

# 600

## OPTICAL LOSS TEST SET

### FOT-600

NETWORK TESTING



- Combines a power meter and a light source; choose your configuration—up to three singlemode wavelengths (1310, 1550, and 1490 or 1625 nm), or two multimode wavelengths (850 and 1300 nm)
- Memory capacity of 1000 data items; enables data transfer to a PC via USB connection
- User-configurable pass/fail thresholds with LED indicator
- Error-free testing: automatic wavelength recognition, and no offset nulling required
- Visual fault locator (VFL) option for quick and easy troubleshooting
- Low cost of ownership: three-year warranty and recommended calibration interval

Part of EXFO's 600 handheld series, which includes the FPM-600 Power Meter and the FLS-600 Light Source, the FOT-600 Optical Loss Test Set is the ideal tool for network-link 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 converter software, the FOT-600 facilitates data management and enables data transfer to a PC via USB connection.

### Error-Free Test Features in a Highly Versatile Unit

When paired up with another 600 series unit, a 300 series unit, the FOT-930 MaxTester or the FTB-3930 Multitest Module, the FOT-600 OLTS automatically recognizes the wavelength in use and switches to the proper calibration parameters, providing for error-free testing.

Thanks to its unique design, the FOT-600 Optical Loss Test Set reduces risk of error and measurement time in typical measurement situations, as the need for an offset nulling is eliminated.

In addition to network-link qualification features, the highly accurate FOT-600 offers 40 user-definable calibrated wavelengths. What's more, it lets you measure power fluctuations with its Hold Min/Max Power function.

### FTTx Ready

EXFO's FOT-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.

### Rugged and Versatile

Like all EXFO portable instruments, the FOT-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.



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Telecommunications Test and Measurement

**EXFO**  
EXPERTISE REACHING OUT

# Optical Loss Test Set

## SPECIFICATIONS<sup>1</sup>

Model	FOT-602	FOT-602X	General Specifications		
<b>Detector<sup>2</sup></b>	<b>Ge</b>	<b>GeX</b>	Size (H x W x D)	19.0 cm x 10.0 cm x 6.2 cm	(7 1/2 in x 4 in x 2 1/2 in)
Power range (dBm) <sup>3</sup>	10 to -70	26 to -55	Weight	0.48 kg	(1.1 lb)
Wavelength range (nm)	800 to 1650	800 to 1650	Temperature operating	-10 °C to 50 °C	(14 °F to 122 °F)
Number of calibrated wavelengths	40	40	Temperature storage	-40 °C to 70 °C	(-40 °F to 158 °F)
Power uncertainty (%) <sup>4</sup>	± 5 ± 1 nW	± 5 ± 10 nW	Relative humidity	0 % to 95 % non-condensing	
Automatic offset nulling <sup>5</sup>	Yes	Yes	<b>Standard Accessories</b>		
Display units	dB, dBm, W	dB, dBm, W	User guide, Certificate of Calibration, instrument stickers in six languages, AC adapter/charger, connector adapter (FOA-XX), lithium ion battery, shoulder strap, soft carrying, USB cable		
Automatic wavelength recognition <sup>6</sup>	Yes	Yes			
Warm-up period (min) <sup>7</sup>	0	0			
Data storage (items)	up to 1000	up to 1000			
Warranty and recommended calibration period (years)	3	3			

Model <sup>8</sup>	12D	23BL	234BL	235BL	01-VCL
Central wavelength (nm)	850 ± 25 1300 +50/-10	1310 ± 20 1550 ± 20	1310 ± 20 1550 ± 20 1625 ± 15	1310 ± 20 1490 ± 10 1550 ± 20	850 ± 20
Spectral width (nm) <sup>9</sup>	50/135	≤ 5	≤ 5	≤ 5	≤ 1
Output power (dBm)	≥ -18 (62.5/125 μm)	≥ 1	≥ 1 ≥ -3 ≥ -5	≥ 1 ≥ -4.5 ≥ -3	≥ -3 (50/125 μm)
Tone generation	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz
Automatic wavelength recognition	Yes	Yes	Yes	Yes	Yes
Warranty and recommended calibration period (years)	3	3	3	3	3

