



Features

Latching optical switch maintains switch position and fiber continuity during power loss

2 * 1 through-connect optical routing

Automatic non-revert, automatic revert (with user-adjustable delay times) or manual switching modes

Compatible with 1310 nm, 1550 nm, and DWDM ITU wavelengths

Compatible with forward and return path applications

Wide input range (-30 dBm to 21 dBm)

Local or remote control using the front panel or Element Management System (EMS) software

Ethernet SNMP status monitoring through the transponder

Operating temperature range from -40 °C to 60 °C (-40 °F to 140 °F)

SC/APC or E2000 optical connectors

SG4-OSW

SG4000 Optical Switch Module

Automatically switches between primary and secondary signal sources during a loss or degradation of the primary signal for either the forward or return path

Motorola's SG4000 modular optical node now enables path redundancy with the addition of the new SG4-OSW Optical Switch Module. With an optical switch located in the node, operators are able to provide crucial services with added reliability. Constant monitoring of both optical inputs enables instantaneous switching during a primary input failure. The wide input power range and several control modes of the SG4-OSW enable redundancy for almost any application.

The SG4-OSW front panel provides labels that indicate the function of the three SC/APC or E2000 bulkhead fittings, active state LEDs, mode LEDs, mode enable switches, and a tri-color LED STATUS indicator.

The SG4-OSW can be installed in any optics slot in the lid of the SG4000. Multiple SG4-OSWs can be installed in a single SG4000.

SG4000

Optical Switch Module

Specifications

OPTICAL

Operating Wavelength	1280 nm to 1620 nm
Operating Input Power Range	-30 dBm to 21 dBm
Input Power Handling	21 dBm max.
Insertion Loss, with connectors	2 dB max.
Switch Time Auto Mode	15 ms max.
Optical Crosstalk	-55 dB max.
Optical Power Reporting Accuracy	±1.0 dBm 1310 nm or 1550 nm
Polarization-Dependent Loss	0.25 dB max.
Temperature-Dependent Loss	0.5 dB max.
24 V Supply Current	300 mA max.
Optical Switch Type	Latching
DC Current	2.04 W max. 85 mA

PHYSICAL

Dimensions	2.1 in x 6.5 in x 2.6 in (5.3 cm x 16.5 cm x 6.7 cm)
Mounting	SG4000 lid
Operating Temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Weight	0.73 lb (0.33 kg)
Optical Connectors	SC/APC or E2000
Eye Protection	Protective plug
Visual Interface	Six front-panel LEDs

Individual Components		
Model	SG4000	Part Number
SG4-OSW/SC-R	Optical Switch module with SC/APC optical connectors	537693-001-00
SG4-OSW/E-R	Optical Switch module with E2000 optical connectors	537693-002-00

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