# fpm-600

### **POWER METER**







the highly versatile fpm-600 power meter is designed for link and system qualification.

# key feAtureS

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





SpeC SHeet

## 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.

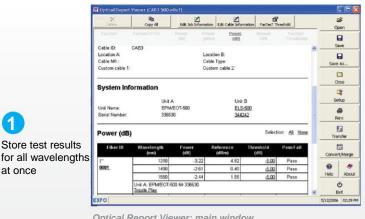
## Rugged and Versatile

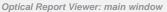
Like all EXFO portable instruments, the FPM-600 is built for top ruggedness and versatility, perfect for the harshest test conditions. It features a keypad/LCD backlight, for easy operation in darker environments. What's more, it is powered by a rechargeable battery.

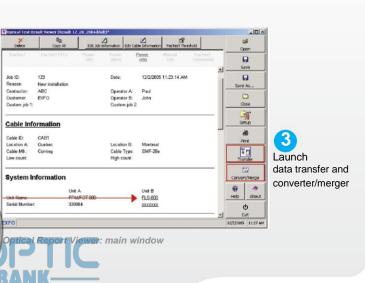
## Reporting Software

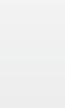
This new software tool enables you to produce professional-looking reports with comprehensive documentation. It also offers these functionalities:

- > 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)







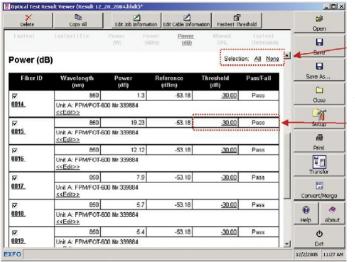


at once

Store test results







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                                          | a                                                                                                                                                                                                                                                            |                                                       |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Model                                                   | FPM-602                                                                                                                                                                                                                                                      | FPM-602X                                              |
| Detector                                                | Ge                                                                                                                                                                                                                                                           | GeX                                                   |
| Power range (dBm) <sub>b</sub>                          | 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 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 <sub>e</sub>                             | Yes                                                                                                                                                                                                                                                          | Yes                                                   |
| Warm-up period (min)                                    | 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                                                     |

#### 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  $\delta$  0.06 dB at power levels  $\epsilon$  –40 dBm for FPM-602 and  $\epsilon$  –25 dBm for FPM-602X.





### STANDARD ACCESSORIES

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

### **GENERAL SPECIFICATIONS**

Size (H x W x D) 190 mm x 100 mm x 55 mm (7 1/2 in x 4 in x 2 1/8 in)

Weight (with battery) 0.48 kg (1.1 lb)

Temperature operating -10 °C to 50 °C (14 °F to 122 °F)

-40 °C to 70 °C (-40 °F to 158 °F) storage

Relative humidity 0 % to 95 % noncondensing

#### LASER SAFETY



#### ORDERING INFORMATION

#### FPM-60X-XX

Model

FPM-602 = Ge detector

Example: FPM-602X-FOA-22

FPM-602X = High-power Ge detector

Connector adapter

FOA-12 = Biconic

FOA-14 = D4, D4: PC FOA-16 = SMA/905, SMA-906

FOA-22 = FC/PC, FC/SPC, FC/UPC, FC/APC, NEC-D3 FOA-28 = DIN 47256 (LSA), DIN 47256 (PC/APC)

FOA-32 = ST/PC, ST/SPC, ST/UPC

FOA-40 = Diamond HMS-0HFS-3 (3.5 mm)

FOA-54 = SC/PC, SC/SPC, SC/UPC, SC/APC

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

EXFO Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | www.EXFO.com

EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to www.EXFO.com/contact.

EXFO is certified ISO 9001 and attests to the quality of these products. 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

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

Keep this document for future reference.



