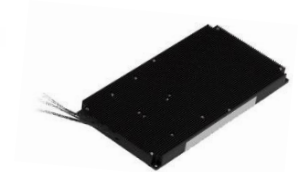


Multicast Fiber Optical Switch

(2x16, 4x16, 8x16, 16x16, up to 168x168)

The MCSW series of Multicast Fiber Optical Switches connects any number of optical inputs to any outputs with little optical loss and in a fully non-blocking and conflict-free configuration flexibility way. It is passive that transmits data independent of speed up to 100GHz. The MCSW integrates fiber splitters, optical amplifiers, and optical switches to form an NxM multicast switch, in which N and M can be 1 to 168 channels. It is available in a compact module or net-ready rackmount with ethernet and a user-friendly GUI control interface. Since different type amplifier is used to cover the required wavelength, the price is sensitive to the wavelength band selection.

The order table includes a list of standard control interfaces. Additionally, we provide a list of commands to assist customer engineers in coding. For those who require it, we offer a code-writing service for customer interfaces at an additional charge.



Features

- Low Latency
- High Reliability
- Compact
- Tap Monitoring

Specifications ^[1]

Parameters		Min	Typical	Max	Unit
Operating Wavelength		1310	1540	1620	nm
Insertion Loss		-5		1	dB
Latency ^[1]		5		50	dB
Return Loss			45		dB
Cross Talk On/Off Ratio			55		dB
PDL				0.05	dB
Switching Time	MEMS	0.1	10	20	ms
	CL	1	10	50	μs
	NS	10	100	100	ns
Switch Durability		10 ¹³			cycle
Attenuation Range ^[2]		35			dB
Optical Power				500	mW
Operating Temperature		0		70	°C
Storage Temperature		-40		85	°C
Working Power		DC: 12~48V; AC: 110~220V (50/60 Hz)			
Fiber Type		SMF-28 or equivalent			

Notes:

- [1]. Fiber length delay out from the front panel
- [2]. Output power control option

Applications

- Reduce Network Opex
- ROADM
- Stock Trading

Note: The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [click this link](#):

Multicast Fiber Optical Switch

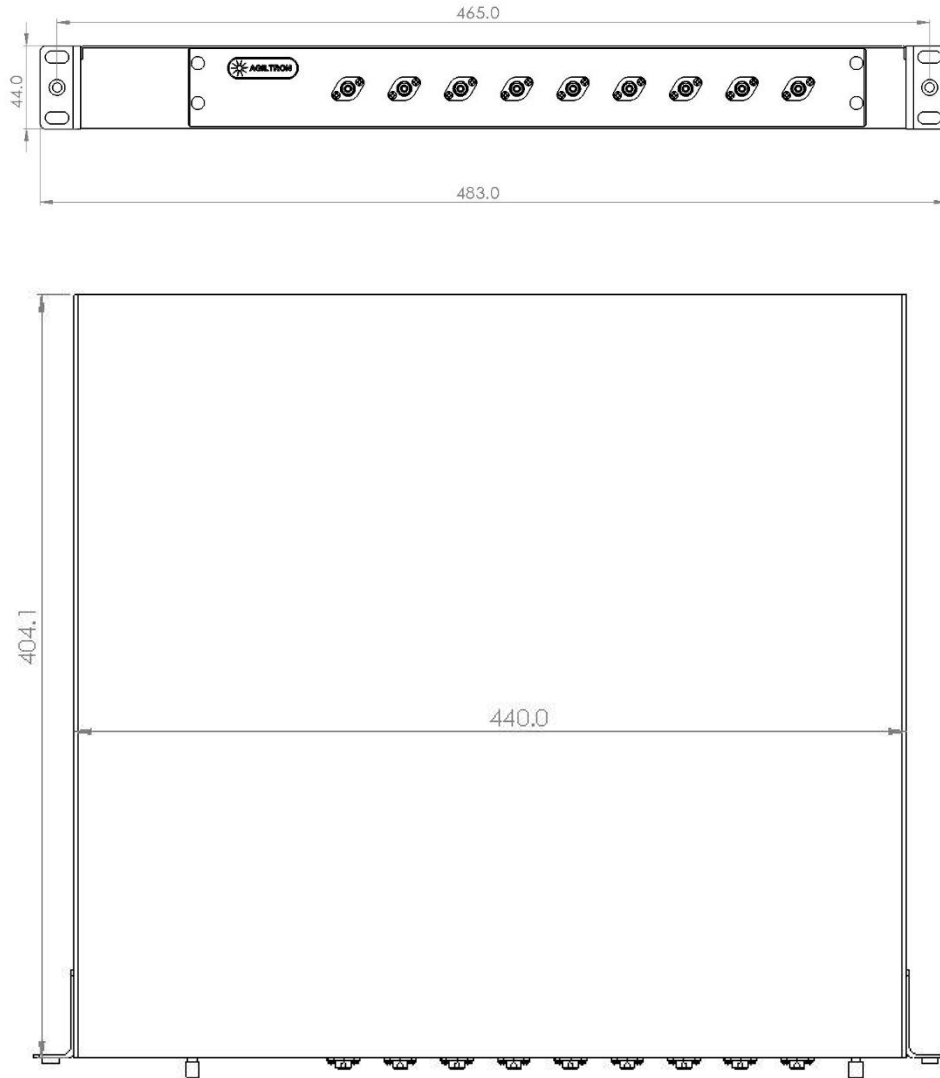
(2x16, 4x16, 8x16, 16x16, up to 168x168)

