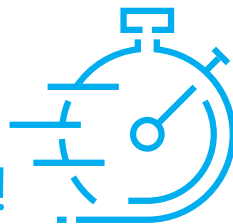
FastReporter



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.

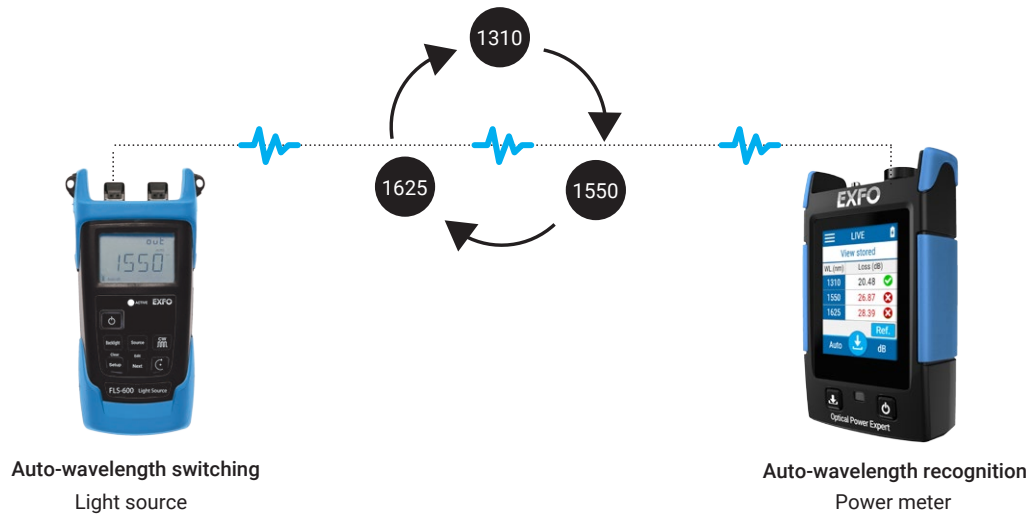
Ready,
Set,
Good to go!



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^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.



Light source

- 270 Hz
- 330 Hz
- 1 kHz
- 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.



3 modes

VFL X

- Off
- Continuous
- Blink slow
- Blink fast

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

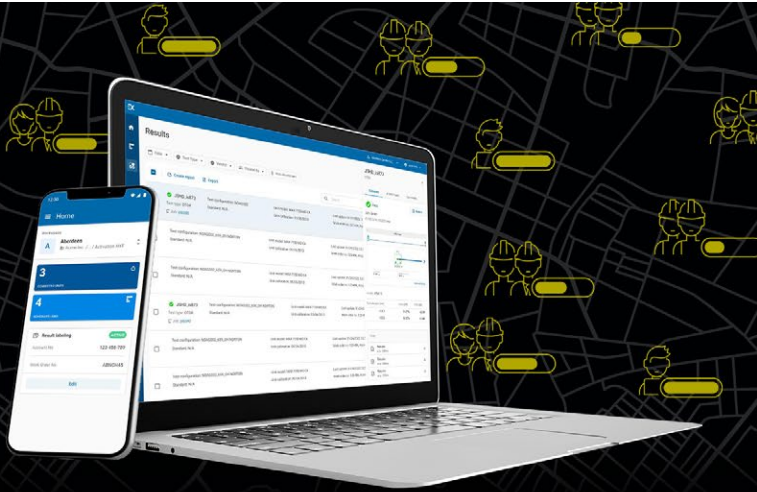
Soft-pouch included



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



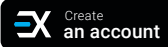
Unlock insights to see what matters

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).



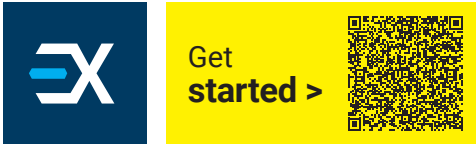
For MaxTester and FTB users, install the native app.



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.



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 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 ^f -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 _{out} 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. 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-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-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^a
- GP-2269—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^a
- GP-2269—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

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

Example: PX1-S-FOAS-22

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.

For the most recent patent marking information, please visit 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. **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.

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