

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

SPECIFICATIONS¹

Model	FOT-602	FOT-602X
Detector	Ge	GeX
Power range (dBm) ²	10 to -70	26 to -55
Wavelength range (nm)	800 to 1650	800 to 1650
Number of calibrated wavelengths	40	40
Power uncertainty ³	± 5 % ± 0.1 nW	± 5 % ± 3 nW
Resolution (dB)	± 0.01 (10 to -60)	± 0.01 (26 to -45)
Automatic offset nulling ⁴	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
Automatic wavelength recognition ⁵	Yes	Yes
Warm-up period (min) ⁶	0	0
Data storage (items)	more than 1000	more than 1000
Battery life (hours) (typical)	72	72
Warranty and recommended calibration period (years)	3	3

General Specifications

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)
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, connector adapter (FOA-XX), lithium ion battery, shoulder strap, hard carrying case, USB cable.

Model	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/+10
Spectral width (nm) ⁷	50/135	≤ 5	≤ 5	≤ 5	≤ 1
Output power (dBm)	≥ -18 (62.5/125 μm) ≥ -18 (62.5/125 μm)	≥ 1	≥ 1 ≥ -3 ≥ -5	≥ 1 ≥ -4.5 ≥ -3	≥ -3 (50/125 μm)
Power Stability (dB) ⁸	15 min 8 hr	± 0.05 ± 0.1	± 0.03 ± 0.1	± 0.03 ± 0.1	± 0.1 ± 0.25
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
Battery life (hours) (typical in Auto mode)	50	50	50	50	60
Warranty and recommended calibration period (years)	3	3	3	3	3
VFL⁹					
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 50/125 μm
 FOT-602-12D = Ge detector, 850/1300 nm, LED source 62.5/125 μm
 FOT-602-23BL = Ge detector, 1310/1550 nm laser source 9/125 μm
 FOT-602-234BL = Ge detector, 1310/1550/1625 nm laser source 9/125 μm
 FOT-602-235BL = Ge detector, 1310/1490/1550 nm laser source 9/125 μm
 FOT-602X-23BL = High-power Ge detector, 1310/1550 nm laser source 9/125 μm
 FOT-602X-234BL = High-power Ge detector, 1310/1550/1625 nm laser source 9/125 μm
 FOT-602X-235BL = High-power Ge detector, 1310/1490/1550 nm laser 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-28 = DIN 47256 (LSA); DIN 47256 (PC/APC)
 FOA-32 = ST (PC/SPC/UPC)
 FOA-40 = Diamond HMS-OHFS-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

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

Connector*

EA-EUI-28 = APC/DIN 47256'
 EA-EUI-89 = APC/FC narrow key'
 EA-EUI-91 = APC/SC'
 EA-EUI-95 = APC/E-2000'
 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

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 23 °C ± 1 °C, with an FC connector and at 1550 nm for detector.
- 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.
- rms for FP lasers and VCSEL; and -3 dB width for LEDs (typical values for LEDs and VCSEL).
- After a 15-minute warm-up period, and using an APC connector on the power meter (except for multimode sources, for which a PC connector is used). Expressed as ± half the difference between the maximum and minimum values measured during the period. Typical values for VCL model.
- Typical values in 62.5/125 μm fiber.

* EXFO Universal Interface is protected by US patent 6,612,750.

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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. 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.