Mechanical Dimensions (Unit: mm)

Standard network rack Box: The height is related connector selection, we will select the minimum height.

Module: the size is related to the fiber port counts

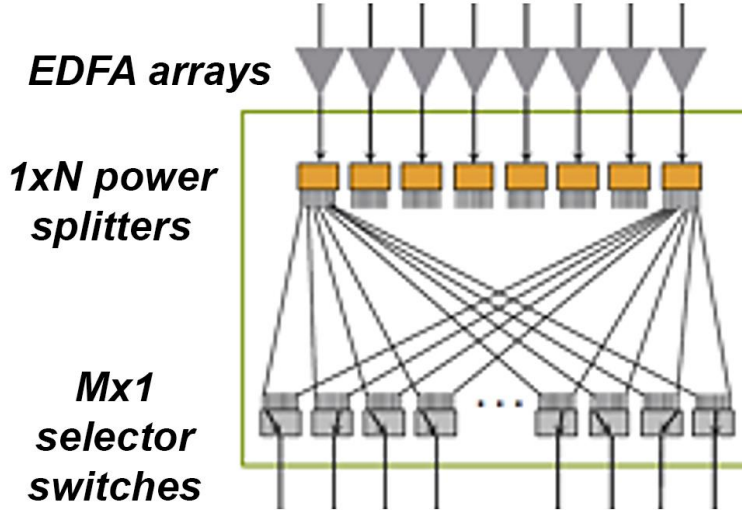
1U Rack Mount



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Optical Diagram (2x4 Example)



Ordering Information

Prefix	Input	Output	Wavelength	Amplifier ^[1]	Package ^[2]	Speed	Control ^[3]	Fiber Type	Fiber Length	Connector
MCSW-	2 = 2 3 = 3 4 = 4 8 = 8 10 = A 12 = B Special = 0	2 = A2 3 = A3 4 = A4 10 = 10 12 = 12 14 = 14 26 = 26 MN = MN Special = 00	C-band = 5 1310 = 3 L-band = 6 C+L = 7	No = 1 Yes = 2	Module = 1 Rack = 2	50ms = 1 10µs = 2 100ns = 3 50ns = 4	RS232 = 1 Ethernet = 2	SM28 = 1 Special = 0	0.5m = 1 1m = 2 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 LC/PC = 7 Duplex LC/PC = 8 LC/APC = A LC/UPC = U MPO = Y Special = 0

[1]. Using an amplifier, the insertion loss is set at zero for all channels. Without amplifier, the loss is splitting ratio of an income signal

[2]. Rack Mount Depth ~ 430mm.

Note:

- ☐ Number of ports (MN) can be up to 168

Multicast Fiber Optical Switch

(2x16, 4x16, 8x16, 16x16, up to 168x168)

Questions and Answers

Q: If the device were to fail, would the switch continue to pass the fiber light through the switch as configured before failure? When power is restored, does the IN/OUT configuration before failure remain in place?

A: This depends, if one mirror fails, it only affects the light go through that mirror. Yes, when power back up it will go to the previous points

Q: When power is restored, does the IN/OUT configuration before failure remain in place?

A: Yes, when power back up it will go to the previous flightpath

Q: If power to the device were shutoff, would the device continue to pass the fiber light as configured before failure?

A: This function is call latching. We uniquely offer MEMS latching switch but cost more.

Q: With the Ethernet Control Option, does the switch support SNMPv3

A: Yes. This internet standard protocol allows user to write their own control code

Q: With the Ethernet Control Option, what type of encryption does the SNMPv3 use?

A: MD5/DES

Q: With the Ethernet Control Option, could this device be controlled by multiple users at different locations and all users will also see the configuration updates?

A: Yes

Q: With the Ethernet Control Option, could this switch be controlled by multiple users at different locations and all users will also see the configuration updates?

A: Yes

Q: With the Ethernet Control Option, does the user need to install any software on their computer other than a web browser?

A: No