

# EXFO FPM-600 Specs Provided by www.AAATesters.com



- High accuracy, wide dynamic range and high power measurement capability (up to 26 dBm)
- Memory capacity of 1000 data items; enables data transfer to a PC via USB connection
- User-configurable pass/fail thresholds with LED indicator
- Over 40 calibrated wavelengths, and Hold Min/Max Power function
- Rechargeable batteries
- Error-free, time-saving test features: automatic wavelength switching, no offset nulling
- Low cost of ownership: three-year warranty and recommended calibration interval

Part of EXFO's 600 handheld series, which includes the FOT-600 Optical Loss Test Set, no the FLS-600 Light Source, the highly versatile FPM-600 Power Meter is designed for link and system qualification. Its green/red LED indicator gives you a pass or fail test verdict according to the thresholds you have defined, for faster and easier field operation.

Thanks to its memory capacity of 1000 data items and its reporting software, the FPM-600 facilitates data management and enables data transfer to a PC via USB connection. Build a complete test report, including certification of the link with pass/fail information. Customize this report to your own needs.



Next-Generation Network Assessment





# Suited for All Network Types

The FPM-600 is a very powerful tool for the most demanding applications such as high-speed DWDM or CWDM network qualification. With more than 40 calibrated wavelengths, including all CWDM wavelengths, it allows for user-defined measurement wavelengths, using the interpolation method between calibrated points. Use its Hold Min/Max Power function to measure system power burst or fluctuations.

NEW

# Error-free, Time Saving Test Features

When used in combination with a FLS-600 Light Source in Auto-Switching mode, the power meter automatically recognizes the wavelength in use and switches to the proper calibration parameter. At the press of a button, you can store results for all wavelengths at once.

## FTTx Ready

EXFO's FPM-600 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.at once.

## Rugged and Versatile

Like all EXFO portable instruments, the FPM-600 is built for top ruggedness and versatility, perfect for the harshest test conditions. It features a keypad/LCD backlight, for easy operation in darker environments. What's more, it is powered by a rechargeable battery.

# Reporting Software

This new software tool enables you to produce professional-looking reports with comprehensive documentation. It also offers these functionalities:

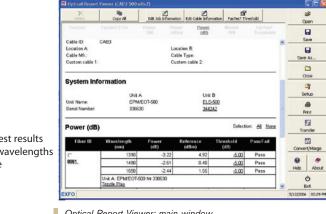
- Two test files can be merged into one test report (see note no. 3)
- Pass/fail thresholds that are active during download are automatically activated and displayed in the Report Viewer

information

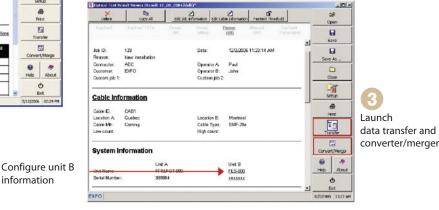
One-touch storage of results for all wavelengths at once (see note no. 1)

NEW

- Unit B configuration information can be input and documented (see note no. 2)
- Data transfer can be launched from the Report Viewer window (see note no. 3)
- A pass/fail threshold can be set for an individual fiber or wavelength (see note no. 4)



