# **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

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**







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.

# FastReporter

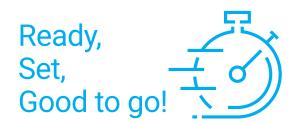






### FOR USE ON THE GO

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.



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

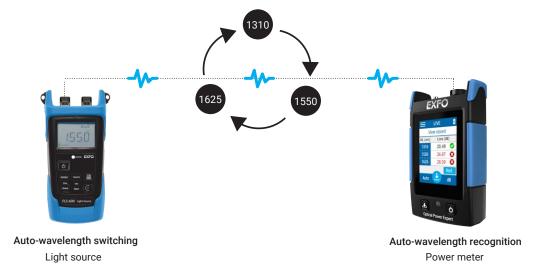






### **AUTOMATED TESTING = ERROR-FREE TESTING**

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.

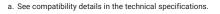


### **FIBER TRACING**

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.

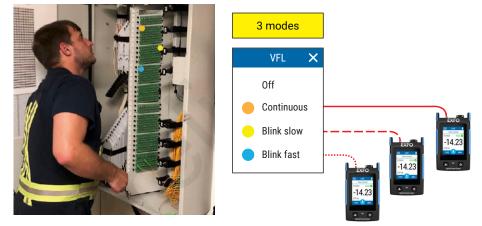








The PRO configuration includes a visual fault locator that emits light in three different modes (continuous, slow blink and fast blink) to trace fibers and identify breaks and macrobends.



### 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).

### PX<sub>1</sub>

### **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





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

CONFIGURATIONS	PX1		PX1-PR0	
	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 % °			
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	N	lo	Yes <sup>d</sup>	
Auto-wavelength switching	N	lo	Yes <sup>e</sup>	
Wavelength bundles	No Yes		es	
Visual fault locator	N	lo	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 $\frac{1}{4}$ in x 3 in x 1 $\frac{1}{8}$ 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 <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 ± 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  $\mu$ m 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.



























GP-2267

GP-3157

GP-2269

FOAS-22

FOAS-32

FOAS-U12

FOAS-U25 GP-1008

ACCECCODIEC	
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-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-PRO

- · Calibration certificate
- GP-3157-Wrist strap
- · 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)
- GP-2227-USB AC adpater
- GP-2267-Soft carrying pouch

# PX1-PRO







GP-2227



GP-2269







GP-2267

GP-3157



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



# 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-42 = SC connector adapter FOAS-98 = LC 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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