

# 600

NETWORK TESTING

## LIGHT SOURCE

### FLS-600



- Up to three singlemode wavelengths (1310, 1550, and 1490 or 1625 nm) on a single port, or four wavelengths (850/1300 nm and 1310/1550 nm) on two ports
- Rechargeable batteries
- Visual fault locator (VFL) option for quick and easy troubleshooting
- Three-year warranty and recommended calibration interval, for low cost of ownership
- Ergonomic, eye-catching handheld package



Part of EXFO's 600 handheld series, which includes the FPM-600 Power Meter and the FOT-600 Optical Loss Test Set, the FLS-600 Light Source is designed for first-class versatility. Choose among laser, LED and VCSEL models, as well as various wavelength options. What's more, you can save time by building a list of your "favorite" wavelengths and only sweeping through these wavelengths when testing.

### **Error-Free, Time-Saving Test Features: Automatic Wavelength Recognition and Distant Referencing**

The FLS-600 transmits with a wavelength-identification digital encrypted protocol, so that any compatible unit—another 600 series unit, a 300 series unit, the FOT-930 MaxTester or the FTB-3930 Multitest Module—can automatically recognize the wavelength in use and switch to the proper calibration parameters, providing for error-free testing.

Signal encrypting can also give the receiving end information on the power to be used as reference, helping ensure efficient referencing, even when the two units are far apart.

### **FTTx Ready**

EXFO's FLS-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 FLS-600 is built for top ruggedness, perfect for the harshest test conditions. It also features a keypad/LCD backlight, for easy operation in darker environments.



# Light Source

## SPECIFICATIONS<sup>1</sup>

Model <sup>2</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 <sup>3</sup> (nm)	50/135	≤ 5	≤ 5	≤ 5	≤ 1
Output power (dBm)	≥ -18/≥ -18 (62.5/125 μm)	≥ 1/≥ 1	≥ 1/≥ -3/≥ -5	≥ 1/≥ -4.5/≥ -3	≥ -3 (50/125 μm)
Automatic wavelength recognition	Yes	Yes	Yes	Yes	Yes
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
Warranty and recommended calibration interval (years)	3	3	3	3	3

### VFL<sup>4</sup>

Emitter type	Laser
Wavelength (nm)	650
Output power (dBm)	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 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, soft carrying case.

### 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

### Notes

1. Guaranteed unless otherwise specified.
2. All specifications valid at 23 °C ± 1 °C, with an FC connector.
3. rms for FP lasers and VCSEL; and -3 dB width for LEDs (typical values for LEDs).
4. Typical values in 62.5/125 μm fiber.

## ORDERING INFORMATION

### FLS-600-XX-XX-XX

#### Model

FLS-600-01-VCL = 850 nm, VCSEL  
 FLS-600-12D = 850/1300 nm LED Fiber D  
 FLS-600-23BL = 1310/1550 nm LSR, 9/125 μm  
 FLS-600-234BL = 1310/1550/1625 nm LSR, 9/125 μm  
 FLS-600-235BL = 1310/1490/1550 nm LSR, 9/125 μm  
 FLS-600-12D-23BL = 850/1300 nm LED Fiber D, 1310/1550 nm Laser

Example: FLS-600-234BL-EI-EUI-89-VFL

#### Note

1. Singlemode only.

#### 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)



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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.