Optical Report Viewer: main window



Optical Report Viewer: main window







for all wavelengths at once

| Delete    | B Copy All   | Edit Job Inform | ation Edit Cable Inform | ation FasTesT Th  |                       |         | Circle Ci | -        |
|-----------|--|-----------------|-------------------------|-------------------|-----------------------|---------|--|----------|
| FasTesT   |  |                 | ilBm) <u>(dB)</u>       | Manual<br>ORL     | FasTesT<br>Thresholds | ,       | 6  |          |
| Power (dB | )  |                 |                         | Selecti           | ion: <u>All Non</u> i | 1       | •  |          |
| Fiber ID  | Wavelength<br>(nm)                                     | Power<br>(dB)   | Reference<br>(dBm)      | Threshold<br>(dB) | Pass/Fail             |         | Save   | As       |
| 4         | 850  | 1.3             | -53.18                  | -30.00            | Pass                  |         | _  | _        |
| 0014      | Unit A: FPM/FOT-8<br>< <edit>&gt;</edit>               | 00 N≥ 339884    |                         |                   |                       | ]       | 0  | ise<br>A |
| R         | 860  | 19.23           | -53.18                  | <u>-30.00</u>     | Pass                  | -       | Set  |          |
| 0015      | Unit A: FPM/FOT-6<br>< <edit>&gt;</edit>               | 00 N≥ 339884    |                         |                   |                       |         | e  | 5        |
| R         | 850  | 12.12           | -53.18                  | <u>-30.00</u>     | Pass                  | 1 💷     | Pri  | nt       |
| 0016      | Unit A: FPM/FOT-600 No 339884<br>< <edi>&gt;</edi>     |                 |                         |                   |                       |         | Tran   |          |
| M         | 860  | 7.9             | -53.18                  | 30.00             | Pass                  |         |  |          |
| 0017      | Unit A: FPM/FOT-600 № 339884<br>< <edit>&gt;</edit>    |                 |                         |                   |                       | Convert | n<br>t/Merg  |          |
| <b>v</b>  | 850  | 5.7             | -53.18                  | -30.00            | Pass                  |         | 0  | .4       |
| 0018      | Unit A: FPM/F0T-600 Ne 339864<br>< <edi>&gt;&gt;</edi> |                 |                         |                   |                       | Help    | Abo  |          |
| R         | 850  | 5.4             | -53.18                  | -30.00            | Pass                  |         | d  | 5        |
| 0019      | Unit A: FPM/FOT-600 Nz 339884                          |                 |                         |                   | -1                    | E       | át   |          |
| (FO       |  |                 |                         |                   |                       |         | 12/2/2005  | 11.27    |

Select all or no results in a specific section

Apply a specific threshold to each fiber and/or wavelength and get a complete pass/fail status (not available with FasTesT results)

Optical Report Viewer: main window

#### SPECIFICATIONS<sup>a</sup>

| Model                             | FPM-602                                      | FPM-602X                  |
|-----------------------------------|--|---------------------------|
| Detector                          | Ge   | GeX                       |
| Power range (dBm) <sup>b</sup>    | 10 to -70                                    | 26 to -55                 |
| Wavelength range (nm)             | 800 to 1650                                  | 800 to                    |
| 1650                              |  |                           |
| Calibrated wavelengths (nm)       | 800, 820, 830, 840, 850, 860, 870, 880, 910, | Same calibrated           |
|                                   | 980, 1270, 1280, 1290, 1300, 1310, 1320,     | wavelengths as the        |
|                                   | 1330, 1340, 1350, 1370, 1390, 1410, 1430,    | FPM-602, plus 1060        |
|                                   | 1450, 1460, 1470, 1480, 1490, 1500, 1510,    |                           |
|                                   | 1520, 1530, 1540, 1550, 1560, 1570, 1580,    |                           |
|                                   | 1590, 1600, 1610, 1620, 1630, 1640, 1650     |                           |
| Power uncertainty c               | ±5 % ± 0.1 nW                                | ±5 % ± 3 nW               |
| Resolution (dB)                   | ±0.01 (10 dBm to -60 dBm)                    | ±0.01 (26 dBm to -45 dBm) |
| Automatic offset nulling d        | Yes  | Yes                       |
| Display units                     | dB, dBm, W                                   | dB, dBm, W                |
| Tone detection                    | 270 Hz, 1 kHz and 2 kHz                      | 270 Hz, 1 kHz and 2 kHz   |
| Auto-switching <sup>e</sup>       | Yes  | Yes                       |
| Warm-up period (min) <sup>f</sup> | 0  | 0                         |
| Data storage (items)              | more than 1000                               | more than 1000            |
| Battery life (hours) (typical)    | 72   | 72                        |
| Warranty and recommended          |  |                           |
| recalibration interval (years)    | 3  | 3                         |
|                                   |  |                           |

# GENERAL SPECIFICATIONS

| Size (H x W x D)  |           | 190 mm x 100 mm x 62 mm    | (7 <sup>1</sup> / <sub>2</sub> in x 4 in x 2 <sup>1</sup> / <sub>2</sub> in) |
|-------------------|-----------|----------------------------|--|
| Weight            |           | 0.48 kg                    | (1.1 lb)   |
| Temperature       | operating | −10 °C to 50 °C            | (14 °F to 122 °F)  |
|                   | storage   | -40 °C to 70 °C            | (-40 °F to 158 °F)   |
| Relative humidity |           | 0 % to 95 % non-condensing |  |

#### STANDARD ACCESSORIES

User guide, Certificate of Calibration, instrument stickers in six languages, AC adapter/charger, lithium ion battery, shoulder strap, carrying case, USB cable.

