

Broadband Light Source

M2100



High-power EELED source

Variable power output

Broadband spectral range

Available in 980 nm, 1300 nm, 1550 nm and 1620 nm

High dynamic range for PMD measurements

Broad Spectral Range and Impressive Power

The M2100 Broadband Light Source is a high-power EELED-based light source with variable power output. It provides broad spectral range and more power density in a singlemode fiber than a white light source. Use this stable fiber-optic light source for a variety of applications, including WDM component manufacturing and testing, fiber-optic sensing and spectroscopy.

Cable and Fiber PMD Measurements

Polarization mode dispersion (PMD) is caused by asymmetry in a fiber and/or by localized stress throughout a waveguide. Use EXFO's IQ-5500 PMD Analyzer to assess fiber quality during manufacturing, either in zero-stress situations (flat, unrolled) or under light stress conditions (on a spool). Extend the dynamic range of the PMD analyzer to 56 dB through an increased power output with the 1300 nm and 1545 nm options of the M2100. This enables more extensive long-haul measurements in cable and fiber.

Polarization and Depolarization

High power often means a larger degree of polarization (DOP). At maximum power, the M2100-BS and BP options have a DOP that can reach 97 %. Reducing the drive current in order to reduce the output power of the BS option will significantly reduce the DOP (60 to 70 %). A polarizer, integrated into the BP option, ensures a high DOP even when reducing the output power. In both options, DOP can be decreased to almost 1 % with the use of a passive depolarizer such as EXFO's IQ-9700 or M9700 Passive Depolarizer.



Fiber-optic T&M,
monitoring, manufacturing
and assembly solutions



980-nm Source for Component Testing

The M2100 Broadband Light Source offers enough power along the spectrum to measure high-level insertion loss. It also features a either wide-enough to cover many Bragg gratings simultaneously. With an optical spectrum analyzer (OSA), you can efficiently qualify your components during development or pass/fail testing during production.

Specifications

Model	M2106 BS	M2102 BS/BP	M2103 BS/BP	M2104 BS
Wavelength (nm)	980 ± 5	1300 ± 25	1545 ± 25	1620 ± 20
Spectral width ¹ (nm)	25	50	50	60
Output Power (dBm)				
BS	≥ 0 ²	≥ -3	≥ -3	≥ -3
BP	N/A	≥ -6	≥ -6	N/A
Peak density ^{2,3} (dBm/nm)	-15	-24	-24	-24
Stability ⁴ (dB)				
30 minutes	± 0.02 (Δ = 0.04)			
6 hours	± 0.05 (Δ = 0.10)			
Compatible fiber (μm)	5/125	9/125	9/125	9/125

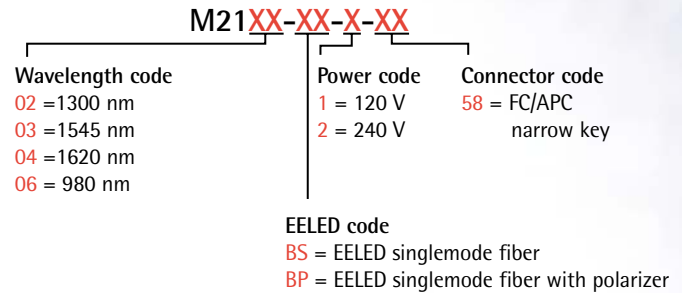
General Specifications

Modulation		
internal	DC to 2 kHz	
external	DC to 50 kHz	
Power	100/120 V (60 Hz) or 220/240 V (50 Hz)	
Temperature		
operating	15 °C to 40 °C	(59 °F to 104 °F)
storage	-30 °C to 70 °C	(-22 °F to 158 °F)
Size (H x W x D)	6.5 cm x 18.5 cm x 26 cm	(2 1/2 in x 7 1/4 in x 10 1/4 in)

Notes

1. Width at 3 dB, typical value.
2. Typical.
3. For BS only.
4. After a 30-minute warm-up, measured at ambient temperature.

Ordering Information



Standard Accessories

Instruction manual and Certificate of Compliance

Safety

For the M2102, M2103 and M2104 options:
 This product complies with 21 CFR 1040.10 and 1040.11 and with IEC 60825-1:1993+A1:1997
CLASS 1 LED PRODUCT

For the M2106 option:
 This product complies with 21 CFR 1040.10 and with IEC 60825-1:1993+A1:1997



CORPORATE HEADQUARTERS	465 Godin Avenue	Vanier (Quebec) G1M 3G7 CANADA	Tel.: 1 418 683-0211 . Fax: 1 418 683-2170
EXFO AMERICA	1201 Richardson Drive, Suite 260	Richardson TX 75080 USA	Tel.: 1 800 663-3936 . Fax: 1 972 907-2297
EXFO EUROPE	Le Dynasteur, 10/12 rue Andras Beck	92366 Meudon la Forêt Cedex FRANCE	Tel.: +33.1.40.83.85.85 . Fax: +33.1.40.83.04.42
EXFO ASIA-PACIFIC	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 333 8241 . Fax: +65 333 8242
EXFO CHINA	Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Beijing 100044 P. R. China	Tel.: +86 (10) 6849 2738 . Fax: +86 (10) 6849 2662
TOLL-FREE (USA and Canada)	Tel.: 1 800 663-3936 www.exfo.com • info@exfo.com		

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