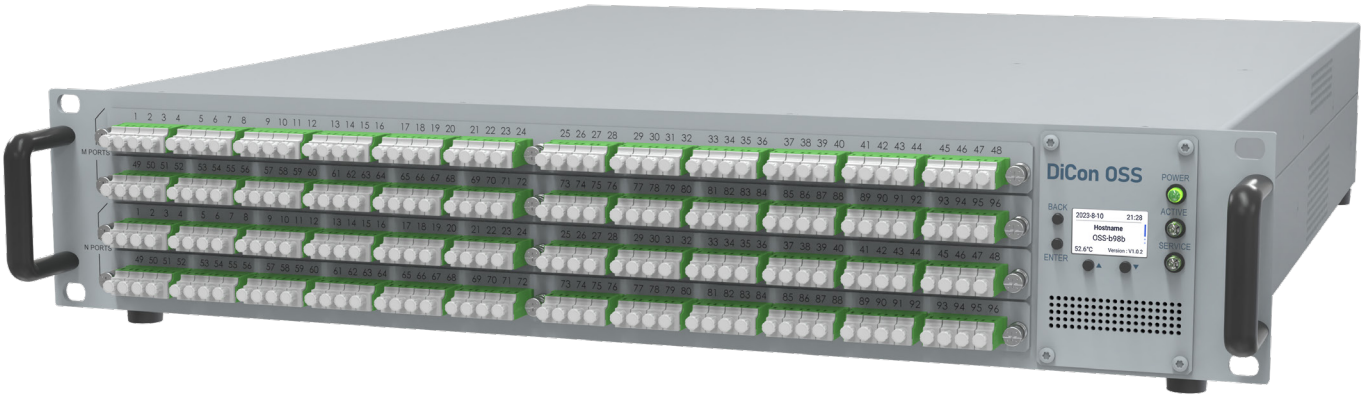
MEMS OPTICAL SWITCHING SYSTEM

DiCon's Optical Switching System (OSS) is a proprietary fully non-blocking, all-optical cross-connect. This innovative design is based on DiCon's industry proven MEMS mirror technology and offers the same level of performance and reliability that can be expected from any of its fiber optic switch solutions. The internals are densely integrated to minimize height and save you previous rack space. Secure and modern software enable Software Defined Networking (SDN) automation, multiple user permissions and sessions. Available in either simplex (MxN) or duplex (any-to-any) configurations, the system can also be highly customized for your application.



*Simplex 96x96 2U shown

FEATURES

- Industry leading optical performance and reliability
- Software defined port partitioning, user provisioning, preset configurations
- Energy efficient, low power consumption
- Low latency for time critical traffic
- No dithering or active alignment artifacts
- Dark fiber switching
- Bi-directional operation

APPLICATIONS

- Dynamic management of optical networks and traffic
- Configurable test and measurement
- Security and critical infrastructure

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MEMS OPTICAL SWITCHING SYSTEM

OPTICAL SPECIFICATIONS

PARAMETER	RATING
Insertion Loss (dB)[1]	(16x16) 0.5 typ., 0.9 max. (32x32) 0.6 typ., 1.1 max. (96x96) 0.8 typ., 1.4 max. (192x192) 1.0 typ., 1.6 max. (384x384) 1.1 typ., 1.6 max.
Port dimensions	Up to 384x384
Stability (dB)[2]	0.05 typ., 0.1 max.
Switching time (ms)	25 max for all concurrent
Optical crosstalk (dB)	-85 typ., -60 max.
PDL (dB)[3]	0.1 typ., 0.25 max.
Operating wavelength (nm)	1260 – 1650, customizable
Operating temperature (°C)	0 to 50
Fiber connectors	LC, MTP/MPO, other
Fiber type	SMF-28, PM
Simplex, Duplex	Both available
Power Monitoring[4]	Optional on any port
Others	Non-blocking Bi-directional

1. Excluding connector loss. Equivalent to Method A.3 Three Jumper (TIA/EIA-526-7). Tested at calibrated wavelengths.
2. Sampled at 10kHz for 10 sec.
3. Add up to 0.1dB max. For power monitoring.
4. Add up to 0.4dB max. IL for power monitoring.

CONTROL AND MANAGEMENT

SDN and automation interfaces: REST API, NETCONF, SNMPv3, TL1, Web GUI, RS232
Port partitioning and group permissions
User and group management
Saved and easily applied preset configurations
System event and alarm logging

ELECTRICAL AND MECHANICAL

Dimensions: 1U and above[5]
Uninterrupted field service, upgrades[6]
Redundant Power Supply 90-264 VAC, -48 VDC

5. Depends on connector type and if on front or rear.
6. Holds state when updating firmware or replacing network control unit for example.

* Please contact DiCon Fiberoptics to discuss any special requirements not defined above.

