

# FPM-300

NETWORK TESTING—OPTICAL



- 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.

## 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 <sup>a</sup>

Model <sup>b</sup>	FPM-302	FPM-302X
<b>Power meter port</b>	<b>Ge</b>	<b>GeX</b>
Power range <sup>c</sup> (dBm)	10 to -60	26 to -50
Range displayed (dBm)	Down to -65	Down to -50
Number of calibrated wavelengths <sup>d</sup>	10	10
Power uncertainty <sup>e</sup>	± 5 % ± 1 nW	± 5 % ± 10 nW
Resolution (dB)	0.01 <sup>f</sup>	0.01 <sup>g</sup>
Automatic offset nulling <sup>h</sup>	Yes	Yes
Warmup time <sup>i</sup> (s)	0	0
Display units	dB/dBm/W	dB/dBm/W
Automatic wavelength recognition <sup>j</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

NOTES

- a. Guaranteed unless otherwise specified.
- b. All specifications valid at 1550 nm and 23 °C ± 1 °C, with an FC connector.
- c. In CW mode; sensitivity defined as 6 x rms noise level.
- d. Wavelengths: 830 nm, 850 nm, 980 nm, 1300 nm, 1310 nm, 1450 nm, 1490 nm, 1550 nm, 1590 nm and 1625 nm.
- e. Traceable to NIST; FPM-302X: up to 20 dBm.
- f. From 10 dBm to -50 dBm.
- g. From 26 dBm to -35 dBm.
- h. Power of > -40 dBm for FPM-302, and of > -25 dBm for FPM-302X.
- i. For ± 0.05 dB and temperatures of > 18 °C.
- j. 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.

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.

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/U/PC/APC), NEC-D3  
FOA-24 = Radial VFO/DF (straight/slant)  
FOA-28 = DIN 47256 (LSA): DIN 47256 (PC/APC)  
FOA-32 = ST (PC/SPC/U/PC)

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/U/PC/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

**Rugged Handheld Solutions**

**OPTICAL**

- OLTs
- Power meters
- Light sources
- Talk sets

**COPPER ACCESS**

- ADSL/ADSL2+, SHDSL, VDSL test sets
- VoIP and IPTV test sets
- Ethernet test sets
- POTS test sets

**Platform-Based Solutions**

**OPTICAL FIBER**

- OTDRs
- OLTs
- ORL meters
- Variable attenuators

**DWDM TEST SYSTEMS**

- OSAs
- PMD analyzers
- Chromatic dispersion analyzer

**TRANSPORT AND DATACOM**

- Next Generation SONET/SDH and OTN testers
- SONET/DSn (DS0 to OC-192) testers
- SDH/PDH (64 kb/s to STM-64) testers
- T1/T3, E1 testers
- 10/100M and Gigabit Ethernet testers
- Fibre Channel testers
- 10 Gigabit Ethernet testers

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).

EXFO Corporate Headquarters > 400 Godin Avenue, Quebec City (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)

<b>EXFO Montreal</b>	2650 Marie-Curie	St-Laurent (Quebec) H4S 2C3 CANADA	Tel.: 1 514 856-2222	Fax: 1 514 856-2232
<b>EXFO Toronto</b>	160 Drumlin Circle	Concord (Ontario) L4K 3E5 CANADA	Tel.: 1 905 738-3741	Fax: 1 905 738-3712
<b>EXFO America</b>	3701 Plano Parkway, Suite 160	Plano, TX 75075 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
<b>EXFO Europe</b>	Omega Enterprise Park, Electron Way	Chandlers Ford, Hampshire S053 4SE ENGLAND	Tel.: +44 2380 246810	Fax: +44 2380 246801
<b>EXFO Asia</b>	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
<b>EXFO China</b>	No.88 Fuhua, First Road Central Tower, Room 801, Futian District Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Shenzhen 518048, CHINA  Beijing 100044 P.R. CHINA	Tel.: +86 (755) 8203 2300  Tel.: +86 (10) 6849 2738	Fax: +86 (755) 8203 2306  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. All of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit [www.EXFO.com/recycle](http://www.EXFO.com/recycle). 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.