

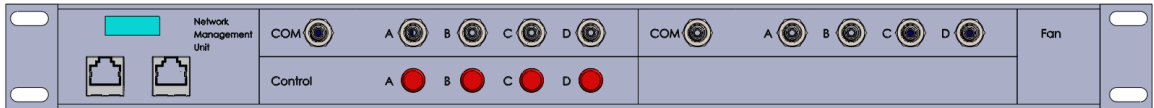
Fiber Optical A/B/C/D Switch

(Telnet Interface)

Product Description

The Fiber Optical A/B/C/D Switch with Telnet allows the user to connect the “COMMON” port among four other devices connected to the “A,” “B,” “C,” and “D” ports. The default configuration is a duplex 1U metal chassis rack. Each channel is a front pluggable module designed for easy repair. Up to 20 channels can be accommodated.

- It is an all-optical routing supporting Gigabit data rate.
- Two data channels are activated together by a single command via either a front pushbutton or remote.
- Frontpanel LED's display present position and power status.
- Remote Control access uses an Ethernet 10/100Base-T connection with Telnet commands, reachable through the local EJ45 Ethernet port. It can lockout front panel operations, obtain switch status, as well as query firmware version number, query serial number, and enable/disable autosend of switch positions.
- The unit has two power suppliers to increase reliability. EMI power inlet filter reduces the effect of power supply noise.
- We uniquely provide several switch choices: low-cost mechanical, high-reliability MEMS, fast 100 ns switching, and vibration-insensitive switch that can function live in a shock/vibration environment.
- Moreover, the system can be configured by automatically switching when the power value is lower than a user-defined threshold.



Performance Specifications

Optical Line Protection Switch	Min	Typical	Max	Unit
Operating Wavelength	850		1620	nm
Insertion Loss ^{[1], [2]}	1x4	1.0	1.3	dB
Return Loss		45		dB
Cross Talk		55	70 ^[3]	dB
PDL			0.05	dB
Optical Switching Time ⁴	100 ns	10 ms		
Repeatability			±0.05	dB
Durability ⁵	10 ⁷		10 ¹³	Cycle
Operating Temperature	0		70	°C
Storage Temperature	-40		85	°C
Interface	RJ45, Console, SFP, CLI, SSH, Telnet, SNMP			
Power Supply	DC: 12~48V; AC: 100~240V (50/60 Hz), 50W, Dual and Hot Swappable			
Alarms	Signal Degradation, Switching Event, Fan Failure, CPU at high work load			
Fiber Type	SMF-28 or equivalent			
Chassis Type	19" Rack, 1U Supports 4 pluggable with Dimension 44.5x482.6x300mm			
Internal Cooling Fan	Included			
Relative Humidity	5-95%			

[1]. Excluding connectors.

[2]. Multimode 1L measure @ Light Source CPR<14 dB.

