# PPM1 SERVICE ACTIVATION PON POWER METER

Versatile dual-layer tester purpose-built for service activation of PON, with added broadband capabilities.



# **KEY FEATURES AND BENEFITS**

Unique PON-aware<sup>™</sup> capability: helps to select the appropriate PON technology under test

Supports 1G/10G PON networks: G/EPON and XGS-PON/10G-EPON

No training required: color touchscreen with a highly intuitive GUI

Robust and rugged: IP54 design for dust and water protection

3-year warranty and calibration interval

Visual fault locator (PRO model)

Broadband power meter mode (PRO model)

# **APPLICATIONS**

Multilayer FTTx PON downstream service activation

GPON, EPON, XGS-PON, 10G-EPON, RF video and RFoG service activation

Network troubleshooting

Insertion loss measurement

Fiber tracing

# **RELATED PRODUCTS AND ACCESSORIES**







EX1



Fiber inspection scope FIP-500

FTTH residential services tester EX10

FTTH and business PON power meter PPM-350D services tester



Cleaning kits



# **NEXT-GENERATION PON SERVICE ACTIVATION**

Next-generation passive optical networks (PONs) will, in most cases, leverage existing outdoor plant infrastructure already in use for PON customers. Adding new services on existing networks translates into overlaying multiple wavelengths on the same physical fiber plant.

# A SINGLE POWER METER FOR 1G AND 10G NETWORKS

EXFO's PPM1 is compatible with multiple services including GPON, EPON, XGS-PON and 10G-EPON technologies. Its PON-layer wavelength-selective design allows it to measure up to two downstream signals simultaneously, assessing power level for rapid and reliable service activation.

# **PON-AWARE TECHNOLOGY**

By leveraging customizable or preset PON layer configurations, the PPM1 notifies the user and recommends the available PON layer for the network under test for proper pass/fail assessment, enabling error-free testing.

# PRO MODEL: ALL-IN-ONE VERSATILE POWER METER

#### Mode for broadband

On top of the PON mode, the PPM1 PRO features a Broadband Power Meter mode calibrated at five wavelengths with the following capabilities when used in combination with an EXFO light source: auto-wavelength detection and switching, modulated tone detection, power and loss measurement.

#### Visual fault locator (VFL)

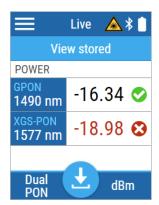
The PRO model includes a VFL that emits light in three different modes (continuous, slow blink and fast blink) to trace fibers and identify breaks and macrobends.

#### LOW COST OF OWNERSHIP

Designed for extended use in the field, the PPM1 delivers best-in-class optical performances—day in, day out. Backed by EXFO's track record of device robustness and its IP54 design for water and dust protection, this tester is an extremely reliable and long-lasting investment.









#### PPM1

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Simultaneous measurement of up to two downstream signals

PON technologies supported: GPON, EPON, XG(S)-PON, RF video overlay, RFoG, downstream measurement

Pass/fail status

3 calibrated wavelengths



#### **PPM1-PRO**

In addition to PPM1 capabilities, the PRO model features:

Auto-wavelength recognition and switching

Tone detection

Broadband power meter

VFL (3 modes: continuous, slow blink, fast blink)

5 calibrated wavelengths

#### EXPERIENCE THE INTUITIVE INTERFACE ON YOUR OWN





# **SPECIFICATIONS**

FTTX (PON MODE)		
	PPM1-D	PPM1-PRO-D
Spectral passband (nm)	1490 ±10, 1550 ±10, 1577 ±10	
Calibrated wavelengths (nm)	1490, 1550, 1577	1310, 1490, 1550, 1577, 1625
Power measurement range (dB)	15 to -45	
Power uncertainty <sup>a</sup> (dB)	0.5	
ORL <sup>a</sup> (dB)	55	
Visual fault locator	No	Yes (3 modes—continuous, 1 Hz, 4 Hz)

# BROADBAND POWER METER SPECIFICATIONS (PPM1-PRO-D ONLY)

	PPM1-PRO-D	
Wavelength measurement range (nm)	1260 to 1469, 1481 to 1499, 1511 to 1625	
Calibrated wavelengths (nm)	1310, 1490, 1550, 1577, 1625	
Power measurement range (dB)	15 to -45	
Power uncertainty <sup>a,b</sup> (dB)	0.5	
Auto-wavelength recognition and switching $^{\circ}$	Yes	
Tone detection <sup>d</sup>	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 ¼ 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, Spanish
Battery charging	< 2h 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 at brightness 50%, BLE: ON, AUTO: OFF)
Interfaces	Bluetooth 5.0 with BLE USB Type C
Storage capacity	1000 test results for local reading
Warranty <sup>e</sup>	3 years
Calibration interval	3 years
Temperature Storage 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) (PPM1-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

a. Typical, at 23 °C ±3 °C.

b. At calibrated wavelengths.

- c. With EXFO light sources.
- d. For the range -35 dBm to 10 dBm.
- e. Excluding connector wear.

#### LASER SAFETY





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
Connector adapter	
GP-1008	VFL adapter for 1.25 mm ferrule

#### **ORDERING INFORMATION**

PPM1-XX-XX Configurations D= Dual PON layer PRO-D = Pro configuration with dual PON layer Connectors 88 = SC/APC connector Example: PPM1-PRO-D-88

**EXFO headquarters** T +1 418 683-0211 Toll-free +1 800 663-3936 (USA and Canada)

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