

# 300

NETWORK TESTING

## POWER METER

### FPM-300



- Highly accurate unit offering 10 calibrated wavelengths and reference values
- Power autonomy of 300 hours
- Three-year warranty and recommended calibration interval, for dramatically reduced cost of ownership
- Ergonomic, eye-catching handheld package

The FPM-300 Power Meter is part of EXFO's new line of handheld units, which includes the FLS-300 Light Source and the FOT-300 Optical Loss Test Set.

#### **Auto-Wavelength Recognition**

The FLS-300 or FOT-300 units can transmit with a wavelength-identification digital encrypted protocol, enabling the FPM-300 Power Meter to automatically use the proper calibration parameters. This feature reduces the need for communication between the two technicians and decreases the potential for error.

#### **Distant Referencing**

Signal encrypting can also give the receiving end information on the power to be used as reference, helping ensure efficient referencing, even when the two units are far apart.

#### **No Offset Nulling**

Thanks to its unique design, the FPM-300 Power Meter reduces measurement time in typical measurement situations, as the need for an offset nulling is eliminated.

#### **FTTx Ready**

EXFO's FPM-300 allows for the testing of passive optical networks (PONs) at 1310 nm, 1490 nm and 1550 nm, the three wavelengths recommended by the ITU-T (G.983.3) for PONs.



**SPECIFICATIONS 1**

Model <sup>2</sup>	FPM-302	FPM-302X
<b>Power meter port</b>	<b>Ge</b>	<b>GeX</b>
Power range <sup>3</sup> (dBm)	10 to -60	26 to -50
Range displayed (dBm)	Down to -65	Down to -50
Number of calibrated wavelengths <sup>4</sup>	10	10
Power uncertainty <sup>5</sup>	± 5 % ± 1 nW	± 5 % ± 10 nW
Resolution (dB)	0.01 <sup>6</sup>	0.01 <sup>7</sup>
Automatic offset nulling <sup>8</sup>	Yes	Yes
Warmup time <sup>9</sup> (s)	0	0
Display units	dB/dBm/W	dB/dBm/W
Automatic wavelength recognition <sup>10</sup>	Yes	Yes
Screen refresh rate (Hz)	3	3
Tone detection (Hz)	270, 1 k, 2 k	270, 1 k, 2 k
Battery life (hours) (typical)	> 300	> 300
Warranty and recommended calibration interval (years)	3	3

**General Specifications**

Size (H x W x D)	18.5 cm x 10.0 cm x 5.5 cm	(7 <sup>1</sup> / <sub>4</sub> in x 4 in x 2 <sup>1</sup> / <sub>8</sub> in)
Weight	0.4 kg	(0.9 lb)
Temperature	operating: -10 °C to 50 °C storage: -40 °C to 70 °C	(14 °F to 122 °F) (-40 °F to 158 °F)
Relative humidity	0 % to 95 % non-condensing	

**Standard Accessories**

User guide, Certificate of Calibration, instrument stickers in six languages, connector adapter (FOA-XX), AC adapter, three AA batteries, wrist strap, alcohol cleaning pads.

**Notes**

1. Guaranteed unless otherwise specified.
2. All specifications valid at 1550 nm and 23 °C ± 1 °C, with an FC connector.
3. In CW mode; sensitivity defined as 6 x rms noise level.
4. Wavelengths: 830 nm, 850 nm, 980 nm, 1300 nm, 1310 nm, 1450 nm, 1490 nm, 1550 nm, 1590 nm and 1625 nm.
5. Traceable to NIST; FPM-302X: up to 20 dBm.
6. From 10 dBm to -50 dBm.
7. From 26 dBm to -35 dBm.
8. Power of > -40 dBm for FPM-302, and of > -25 dBm for FPM-302X.
9. For ± 0.05 dB and temperatures of > 18 °C.
10. At 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm; power of > -50 dBm for FPM-302, and of > -40 dBm (typical) for FPM-302X.

**ORDERING INFORMATION**

**FPM-30X-XX**

**Model**



FPM-302 = Ge detector  
FPM-302X = High-power Ge detector

Example: FPM-302X-FOA-22

**Connector Adapter**

- FOA-12 = Biconic
- FOA-14 = D4, D4/PC
- FOA-16 = SMA/905, SMA/906
- FOA-22 = FC (PC/SPC/UPC/APC), NEC-D3
- FOA-24 = Radial VFO/DF (straight/slant)
- FOA-28 = DIN 47256 (LSA); DIN 47256 (PC/APC)
- FOA-32 = ST (PC/SPC/UPC)
- FOA-34 = Mini-BNC
- FOA-40 = Diamond HMS-OHFS-3 (3.5 mm)
- FOA-42 = Radial PFO
- FOA-44 = Radial MFO
- FOA-48 = HP HFBR-4501-HFBR-4503
- FOA-52 = Biconic Bayonet
- FOA-54 = SC (PC/SPC/UPC/APC)
- FOA-68 = AT&T Rotary Splice
- FOA-76 = FSMA HMS-10/AG, HFS-10/AG
- FOA-78 = Radial EC
- FOA-84 = Diamond HMS-10, HFS-13
- FOA-96B = E-2000
- FOA-98 = LC
- FOA-99 = MU

Find out more about EXFO's extensive line of high-performance portable instruments by visiting our website at [www.exfo.com](http://www.exfo.com).

 <p><b>Rugged Handheld Solutions</b></p> <ul style="list-style-type: none"> <li>- OLTS</li> <li>- Power meter</li> <li>- Light source</li> <li>- Talk set</li> </ul>	 <p><b>Optical Fiber</b></p> <ul style="list-style-type: none"> <li>- OTDR</li> <li>- OLTS</li> <li>- ORL meter</li> <li>- Switch</li> </ul>	<p><b>DWDM Test Systems</b></p> <ul style="list-style-type: none"> <li>- OSA</li> <li>- PMD analyzer</li> <li>- Chromatic dispersion analyzer</li> <li>- Multiwavelength meter</li> </ul>	<p><b>Transport/Datacom</b></p> <ul style="list-style-type: none"> <li>- 10/100 and Gigabit Ethernet</li> <li>- SONET/SDH (DS0 to OC-192c)</li> <li>- SDH/PDH (64 kb/s to STM-64c)</li> <li>- SAN</li> </ul>

Corporate Headquarters > 400 Godin Avenue, Vanier (Quebec) G1M 2K2 CANADA | Tel.: 1 418 683-0211 | Fax: 1 418 683-2170 | [info@exfo.com](mailto:info@exfo.com)

Toll-free: 1 800 663-3936 (USA and Canada) | [www.exfo.com](http://www.exfo.com)

EXFO America	4275 Kellway Circle, Suite 122	Addison, TX 75001 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Le Dynasteur, 10/12 rue Andras Beck	92366 Meudon la Forêt Cedex FRANCE	Tel.: +33.1.40.83.85.85	Fax: +33.1.40.83.04.42
EXFO Asia-Pacific	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Beijing 100044 P. R. CHINA	Tel.: +86 (10) 6849 2738	Fax: +86 (10) 6849 2662

EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. 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.

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 the EXFO website at <http://www.exfo.com/specs>

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