[3]. Special order for 70dB

[4]. Optical switch speed only, there are electrical signal delay in the system

Features

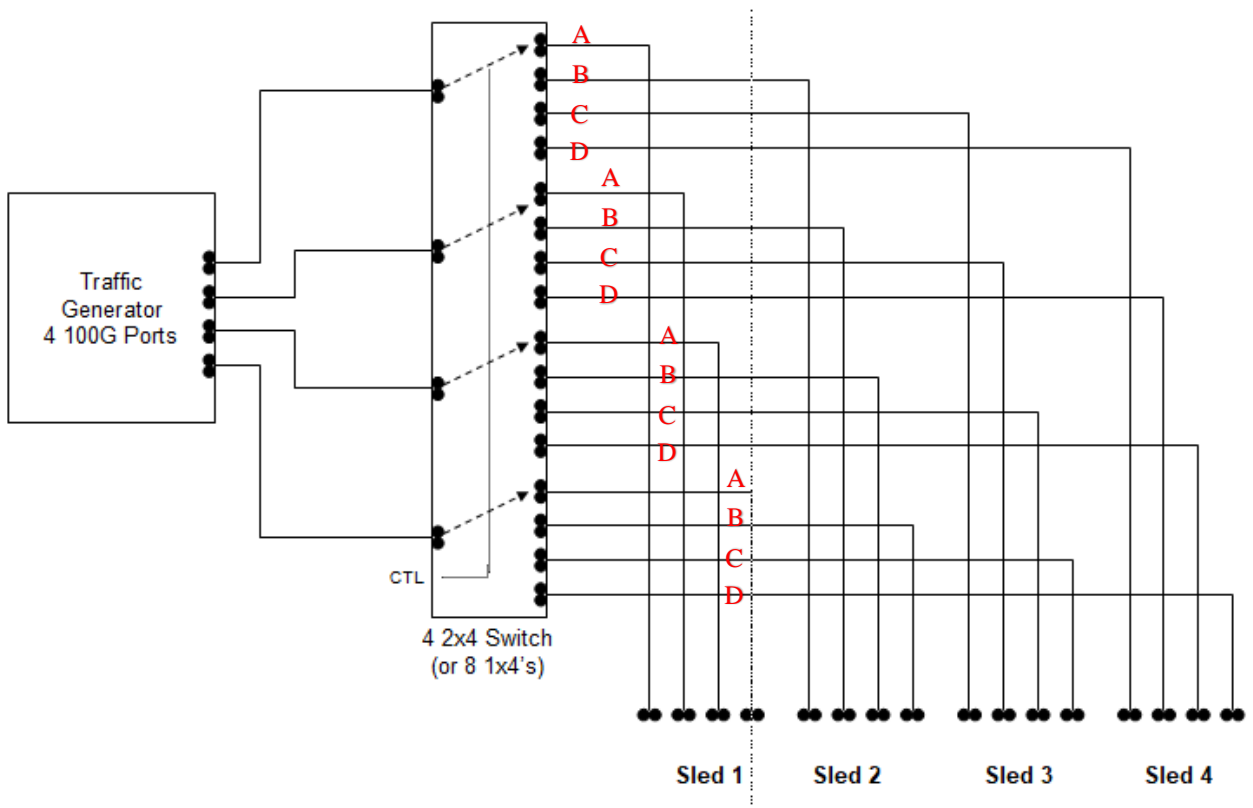
- Vibration Resist
- Dual Power
- Pluggable
- High Speed
- Easy to Use
- Low Cost
- Reliable

Applications

- Network
- Shipboard

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Optical Path Diagram (an example of 4 duplex total 8 channel ABCD)



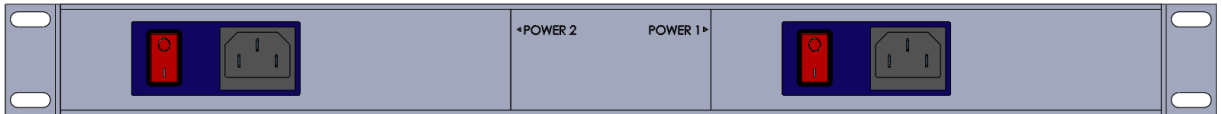
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Dimensions (Unit: mm)

DIMENSIONS WITHOUT EARS: 16.75" W x 1.75" H x 10.63" D. (42.5 x 4.4 x 27.1 cm)

DIMENSIONS WITH EARS: 19.0" W x 1.75" H x 10.63" D. (48.3 x 4.4 x 27.1 cm)

WEIGHT: Approximately 4.7 lbs. (2.2 kg)



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Electrical/Computer Connection

DISPLAY: (4) Front panel LED's display switch position and power status.

REMOTE: (1) RJ45 female connector on rear panel accepts 10/100 Base-T LAN access Ethernet for Remote Control.

POWER SUPPLY: 100VAC-240VAC, 50Hz/60Hz receptacle.

Ordering Information

Prefix	Type	Channel*	Wavelength	Package**	Fiber Type	Switch Type	Pushbutton***	Connector
ABSW-	Standard = 1 Special = 0	2 = 02 4 = 04 6 = 06 12 = 12	1270-1620nm = 1 850nm = 2 1310nm = 3 850/1310 = 4	1RU = 1 2RU = 2 3RU = 3 4RU = 4 Special = 0	SMF28e = 1 MM50/125 = 5 MM62.5/125 = 6 Special = 0	10 ms = 1 100 ns = 3 vibration resist = 9	Yes = 1 No = 0	ST Simplex = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 Duple LC = 8 Special = 0

* Each channel consists one input and four outputs.

** Duplex LC connector enables dual channel per pluggable card

*** Manual Pushbutton need at least one pluggable card

Fiber Optical A/B/C/D Switch

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