

MEMS 96-PORT ANYPORT OPTICAL SWITCHING SYSTEM

OSS Model, Single Mode Fiber, Anyport-to-Anyport

OPTICAL SPECIFICATIONS¹

Test Wavelength	1260 to 1675 nm
Insertion Loss ²	1.3 dB max.
Insertion Loss with OPM ²	2.0 dB max.
Loss Repeatability ³	+/- 0.03 dB
Connection Stability ^{4,5}	+/- 0.03 dB
PDL ⁵	0.1 dB max.
PDL with OPM ⁵	0.3 dB max.
WDL ^{5,6}	0.3 dB max.
Crosstalk ⁵	-60 dB max.
Data Latency ⁵	15 ns max.
Back Reflection	-45 dB max.
Optical Transition Time ^{5,7}	25 ms max.
Switch Lifetime	1 Billion Cycles min.
Input Power Range	Dark to +27 dBm
OPM Dynamic Range	-50 to +22 dBm
OPM Relative Accuracy	+/-0.2 dB @ -30 dBm min. +/-0.5 dB @ -50 dBm min.
VOA Accuracy (Closed-Loop) ^{5,8,9}	+/-0.3 dB @ 20 dB Attn +/-0.5 dB @ 30 dB Attn
VOA Accuracy (Open-Loop) ^{8,10}	+/-1.5 dB @ 20 dB Attn +/-1.5 dB @ 30 dB Attn

1. Measured separately for each Test Wavelength at room temperature
2. Measured with 3-jumper method or equivalent. See TIA/EIA 526-7
3. Over 100 cycles
4. 1 Hz sampling rate for 15 min
5. Met by design, not measured
6. Test Wavelength +/-20 nm
7. Optical transition time for all ports switching concurrently, not including command processing overhead
8. 98th percentile of optical connections; defined as the average +2 standard deviations
9. Requires Power Monitoring
10. Corresponds to accuracy using Constant Attenuation Mode. Both Constant Power Mode and Relative Attenuation Mode will have better accuracy due to Closed-Loop feedback

ELECTRICAL SPECIFICATIONS

Power Consumption	40W max. Steady State 45W max. at Startup
Power Supply Options	Redundant Power Supply, 100-240 VAC or -48 VDC
Network Interface Card	RJ45 Dual Redundant Gigabit Ethernet
SDN & Automation Interfaces	REST API, NETCONF, SNMPv3, TL1, Web GUI, RS232, gNMI, Telnet, SSH

*Power is measured with a redundant AC power supply and power monitoring. When using a redundant DC power supply, the total power consumption may increase by 5-10 W.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

MECHANICAL SPECIFICATIONS

Chassis Width	483 mm (19")
Chassis Depth*	435 mm (17") 559 mm (22")
Chassis Height	2U (with LC)*

*Please consult DiCon. Depends on connectors and options.

