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# Test & Measurement

- sales
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### **Complimentary Reference Material**

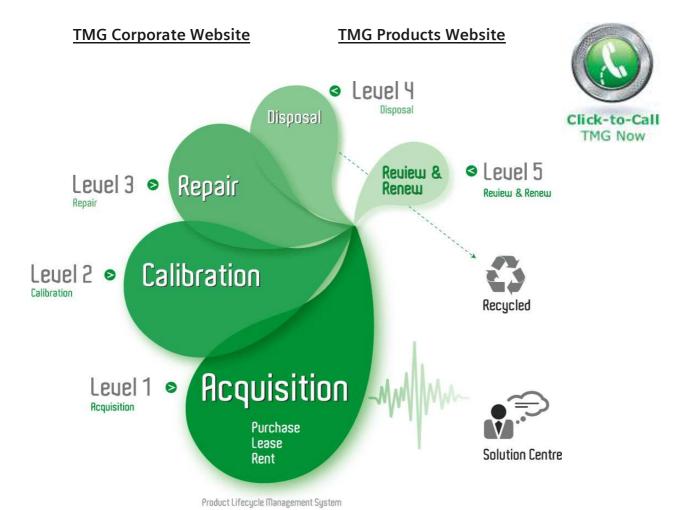
This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can all us for FREE!



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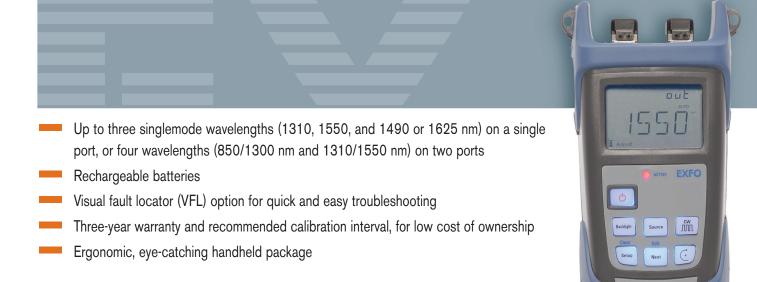




# LIGHT SOURCE |||

FLS-600

IIII NETWORK TESTING



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 Switching and Distant Referencing



Using the FLS-600 in Auto-Switching mode allows you to automatically toggle between available wavelengths. When using this source with a compatible power meter (FPM/FOT-600), the latter recognizes the wavelength in use and switches to the proper calibration parameter.

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 1

Model		12D	23BL	234BL	235BL	01-VCL
Central wavelength (nm)		850 ± 25	1310 ± 20	1310 ± 20	1310 ± 20	850 +20/-10
· ·		1300 +50/-10	1550 ± 20	$1550 \pm 20$	1490 ± 10	
				1625 ± 15	1550 ± 20	
Spectral width <sup>2</sup> (nm)		50/135	≤ 5	≤ 5	≤ 5	≤ 1
Output power (dBm)		≥ -20/≥ -20 (62.5/125 µm)	≥ 1/≥ 1	≥ 1/≥ -3/≥ -5	≥ 1/≥ -4.5/≥ -3	≥ -3 (50/125 µm)
Power stability (dB) <sup>3</sup>	15 min	±0.05	±0.03	±0.03	±0.03	±0.1
	8 h	±0.1	±0.1	±0.1	±0.1	±0.25
Auto-switching		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
Battery life (hours) (typical in Auto mode) 50		50	50	50	50	60
Warranty and recommended calibration interval (years) 3		3	3	3	3	3

#### VFL⁴

Emitter type	Laser	
Wavelength (nm)	650	
Output power (dBm)	3	

#### **General Specifications**

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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	(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, lithium ion battery, shoulder strap, hard 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. All specifications valid at 23 °C  $\pm$  1 °C, with an FC connector.

FLS-600-12D-23BL = 850/1300 nm LED source 62.5/125  $\mu$ m, 1310/1550 nm laser 9/125  $\mu$ m

- 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.
- 4. Typical values in 62.5/125  $\mu m$  fiber.

#### ORDERING INFORMATION

FLS-600-01-VCL = 850 nm VCSEL 50/125  $\mu m$ 

FLS-600-12D = 850/1300 nm LED 62.5/125  $\mu$ m FLS-600-23BL = 1310/1550 nm laser 9/125  $\mu$ m

FLS-600-234BL = 1310/1550/1625 nm laser 9/125 µm

FLS-600-235BL = 1310/1490/1550 nm laser  $9/125 \mu m$ 

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

Connector\*

EA-EUI-28 = APC/DIN 47256<sup>1</sup>

EA-EUI-89 = APC/FC narrow key<sup>1</sup>

 $EA-EUI-91 = APC/SC^{1}$ 

 $EA-EUI-95 = APC/E-2000^{1}$ 

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)

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

#### Note

Model

1. Singlemode only.

 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. All of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.exfo.com/recycle. 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.

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