# **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.

### **KEY FEATURES**

Connect to smart app via Bluetooth for data reporting from the field and cloud storage (see page 2 for release dates)

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 (on PRO)

Local data storage of 1000 test results

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

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 probe 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 TestFlow 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.

#### FASTREPORTER

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.

#### **GO BEYOND WITH THE CLOUD**

Pair the device with the TestFlow mobile app and leverage your smart device for:

- Occasional PDF reporting from the field to share on the go via email, text message or your favorite messaging app
- · Cloud storage and full job documentation (Available in fall 2021)



The compact Optical Power Expert fits neatly into your pocket.

## 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.



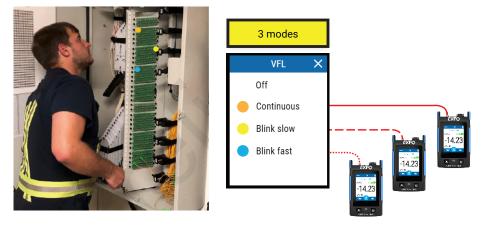
#### **FIBER TRACING**

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.





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.



#### **EVOLUTIVE SOLUTION**

To increase field efficiency and adapt to new challenges as they arise, this solution is designed to evolve, and system releases will be made on a regular basis. These releases will upgrade the feature set of the Optical Power Expert, the mobile app and relevant cloud-based services.





#### 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.



#### **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).



#### SPECIFICATIONS <sup>a</sup>

CONFIGURATIONS	PX1	PX1-PR0
Power measurement range (dBm) Standard High power	10 to -70 26 to -50 <sup>b</sup>	
Power uncertainty	±5 % °	
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 °
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 SPEC	IFICATIONS		
Dimension		133 mm x 78 mm x 30 mm (5 ¼ in x 3 in x 1 ¼ in)	
Display size		2.8 in	
Weight (with battery) 225 g (0.5 lb)		225 g (0.5 lb)	
Display type		Color display with capacitive touchscreen	
Interface languag	es	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	,	8 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 TestFlow application.	
		- Transfer results to a PC via USB cable and generate reports with FastReporter software.	
Warranty		3 years	
Calibration interva	al	3 years	
Temperature	Storage <sup>f</sup> 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  $\pm$  10 nm

CW/Modulate 1 Hz/Modulate 4 Hz

Typical  $P_{_{out}}$  in 62.5/125  $\mu m$  >-1.5 dBm (0.7 mW)

Laser safety: Class 2



a. Specifications valid at (23  $\pm$  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 (for charging purposes only-no data transfer)
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-2269

FOAS-U25

- GP-2295-Rechargeable battery
- FOAS-U25–Universal 2.5 mm connector adapter<sup>a</sup>
- GP-2269–USB cable (compatible with any AC USB charger)

#### Included accessories—PX1-PR0

- 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-PR0







GP-2267





GP-2227



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

**PX1** 

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#### **ORDERING INFORMATION**

#### Model

**Optical Power Expert** Configurations S = Standard power measurement range H = High power measurement rangePRO-S = Pro configuration with standard power measurement range PRO-H = Pro configuration with high power measurement range Connector adapter

PX1-XX-XX

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

Example: PX1-S-FOAS-22



