

# 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 1/4 in x 4 in x 2 1/8 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 = Radiall 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 = Radiall PFO
- FOA-44 = Radiall 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 = Radiall 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).



**Rugged Handheld Solutions**

- OLTS
- Power meter
- Light source
- Talk set



**Optical Fiber**

- OTDR
- OLTS
- ORL meter
- Switch

**DWDM Test Systems**

- OSA
- PMD analyzer
- Chromatic dispersion analyzer
- Multiwavelength meter

**Transport/Datacom**

- 10/100 and Gigabit Ethernet
- SONET/SDH (DS0 to OC-192c)
- SDH/PDH (64 kb/s to STM-64c)
- SAN

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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.