

MAP Fabry-Perot Laser (mFPL-A1)



Key Features

- Dual independent sources available in a single cassette
- Single-mode (SM)/Multimode (MM) output
- Internal modulation
- Can be automated when used with MAP-200 LXI-compliant interfaces and IVI drivers

Applications

- Insertion loss (IL)
- Return loss (RL)
- Polarization dependent loss (PDL) tests
- Dense wavelength division multiplexing (DWDM) test

Compliance

- The MAP Fabry-Perot Laser Source, when installed in a MAP chassis, complies to CE, CSA/UL/IEC61010-1, LXI Class C requirements, meets the requirements of Class 3B in standard IEC 60825-1 (2002), and complies with 21 CFR 1040.1 except deviations per Laser Notice No. 50, July 2001.



The Multiple Application Platform (MAP) Fabry-Perot Laser Source (mFPL-A1) is optimized for the industry-leading JDSU MAP-200 platform. Based on the previous-generation Multiple Application Platform (MAP), the MAP-200 is the first photonic layer lab and manufacturing platform that is LAN Extensions for Instrumentation (LXI)-compliant by conforming to the required physical attributes, Ethernet connectivity, and interchangeable virtual instrument (IVI) drivers. The MAP-200 platform is optimized for density and maximum configurability to meet specific application requirements in the smallest possible foot print.

The mFPL-A1 consists of a Fabry-Perot laser diode combined with a high performance laser driver circuitry for optimal wavelength and power stability. It features internal modulation capabilities and variable power control. Cassettes can be configured with two independent sources for maximum instrumentation density.

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Single-mode (SM) Specifications

Parameter	980 nm	1310 nm	1480 nm	1550 nm	1625 nm	1650 nm
Peak wavelength	980 ±20 nm	1310 ±20 nm	1480 ±20 nm	1550 ±20 nm	1625 ±20 nm	1650 ±20 nm
Spectral width (FWHM)	<5 nm	<5 nm	<5 nm	<6 nm	<7 nm	<7 nm
Total power ^{1,2}	0 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm
Fiber type	Flexcor™	SMF-28	SMF-28	SMF-28	SMF-28	SMF-28
Modulation ³	0.2 to 20 kHz					
Stability (15 minutes) ^{1,2,4}	±0.005 dB					
Connector type	FC/PC, FC/APC					
Operating temperature	10 to 40°C					
Storage temperature	-30 to 60°C					
Dimensions (W x H x D)	4.06 x 13.26 x 37.03 cm (1.6 x 5.22 x 14.58 in)					
Weight	0.5 kg (1.1 lb)					

1. After 30 minute warm-up
2. Measured at constant temperature of 23 ±5°C
3. Modulation duty cycle is adjustable from 15% to 85%. Modulation depth is fixed at 100%
4. Measured at full power

Multimode (MM) Specifications

Parameter	850 nm	1310 nm	1550 nm
Peak wavelength	850 ±20 nm	1310 ±20 nm	1550 ±20 nm
Spectral width (FWHM)	<8 nm	<8 nm	<8 nm
Total power ^{1,2}	-3 dBm	-6 dBm	-6 dBm
Modulation ³	0.2 to 20 kHz		
Stability (15 minutes) ^{1,2,4}	±0.01 dB		
Connector type	FC/PC, FC/APC		
Operating temperature	10 to 40°C		
Storage temperature	-30 to 60°C		
Dimensions (W x H x D)	4.06 x 13.26 x 37.03 cm (1.6 x 5.22 x 14.58 in)		
Weight	0.5 kg (1.1 lb)		

1. After 30 minute warm-up
2. Measured at constant temperature of 23 ±5°C
3. Modulation duty cycle is adjustable from 15% to 85%. Modulation depth is fixed at 100%
4. Measured at full power

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Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Product Code	Description
Base Options (Required, select one)	
MFPL-A1100	Fabry-Perot mono-wavelength laser source
MFPL-A1200	Fabry-Perot bi-wavelength laser source
Laser Wavelength Options (Required, select one or two)	
MWL1650A	1650 nm wavelength
MWL1625A	1625 nm wavelength
MWL1550A	1550 nm wavelength
MWL1480A	1480 nm wavelength
MWL1310A	1310 nm wavelength
MWLO980A	980 nm wavelength
MWLO850A	850 nm wavelength
Fiber Type Options (Required, select one)¹	
M100	9/125 fiber type
M101	50/125 fiber type (850, 1310 and 1550 nm only)
M102	62.5/125 fiber type (850, 1310 and 1550 nm only)
M104	Flexcore fiber (980 nm only)
Connector Options (Required, select one)	
MFP	FC/PC connector type
MFA	FC/APC connector type (M100 only)

1. SM and MM fiber type options cannot be combined in one module

Test & Measurement Regional Sales

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