

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.



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

### **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.

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) <sup>1</sup>	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) <sup>1</sup>	0.02 dB/0.04 dB	0.04 dB/0.08 dB	N/A	N/A		
Return loss (RL) <sup>1,2</sup>	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)					

Excluding connectors. All optical measurements taken after temperature has been stabilized for one hour





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)							
<b>Product Code</b>	Description	Prod	luct Code	Description			
MLCS-A1104B	Single 1x4 switch, bulkheads	s MLC	S-A1204B	Dual independent 1x4 switch, bulkheads			
MLCS-A1106B	Single 1x6 switch, bulkheads	s MLC	S-A1208P	Dual independent 1x8 switch, pigtails			
MLCS-A1108B	Single 1x8 switch, bulkheads		S-A1212P	Dual independent 1x12 switch, pigtails			
MLCS-A1112P	Single 1x12 switch, pigtails		S-A1216P	Dual independent 1x16 switch, pigtails			
MLCS-A1116P	Single 1x16 switch, pigtails		S-A1225P	Dual independent 1x25 switch, pigtails			
MLCS-A1124P	P Single 1x24 switch, pigtails		S-A1104BD	Single 2x4 E configuration switch, bulkheads			
MLCS-A1132P	Single 1x32 switch, pigtails		S-A1108BD	Single 2x8 E configuration switch, bulkheads			
MLCS-A1142P	ALCS-A1142P Single 1x42 switch, pigtails		S-A1116PD	Single 2x16 E configuration switch, pigtails			
MLCS-A1150P	Single 1x50 switch, pigtails	MLC	S-A1204PD	Dual 2x4 E configuration switch, pigtails			
		MLC	S-A1208PD	Dual 2x8 E configuration switch, pigtails			
		MLC	S-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 conne	ector type			
M101 50/125 fiber type		MFA	FC/APC conr	nector type (for M100 fiber type option only)			
M102 62.5/125 fiber type		MSC	SC/PC conne	ector type			



Contact Us

MSU

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SC/APC connector type (for M100 fiber type option only)