

# FLS-300

NETWORK TESTING—OPTICAL



- Multifunctional light source: up to three singlemode wavelengths on a single port, or four wavelengths (two multimode, and two singlemode) on two ports
- Power autonomy of 120 hours
- Highest output power in the industry
- Three-year warranty and recommended calibration interval, for dramatically reduced cost of ownership
- Ergonomic, eye-catching handheld package

The FLS-300 Light Source is part of EXFO's new line of handheld units, which includes the FPM-300 Power Meter and the FOT-300 Optical Loss Test Set.

## Auto-Wavelength Recognition

The FLS-300 Light Source can transmit with a wavelength-identification digital encrypted protocol, so that any compatible unit—the FPM-300 Power Meter and the FOT-300 Optical Loss Test Set—can automatically use the proper calibration parameters. This feature reduces the need for communication between the two technicians and decreases the potential for error.

## Distant Referencing

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-300 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.



SPECIFICATIONS<sup>a</sup>

Model <sup>b</sup>	23BL	234BL	235BL	12D	01-VCL
Central wavelength (nm)	1310 ± 20 1550 ± 20	1310 ± 20 1550 ± 20 1625 ± 15	1310 ± 20 1490 ± 10 1550 ± 20	850 ± 25 1300 +50/-10	850 +10/-20
Spectral width <sup>c</sup> (nm)	≤5	≤5	≤5	50/135	≤1
Output power (dBm)	≥1/≥1	≥1/≥-3/≥-5	≥1/≥-4.5/≥-3	≥-20/≥-20 (62.5/125 μm)	≥-3 (50/125 μm)
Power stability <sup>d</sup> (dB)					
8 hours	±0.10	±0.10	±0.10	±0.10	±0.25
Battery life <sup>e</sup> (hours)	120	100	120	120	250
Enables automatic wavelength recognition	Yes	Yes	Yes	Yes	Yes
Tone generation (Hz)	270, 1 k, 2 k	270, 1 k, 2 k	270, 1 k, 2 k	270, 1 k, 2 k	270, 1 k, 2 k
Warranty and recommended calibration interval (years)	3	3	3	3	3

GENERAL SPECIFICATIONS

Size (H x W x D)	18.5 cm x 10.0 cm x 5.5 cm	(7 <sup>1</sup> / <sub>4</sub> in x 4 in x 2 <sup>1</sup> / <sub>8</sub> in)
Weight	0.4 kg	(0.9 lb)
Temperature	operating storage	-10 °C to 50 °C -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, three AA batteries, wrist strap.

SAFETY

21 CFR 1040.10 AND IEC 60825-1:2007  
CLASS 1 LASER PRODUCT

NOTES

- a. Guaranteed unless otherwise specified.
- b. All specifications valid at 23 °C ± 1 °C, with an FC connector.
- c. rms for lasers and -3 dB width for LEDs; typical values for LEDs.

- d. After 15 minutes warmup; expressed as ± half the difference between the maximum and minimum values measured during the period, with an APC connector on the power meter.
- e. Typical autonomy in Auto mode.
- f. EA-EUI only available on models 23BL and 235BL.

ORDERING INFORMATION

FLS-300-XX-XX

Model ■

- FLS-300-01-VCL = 850 nm VCSEL 50/125 μm
- FLS-300-12D = 850/1300 nm LED 62.5/125 μm
- FLS-300-23BL = 1310/1550 nm laser 9/125 μm<sup>f</sup>
- FLS-300-234BL = 1310/1550/1625 nm laser 9/125 μm
- FLS-300-235BL = 1310/1490/1550 nm laser 9/125 μm<sup>f</sup>
- FLS-300-12D-23BL = 850/1300 nm LED 62.5/125 μm,  
1310/1550 nm laser 9/125 μm

Example: FLS-300-234BL-EI-EUI-89

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>f</sup>
- EA-EUI-89 = APC/FC narrow key<sup>f</sup>
- EA-EUI-91 = APC/SC<sup>f</sup>
- EA-EUI-95 = APC/E-2000<sup>f</sup>

EXFO Corporate Headquarters > 400 Godin Avenue, Quebec City (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

EXFO America	3701 Plano Parkway, Suite 160	Plano, TX 75075 USA	Tel.: +1 800 663-3936	Fax: +1 972 836-0164
EXFO Asia	100 Beach Road, #22-01/03 Shaw Tower	SINGAPORE 189702	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	36 North, 3 <sup>rd</sup> Ring Road East, Dongcheng District Room 1207, Tower C, Global Trade Center	Beijing 100013 P. R. CHINA	Tel.: + 86 10 5825 7755	Fax: +86 10 5825 7722
EXFO Europe	Omega Enterprise Park, Electron Way	Chandlers Ford, Hampshire S053 4SE ENGLAND	Tel.: +44 2380 246810	Fax: +44 2380 246801
EXFO NetHawk	Elektroniikkatie 2	FI-90590 Oulu, FINLAND	Tel.: +358 (0)403 010 300	Fax: +358 (0)8 564 5203
EXFO Service Assurance	270 Billerica Road	Chelmsford, MA 01824 USA	Tel.: +1 978 367-5600	Fax: +1 978 367-5700

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. 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](http://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 at <http://www.EXFO.com/specs>

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