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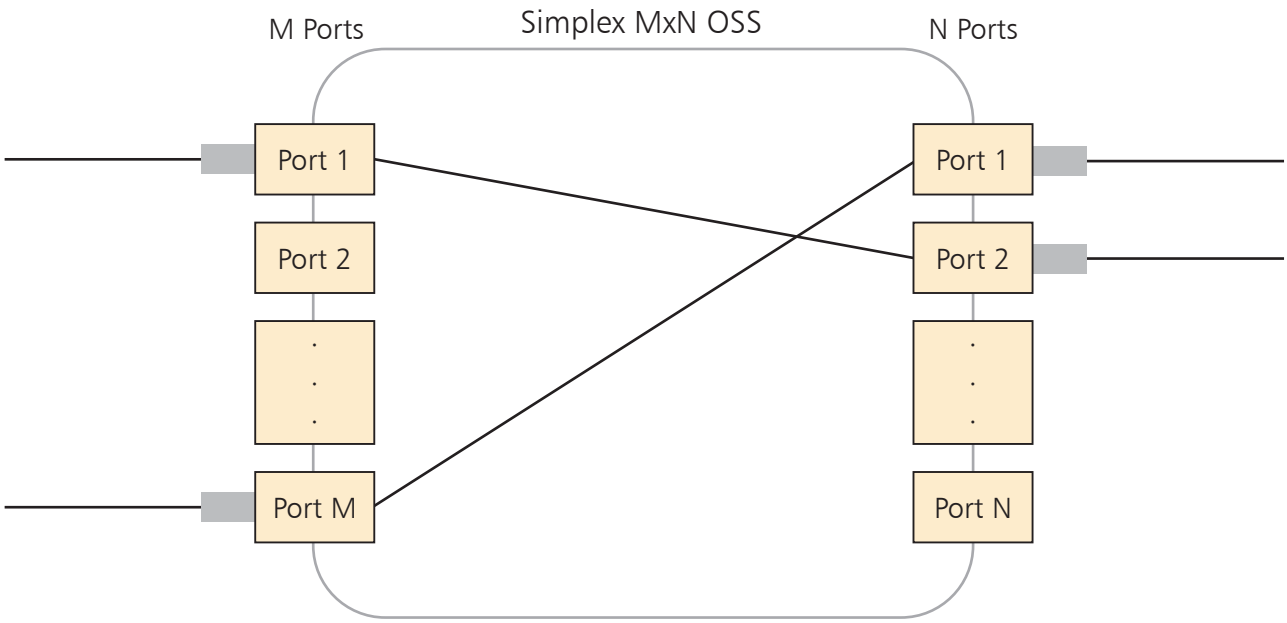
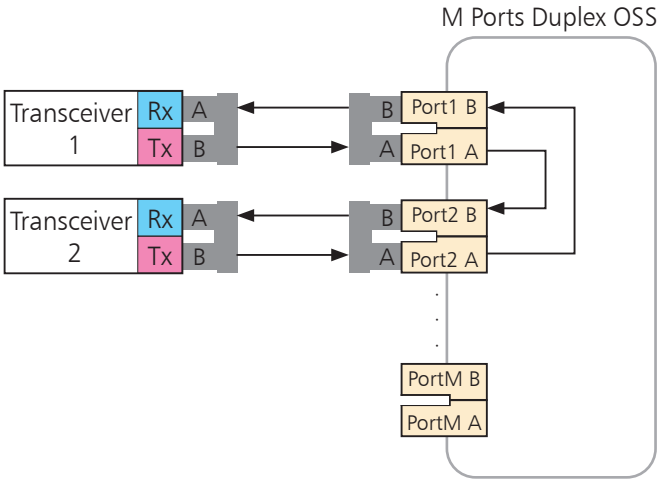
SIMPLEX

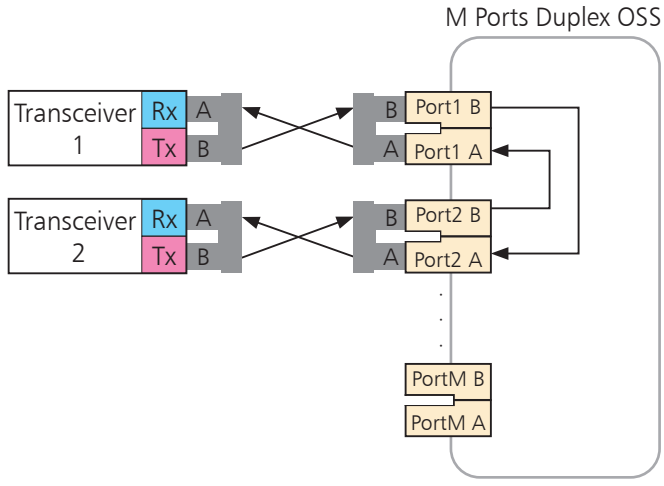


DUPLEX

Using A-B Fiber Patch Cable



Using A-A Fiber Patch Cable



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MEMS OPTICAL SWITCHING SYSTEM

ORDERING INFORMATION

OSS - □ - □ - □ - □ - □ - □ - □ - □

Product Code

OSS	OSS

Simplex / Duplex

S	Simplex
D	Duplex (Network Link)

**No Duplex Synchronous for OSS*

Number Of Ports

	Specify
MxN	M≤96, N≤96 for Simplex "S"
M	M≤96 for Duplex "D"

Chassis Height

1U
2U
4U

**Contact Sales for assistance*

Wavelength Range

A	1260-1650 nm
O	1260-1360 nm
E	1360-1460 nm
S	1460-1530 nm
C	1530-1570 nm
L	1570-1625 nm
U	1625-1675 nm

**Multiple wavelength ranges can be supported. Use "/" to add multiple ranges.*
For example: For 1260 - 1360 nm & 1530 - 1570 nm use O/C,
for 1260 to 1675 nm use O/E/S/C/L/U

Power

A1	AC 90-264V Single
D1	DC -48V Single
A2	AC 90-264V Redundant
D2	DC -48V Redundant

Function

S	Switch (required)
MPM	M Ports Power Monitor
NPM	N Ports Power Monitor (Simplex only)
A	Attenuator (30dB Max, Simplex only)

Use "/" to add multiple functions.
For example: For Switch, M ports monitoring, N ports monitoring,
and Attenuator, use S/MPM/NPM/A

Connector Type

LU	LC connector UPC
LA	LC connector APC
HU	High density LC UPC
HA	High density LC APC
M	MTP-8/MPO (APC)
N	MTP-12/MPO (APC)

**Other connector types available upon request*

Connector Location

F	Front
R	Rear

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