

VIAVI

MAP Small Channel Count Switch

(mSCS-B1)

The Multiple Application Platform (MAP) Small Channel Count Switch (mSCS-B1) is optimized for the industry-leading VIAVI 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,

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.

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) ¹ | | |
| 1 x 2 | ≤0.8 dB | ≤0.8 dB |
| 2 x 2 | ≤1.2 dB | ≤1.1 dB |
| Return loss (RL) ¹ | >50 dB | >20 dB |
| Polarization dependent loss (PDL) ¹ | ≤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 VIAVI account manager or VIAVI directly at 1 844 GO VIAVI (1 844 468 4284) or to find the office nearest you, visit [viavisolutions.com/contact](https://www.viavisolutions.com/contact)

| 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, pigtailed (for M100 fiber type option only) |
| MSCS-B1612P | MAP SCS Cassette, six 1x2 switch, pigtailed (for M100 fiber type option only) |
| MSCS-B1812P | MAP SCS Cassette, eight 1x2 switch, pigtailed (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, pigtailed (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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