# ASE Broadband Source FLS-2300B





Fiber-optic test, measurement and monitoring instruments

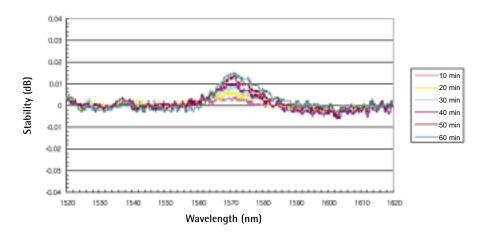


## Remarkably Stable Broadband Source

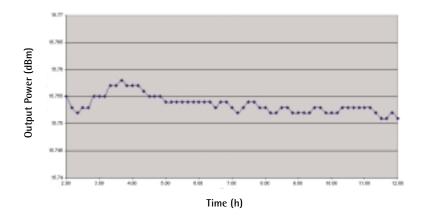
With its remarkable spectral density stability, the cost-effective FLS-2300B from EXFO is an excellent source for fast and reliable characterization of high-loss DWDM passive components such as thin film filters, arrayed waveguides and fiber Bragg gratings. With the FLS-2300B there is no need to perform a reference at every measurement, which saves you time on the production floor.



Spectral Density Stability over One Hour after 90-minute Warmup



FLS-2300B Output Power Stability



#### **Key Applications**

- Spectral measurements of C- + L-band
   DWDM passive components
- Noise simulation in DWDM systems
- Raman Amplifier gain and gain flatness
- Fiber link characterization
- High sensitivity PMD measurements
- Monitor fiber Bragg gratings under stress

## Wide Wavelength Range and High (Power) Spectral Density

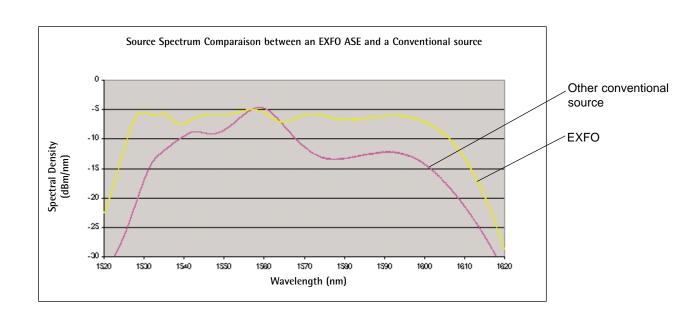
When compared to LED, super-LED or other ASE sources available on the market, the FLS-2300B has the highest power density. The result— a higher dynamic range when measuring a passive device with an optical spectrum analyzer. Make use of the wide wavelength range from 1530 nm to 1600 nm with the high spectral density of –8 dBm/nm.



### **High Output Power and Excellent Flatness**

The FLS-2300B ASE Broadband Source is a high-power, unpolarized fiber-optic source that is ideal for component testing, PMD measurements, communication link characterization and fiber sensing.

By optically pumping an erbium-doped fiber, the C- + L-band source emits a flattened amplified spontaneous emission (ASE) spectrum over the entire wavelength range. Its **unpolarized** output makes it ideal for stable and average loss measurements.



#### Specifications<sup>1</sup>

	Without gain-flattening option	With gain-flattening option
Spectral density (dBm/nm)	≥ -8 from 1530 nm to 1600 nm	≥ -10 from 1530 nm to 1600 nm
	≥ -14 from 1525 nm to 1610 nm	≥ -15 from 1525 nm to 1610 nm
	≥ -25 from 1520 nm to 1615 nm	≥ -26 from 1520 nm to 1615 nm
Total output power (dBm)	≥ 14	≥ 12
Spectral density stability (dB/nm) 15 min	± 0.04 (1520 nm to 1560 nm)	± 0.04 (1520 nm to 1560 nm)
Total power stability <sup>2</sup> (dB) 1 hour	$\pm 0.01 \ (\Delta = 0.02)$	$\pm 0.01 \ (\Delta = 0.02)$
Spectral flatness (dB)	$\Delta \le 3.5$ typical (1537 nm to 1600 nm)	$\Delta \le 3$ (1530 nm to 1600 nm)
DOP	< 2 % typical (1530 nm to 1600 nm) over 0.15 nm band	

#### **General Specifications**

Output connector	FC/APC
Dimensions (H x W x D)	11.7 cm x 22.2 cm x 33.3 cm (4 5/8 in x 8 3/4 in x 13 1/8 in)
Weight	3.2 kg (7 lb)
Operating temperature	10 °C to 40 °C
Storage temperature	-40 °C to 70 °C
Output fiber	SMF-28

#### Notes

- 1. At 23 °C  $\pm$  0.5 °C, after a two-hour warmup.
- 2. The total power stability is expressed as ± half the difference between the maximum and minimum values measured during the period.

#### Safety

Jaicey	
21 CFR 1040.10	CLASS 3B LASER PRODUCT
IEC 60825-1: Ed.1.1 1998	CLASS 3A LASER PRODUCT

#### **Standard Accessories**

Instruction manual, hybrid patchcord, test report, Certificate of Compliance



CORPORATE HEADQUARTERS

TOLL-FREE (USA and Canada)

**EXFO AMERICA** 

EXFO EUROPE

**EXFO ASIA-PACIFIC** 

#### **Ordering Information**

#### FLS-2300B-Z-58

0 = no gain-flattening option

1 = gain-flattening option

Hybrid test jumpers available upon request.

TJ-B58-58

TJ-B58-88

TJ-B58-89

TJ-B58-90 TJ-B58-91

TJ-B58-96

Vanier (Quebec) G1M 3G7 CANADA Tel.: 1 418 683-0211 . Fax: 1 418 683-2170
Richardson TX 75080 USA Tel.: 1 800 663-3936 . Fax: 1 972 907-2297

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.

151 Chin Swee Road, #03-29 Manhattan House

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 Web site at <a href="http://www.exfo.com/support/techdocs.asp">http://www.exfo.com/support/techdocs.asp</a> In case of discrepancy, the Web version takes precedence over any printed literature.



465 Godin Avenue

Tel.: 1 800 663-3936

1201 Richardson Drive, Suite 260

Le Dynasteur, 10/12 rue Andras Beck





SINGAPORE 169876

92366 Meudon la Forêt Cedex FRANCE

www.exfo.com • info@exfo.com



Tel.: +33.1.40.83.85.85 . Fax: +33.1.40.83.04.42

Tel.: +65 333 8241 . Fax: +65 333 8242