Data Sheet
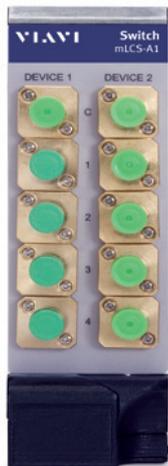
VIAVI
MAP Large Channel Count Switch

(mLCS-A1)

The Multiple Application Platform (MAP) Large Channel Count Switch (mLCS-A1) is optimized for the industry-leading JDSU MAP-200 platform. Based on the previous-generation 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.

Key Features

· Insertion loss (IL) <0.7 dB and return loss (RL) >57 dB

· Low polarization dependent loss (PDL) 0.04 dB

· Up to 1x50 switch configurations in a single width cassette

· Single and dual 2xN switch configurations

Applications

· Dense wavelength division multiplexing (DWDM) channel testing

· Amplifier characterization

· Bit error rate (BER) testing

· Signal routing

Safety Information

The MAP Large Channel Count Switch, when installed in a MAP chassis, complies to CE, CSA/UL/IEC61010-1, plus LXI Class C requirements.

The MAP Large Channel Count Switch is based on JDSU expanded beam and alignment technologies and exhibits low insertion loss (IL) and high return loss (RL). It is available in single-switch configurations from 1x4 up to 1x50, dual independent switch configurations from 1x4 up to 1x25, and both single and dual independent switch configurations from 2x4 to 2x16. An important element of an optical test bed, optical switches increase throughput by enabling time-saving automation, reduce uncertainty from repeated connector mating, and maximize expensive testers.

Specifications

Parameter	Single-mode fiber SMF 9/125 Typical/Maximum		Multimode fiber MMF 50/125 and 62.5/125 Typical/Maximum	
Wavelength range	1270 to 1670 nm		850 to 1350 nm, 750 to 940 nm	
Number of output channels (N)	**N≤25**	**N>25, 2xN**	**N≤25**	**N>25, 2xN**
Insertion loss (IL)[1]	0.5 dB/0.7 dB	0.8 dB/1.2 dB	0.4 dB/0.6 dB	0.7 dB/1.0 dB
Polarization dependent loss (PDL)[1]	0.02 dB/0.04 dB	0.04 dB/0.08 dB	N/A	N/A
Return loss (RL)[1,2]	62 dB/57 dB	55 dB/45 dB	25 dB/20 dB	20 dB/20 dB
IL Stability	±0.02 dB/±0.025 dB	±0.03 dB/±0.04 dB	±0.02 dB/±0.025 dB	±0.03 dB/±0.04 dB
Repeatability sequential switching	±0.005 dB/±0.01 dB	±0.01 dB/±0.03 dB	±0.005 dB/±0.01 dB	±0.01 dB/±0.03 dB
Repeatability random switching	±0.01 dB/±0.05 dB	±0.03 dB/±0.08 dB	±0.01 dB/±0.05 dB	±0.03 dB/±0.08 dB
Crosstalk	−80 dB/N/A	−80 dB/N/A	−80 dB/N/A	−80 dB/N/A
Switching time (first channel/each additional channel)	25 ms/15 ms			
Maximum input power (optical)	300 mW			
Lifetime	>100 million cycles			
Operating temperature	−5 to 55°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	1.3 kg (2.87 lb) maximum (varies with configuration)			

1. Excluding connectors. All optical measurements taken after temperature has been stabilized for one hour
2. RL is based on 1 m pigtail (equivalent to bulkhead version)

? If the configurations available do not meet your performance requirements, please contact our global sales and customer service team to discuss the potential for specialized solutions.

Ordering Information

Base Options (Required, select one)

Product Code	Description	Product Code	Description
MLCS-A1104B	Single 1x4 switch, bulkheads	MLCS-A1204B	Dual independent 1x4 switch, bulkheads
MLCS-A1106B	Single 1x6 switch, bulkheads	MLCS-A1208P	Dual independent 1x8 switch, pigtails
MLCS-A1108B	Single 1x8 switch, bulkheads	MLCS-A1212P	Dual independent 1x12 switch, pigtails
MLCS-A1112P	Single 1x12 switch, pigtails	MLCS-A1216P	Dual independent 1x16 switch, pigtails
MLCS-A1116P	Single 1x16 switch, pigtails	MLCS-A1225P	Dual independent 1x25 switch, pigtails
MLCS-A1124P	Single 1x24 switch, pigtails	MLCS-A1104BD	Single 2x4 E configuration switch, bulkheads
MLCS-A1132P	Single 1x32 switch, pigtails	MLCS-A1108BD	Single 2x8 E configuration switch, bulkheads
MLCS-A1142P	Single 1x42 switch, pigtails	MLCS-A1116PD	Single 2x16 E configuration switch, pigtails
MLCS-A1150P	Single 1x50 switch, pigtails	MLCS-A1204PD	Dual 2x4 E configuration switch, pigtails
		MLCS-A1208PD	Dual 2x8 E configuration switch, pigtails
		MLCS-A1216PD	Dual 2x16 E configuration switch, pigtails

Fiber Type Options (Required, select one)		**Connector Options** (Required, select one)	
M100	9/125 fiber type	MFP	FC/PC connector type
M101	50/125 fiber type	MFA	FC/APC connector type (for M100 fiber type option only)
M102	62.5/125 fiber type	MSC	SC/PC connector type
		MSU	SC/APC connector type (for M100 fiber type option only)

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