

# FPM-600

NETWORK TESTING—OPTICAL



- 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, 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.

## 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.

## 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.

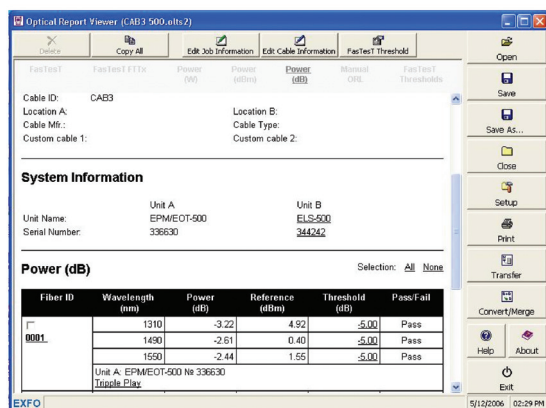
## Reporting Software



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

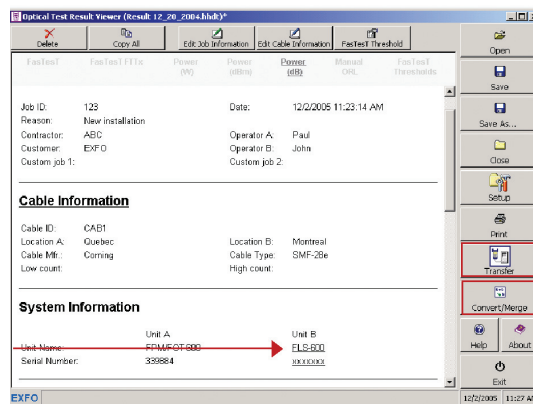
- Two test files can be merged into one test report (see note no. 3)
- Pass/fail thresholds that are active during download are automatically activated and displayed in the Report Viewer
- One-touch storage of results for all wavelengths at once (see note no. 1)
- Unit B configuration information can 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)

**1**  
Store test results for all wavelengths at once



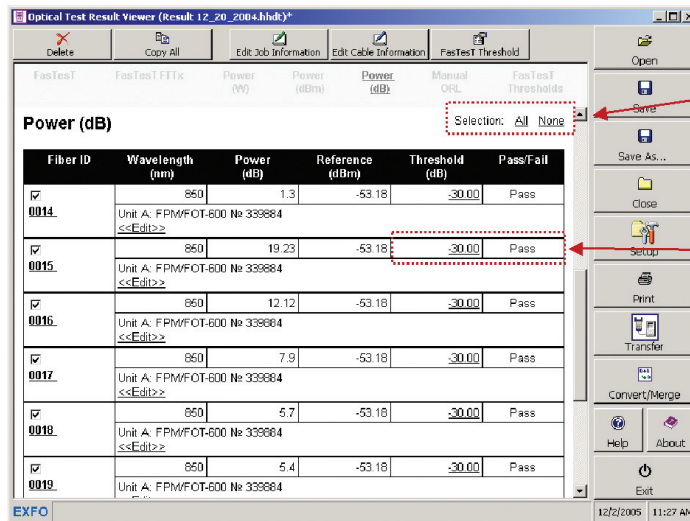
Optical Report Viewer: main window

**2** Configure unit B information



**3**  
Launch data transfer and converter/merger

Optical Report Viewer: main window



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)

4

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, 980, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1370, 1390, 1410, 1430, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650	Same calibrated wavelengths as the FPM-602, plus 1060
Power uncertainty <sup>c</sup>	±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 <sup>d</sup>	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 1/2 in x 4 in x 2 1/2 in)
Weight	0.48 kg	(1.1 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, AC adapter/charger, lithium ion battery, shoulder strap, hard carrying case, USB cable.

### NOTES

- Guaranteed unless otherwise specified. All specifications valid at 1550 nm and 23 °C ± 1 °C, with an FC connector.
- In CW mode; sensitivity defined as 6 x rms noise level.
- For calibrated wavelengths. Valid up to 20 dBm for FPM-602X.
- For power > -40 dBm for FPM-602, and > -25 dBm for FPM-602X.
- 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.
- 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


FPM-602 = Ge detector  
FPM-602X = High-power Ge detector

Example: FPM-602X-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-28 = DIN 47256 (LSA): DIN 47256 (PC/APC)  
FOA-32 = ST (PC/SPC/UPC)  
FOA-40 = Diamond HMS-0HFS-3 (3.5 mm)

FOA-54 = SC (PC/SPC/UPC/APC)  
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**

<b>OPTICAL</b>	<b>COPPER ACCESS</b>
<ul style="list-style-type: none"> <li>— OTDRs</li> <li>— OLTSs</li> <li>— Power meters</li> <li>— Light sources</li> <li>— Talk sets</li> </ul>	<ul style="list-style-type: none"> <li>— ADSL/ADSL2+, SHDSL, VDSL test sets</li> <li>— VoIP and IPTV test sets</li> <li>— Ethernet test sets</li> <li>— POTS test sets</li> </ul>



**Platform-Based Solutions**

<b>OPTICAL FIBER</b>	<b>DWDM TEST SYSTEMS</b>	<b>TRANSPORT AND DATACOM</b>
<ul style="list-style-type: none"> <li>— OTDRs</li> <li>— OLTSs</li> <li>— ORL meters</li> <li>— Variable attenuators</li> </ul>	<ul style="list-style-type: none"> <li>— OSAs</li> <li>— PMD analyzers</li> <li>— Chromatic dispersion analyzer</li> </ul>	<ul style="list-style-type: none"> <li>— Next-generation SONET/SDH and OTN testers</li> <li>— SONET/DSn (DS0 to OC-192) testers</li> <li>— SDH/PDH (64 kbit/s to STM-64) testers</li> <li>— T1/T3, E1 testers</li> <li>— 10/100 Mbit/s and Gigabit Ethernet testers</li> <li>— Fibre Channel testers</li> <li>— 10 Gigabit Ethernet testers</li> </ul>

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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. 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](http://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>  
In case of discrepancy, the Web version takes precedence over any printed literature.