# PEC SHEET

## **Optical Power Expert**

#### **CONNECTED OPTICAL POWER METER**



TestFlow





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: data reporting from the field, cloud storage, workflow management (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)

Data storage

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 bundle of wavelengths for GPON, XGS-PON, NG-PON2, RFoG, CWDM and DWDM ITU channels

#### **RELATED PRODUCTS**



FLS-600 Light source



FIP-400B Wireless
Fiber inspection probe



#### **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 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.



The compact Optical Power Expert fits neatly into your pocket.

#### GO BEYOND WITH TESTFLOW MOBILE

Features to be released in 2020

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 (Available in spring 2020)
- Cloud storage and full job documentation (Available in summer 2020)
- > Leverage TestFlow's capabilities for job management and results sharing in real time (Available in summer 2020)

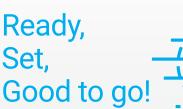
Go to www.EXFO.com/TestFlow for more details.





#### FOR USE ON THE GO

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





Lightning-fast boot-up
No nulling
Intuitive GUI

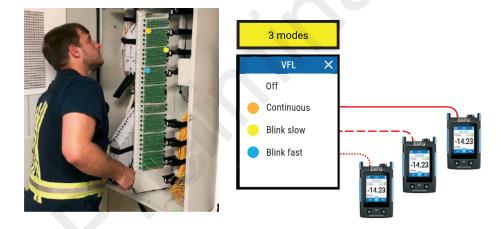


#### FIBER TRACING

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**

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

The first release scheduled in 2020 will enable connectivity. The second release, also in 2020, will unleash the power of cloud-based test results management through compatibility with TestFlow.





#### 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**

**Features** 

and loss (dB)

Pass/fail status

Tone detection

Measure absolute power (dBm)

11 calibrated wavelengths

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

The PX1 includes 11 calibrated wavelengths.

The PX1-PRO goes further and has an integrated visual fault locator, auto-wavelength recognition and switching and has 45 calibrated wavelengths. The PX1-PRO configuration also comes in a soft pouch.

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





#### **SPECIFICATIONS** a

CONFIGURATIONS	PX1	PX1-PR0
Power measurement range Standard High power range	10 dBm to −70 dBm 26 dBm to −50 dBm <sup>b</sup>	
Power uncertainty	±5 % guaranteed °	
Measurement units available	dB, dBm, Watt (W, mW, nW, pW)	
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
Visual fault locator	No	Yes (3 modes-continuous, 1 Hz, 4 Hz)
Auto-wavelength recognition	No	Yes
Auto-wavelength switching	No	Yes
Wavelength bundles	No	Yes
Tone detection	270 Hz, 330 Hz, 1 kHz, 2 kHz	

GENERAL SPECIFICATIONS	
Dimension	133 mm x 78 mm x 30 mm (5 1/4 in x 3 in x 1 1/8 in)
Display size	2.8 in
Weight (with battery)	225 g (0.5 lb)
Display type	Color display with capacitive touchscreen
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
Storage capacity	100 test results for local reading
Reporting	Single test: PDF on TestFlow mobile app  Batch of tests: online (TestFlow account required)  Spring 2020 for single test, summer 2020 for batch report
Warranty	3 years
Calibration interval	3 years
Temperature Storage <sup>d</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 FC adapter.
- b. Typical. Above 24 dBm a clear message indicating high power will be displayed on the unit. Avoid using the instrument more than 60 seconds above 24 dBm.
- c. At 1550 nm for singlemode fiber and 50  $\mu m$  for multimode fiber.
- d. Without battery.























GP-2267

GP-2269 FOAS-32 FOAS-U12 FOAS-U25

GP-1008

ACCESSORIES	
Carrying pouches	
GP-2267	Soft pouch carrying case
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-2225	Rechargeable batterie
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

USB cable (compatible with any AC USB charger) and calibration certificate, one FOAS connector adapter (choice between FC, SC, ST, LC, Universal 1.25 mm or Universal 2.5 mm connector adapter)

#### Included accessories—PX1-Pro

USB cable, calibration certificate, soft carrying pouch, AC USB charger, FOAS connector adapter (choice between SC, ST, LC, Universal 1.25 mm or Universal 2.5 mm connector adapter)





FOAS-U25

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





#### **ORDERING INFORMATION** PX1-XX-XX Model Optical Power Expert Configurations | S = Standard power measurement range H = High power measurement range S-PRO = Pro configuration with standard power measurement range H-PRO = Pro configuration with high power measurement range 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 Example: PX1-S-FOAS-22

EXFO Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | www.EXFO.com

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

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.

Android is a trademark of Google Inc.

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc.

iOS is a registered trademark of Cisco System, Inc. and/or its affiliates in the U.S. and certain other countries.