VFL <sup>10</sup>	
Emitter type	Laser
Wavelength (nm)	650
Output power (dBm)	3*

**Safety**  
21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001: CLASS 1M LASER PRODUCT  
CLASS 3R LASER PRODUCT FOR VFL OPTION

## ORDERING INFORMATION

### FOT-60X-XX-XX-XX

#### Model

FOT-602-01-VCL = Ge Detector, 850 nm, VCSEL  
 FOT-602-12D = Ge Detector, 850/1300 nm, LED Fiber D  
 FOT-602-23BL = Ge Detector, 1310/1550 nm LSR source 9/125 μm  
 FOT-602-234BL = Ge Detector, 1310/1550/1625 nm LSR source 9/125 μm  
 FOT-602-235BL = Ge Detector, 1310/1490/1550 nm LSR source 9/125 μm  
 FOT-602X-23BL = High power Ge Detector, 1310/1550 nm LSR source 9/125 μm  
 FOT-602X-234BL = High power Ge Detector, 1310/1550/1625 nm LSR source 9/125 μm  
 FOT-602X-235BL = High power Ge Detector, 1310/1490/1550 nm LSR source 9/125 μm

#### 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 = Radial 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 = Radial PFO  
 FOA-44 = Radial MFO

FOA-48 = HP HFBR-4501-HFBR-4503  
 FOA-52 = Biconic Bayonet  
 FOA-54 = CS (PC/SPC/UPC/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

Example: FOT-602X-234BL-FOA-22-EI-EUI-89-VFL

#### Connector

EI-EUI-28 = UPC/DIN 47256  
 EI-EUI-76 = UPC/HMS-10/AG  
 EI-EUI-89 = UPC/FC narrow key  
 EI-EUI-90 = UPC/ST  
 EI-EUI-91 = UPC/SC  
 EI-EUI-95 = UPC/E-2000  
 EA-EUI-28 = APC/DIN 47256<sup>1</sup>  
 EA-EUI-89 = APC/FC narrow key<sup>1</sup>  
 EA-EUI-91 = APC/SC<sup>1</sup>  
 EA-EUI-95 = APC/E-2000<sup>1</sup>

#### Visual Fault Locator

00 = Without visual fault locator  
 VFL = With visual fault locator  
 (universal 2.5 mm connector)

#### Note

1. Singlemode only.

#### 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 calibration wavelengths. Valid up to 20 dBm for FOT-602X.
- For power > -40 dBm for FOT-602, and > -25 dBm for FOT-602X.
- At 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm; for power > -50 dBm for FOT-602, and > -40 dBm (typical) for FOT-602X.
- For a variation of ≤ 0.06 dB at 23 °C ± 1 °C; at power levels ≥ -40 dBm for FOT-602 and ≥ -25 dBm for FOT-602X.
- All specifications valid at 23 °C ± 1 °C, with an FC connector.
- rms for FP lasers and VCSEL; and -3 dB width for LEDs (typical values for LEDs and VCSEL).
- Typical values in 62.5/125 μm fiber.

Corporate Headquarters > 400 Godin Avenue, Vanier (Quebec) G1M 2K2 CANADA | Tel.: 1 418 683-0211 | Fax: 1 418 683-2170 | info@exfo.com

Toll-free: 1 800 663-3936 (USA and Canada) | www.exfo.com

Region	Address	Country	Tel.	Fax
EXFO America	4275 Kellway Circle, Suite 122	Addison, TX 75001 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Le Dynasteur, 10/12 rue Andras Beck	92366 Meudon la Forêt Cedex FRANCE	Tel.: +33.1.40.83.85.85	Fax: +33.1.40.83.04.42
EXFO Asia-Pacific	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Beijing 100044 P. R. CHINA	Tel.: +86 (10) 6849 2738	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. 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.