

# MAP Small Channel Count Switch (mSCS-B1)



## Key Features

- Insertion loss (IL) <0.8 dB and return loss (RL) >50 dB
- Low polarization dependent loss (PDL) 0.08 dB
- Up to 8 switches per cassette
- Can be automated when used with MAP-200 LXI-compliant interfaces and IVI drivers

## Applications

- Dense wavelength division multiplexing (DWDM) channel testing
- Amplifier characterization
- Bit error rate (BER) testing
- Signal routing

## Safety Information

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

The Multiple Application Platform (MAP) Small Channel Count Switch (mSCS-B1) 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 mSCS-B1 is based on optical prism and mirror technology that directs incident light into selected output channels. It is available in 1x2 and 2x2 configurations and supports multiple devices per MAP cassette, single-mode or multimode fiber, and four connector types. An important element of an optical test bed, optical switches increase throughput by enabling time-saving automation, reducing uncertainty from repeated connector mating, and maximizing expensive testers.

**Specifications**

Parameter	Single-mode fiber (SM)	Multimode fiber (MM)
Wavelength	1310 and 1550 nm	850 and 1310 nm
Insertion loss (IL) <sup>1</sup>		
1 x 2	≤0.8 dB	≤0.8 dB
2 x 2	≤1.2 dB	≤1.1 dB
Return loss (RL) <sup>1</sup>	>50 dB	>20 dB
Polarization dependent loss (PDL) <sup>1</sup>	≤0.1 dB	N/A
Repeatability	±0.05 dB	±0.02 dB
Crosstalk	<-60 dB	<-35 dB
Optical input power		300 mW
Switching speed		10 ms
Latching	Yes	No
Lifetime		> 10 million cycles
Operating temperature		0 to 50°C
Storage temperature		-30 to 60°C
Humidity		90% relative, non-condensing
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		1.1 kg (2.43 lb) maximum (varies with configuration)

1. Unless otherwise specified, all specifications at start of life at 23°C ±3°C, 45% RH ±5% and optical input power of -25 to 0 dBm, excluding connectors

**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](mailto:customer.service@jdsu.com).

**Base Options (Required, select one)**

Product Code	Description
MSCS-B1112B	MAP SCS Cassette, one 1x2 switch, bulkheads
MSCS-B1212B	MAP SCS Cassette, two 1x2 switch, bulkheads
MSCS-B1412P	MAP SCS Cassette, four 1x2 switch, pigtails (for M100 fiber type option only)
MSCS-B1612P	MAP SCS Cassette, six 1x2 switch, pigtails (for M100 fiber type option only)
MSCS-B1812P	MAP SCS Cassette, eight 1x2 switch, pigtails (for M100 fiber type option only)
MSCS-B1122B	MAP SCS Cassette, one 2x2 switch, bulkheads
MSCS-B1222B	MAP SCS Cassette, two 2x2 switch, bulkheads
MSCS-B1422P	MAP SCS Cassette, four 2x2 switch, pigtails (for M100 fiber type option only)

**Fiber Type Options (Required, select one)**

M100	9/125 fiber type
M101	50/125 fiber type
M102	62.5/125 fiber type

**Connector Options (Required, select one)**

MFP	FC/PC connector type
MFA	FC/APC connector type (for M100 fiber type option only)
MSC	SC/PC connector type
MSU	SC/APC connector type (for M100 fiber type option only)

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