#### NOTES

- a. Guaranteed unless otherwise specified. All specifications valid at 1550 nm and 23  $^{\circ}C$   $\pm$  1  $^{\circ}C,$  with an FC connector.
- b. In CW mode; sensitivity defined as 6 x rms noise level.
  c. For calibrated wavelengths. Valid up to 20 dBm for FPM-602X.
- d. For power >-40 dBm for FPM-602, and >-25 dBm for FPM-602X.
- e. At 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1650 nm; for power > –50 dBm for FPM-602 and > –40 dBm (typical) for FPM-602X.
- f. For a variation of ≤ 0.06 dB at power levels ≥ −40 dBm for FPM-602 and ≥ −25 dBm for FPM-602X.

### **ORDERING INFORMATION**

| FPM-60X-XX                        |  |                                    |  |  |  |
|-----------------------------------|--|------------------------------------|--|--|--|
| Model                             | Connector Adapter                            |                                    |  |  |  |
| FPM-602 = Ge detector             | FOA-12 = Biconic                             | FOA-54 = SC (PC/SPC/UPC/APC)       |  |  |  |
| FPM-602X = High-power Ge detector | FOA-14 = D4, D4/PC                           | FOA-76 = FSMA HMS-10/AG, HFS-10/AG |  |  |  |
|                                   | FOA-16 = SMA/905, SMA/906                    | FOA-78 = Radiall EC                |  |  |  |
| Example: FPM-602X-FOA-22          | FOA-22 = FC (PC/SPC/UPC/APC), NEC-D3         | FOA-84 = Diamond HMS-10, HFS-13    |  |  |  |
|                                   | FOA-28 = DIN 47256 (LSA): DIN 47256 (PC/APC) | FOA-96B = E-2000                   |  |  |  |
|                                   | FOA-32 = ST (PC/SPC/UPC)                     | FOA-98 = LC                        |  |  |  |
|                                   | FOA-40 = Diamond HMS-0HFS-3 (3.5 mm)         | FOA-99 = MU                        |  |  |  |

#### 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

|                        |   |  | Toll-free: +1 800 663-3936 (US | Toll-free: +1 800 663-3936 (USA and Canada) www.EXFO.com |  |  |
|------------------------|---|--|--------------------------------|--|--|--|
| EXFO America           | 3701 Plano Parkway, Suite 160   | Plano, TX 75075 USA                        | Tel.: +1 800 663-3936          | Fax: +1 972 836-0164                                     |  |  |
| EXFO Asia              | 100 Beach Road, #22-01/03 Shaw Tower  | SINGAPORE 189702                           | Tel.: +65 6333 8241            | Fax: +65 6333 8242                                       |  |  |
| EXFO China             | 36 North, 3 <sup>rd</sup> Ring Road East, Dongcheng District<br>Room 1207, Tower C, Global Trade Center | Beijing 100013 P. R. CHINA                 | Tel.: + 86 10 5825 7755        | Fax: +86 10 5825 7722                                    |  |  |
| EXFO Europe            | Omega Enterprise Park, Electron Way   | Chandlers Ford, Hampshire S053 4SE ENGLAND | Tel.: +44 2380 246810          | Fax: +44 2380 246801                                     |  |  |
| EXFO NetHawk           | Elektroniikkatie 2  | FI-90590 Oulu, FINLAND                     | Tel.: +358 (0)403 010 300      | Fax: +358 (0)8 564 5203                                  |  |  |
| EXFO Service Assurance | 270 Billerica Road  | Chelmsford, MA 01824 USA                   | Tel.: +1 978 367-5600          | Fax: +1 978 367-5700                                     |  |  |

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. 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 the EXFO website at http://www.EXFO.com/specs

CE Printed in Canada 11/04

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

