Features

- 1 x N latching optical switch (N = 4 up to 48*)
- Singlemode: 1310/1550/1625 nm or Multimode: 850/1310 nm
- Remote or local (front panel) operation
- 10BaseT, RS232 control interfaces
- GUI and TL1 interface protocol
- -48 VDC operation (100-250 VAC option available)
- Fits into FSXpert™ chassis (19"/23" EIA or WECO)
- Removable adapters for easy cleaning
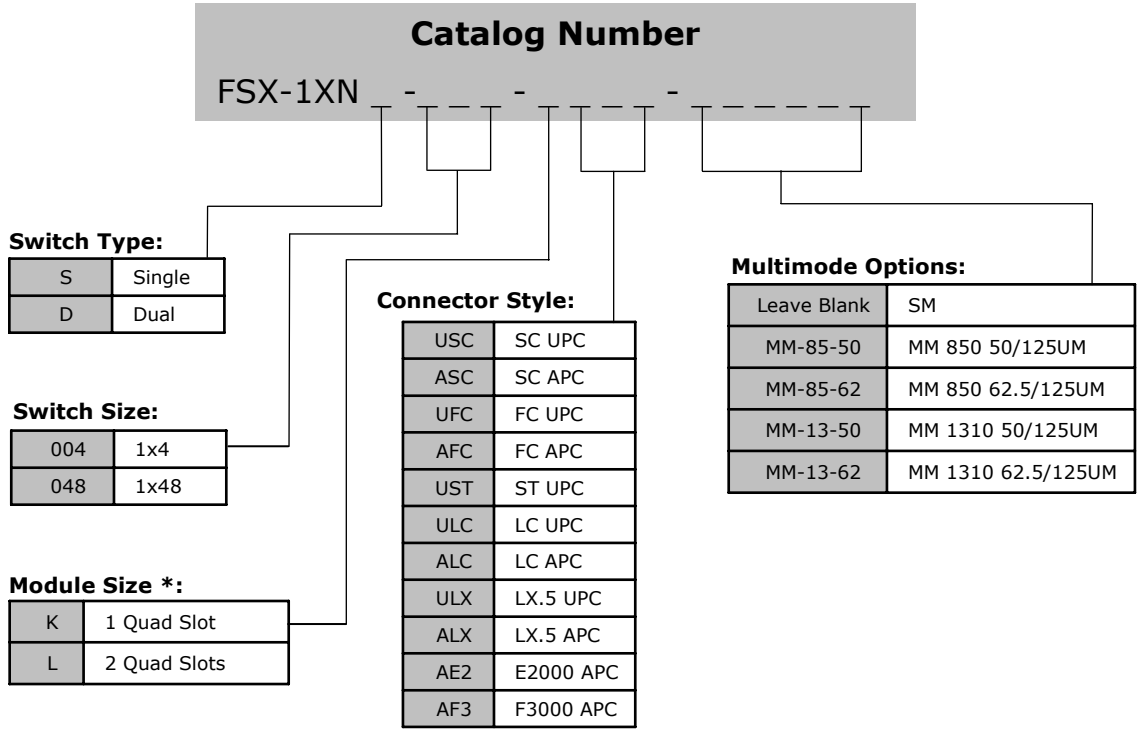- Connectors exit at an angle to prevent fiber bends

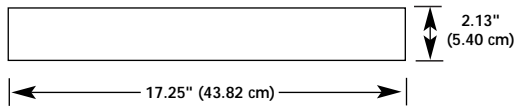* Switches up to 1x130 available on the OTAU7 rack mount optical switches

ALCON TECHNOLOGIES

FSXpert™ 1 x N Optical Switch
Ordering Information

Catalog Number

FSX-1XN __ - __ - __ - __

Switch Type:

S	Single
D	Dual

Switch Size:

004	1x4
048	1x48

Module Size *:

K	1 Quad Slot
L	2 Quad Slots

Connector Style:

USC	SC UPC
ASC	SC APC
UFC	FC UPC
AFC	FC APC
UST	ST UPC
ULC	LC UPC
ALC	LC APC
ULX	LX.5 UPC
ALX	LX.5 APC
AE2	E2000 APC
AF3	F3000 APC

Multimode Options:

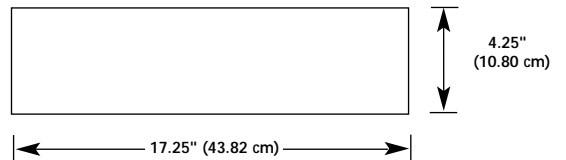| Leave Blank	SM
MM-85-50	MM 850 50/125UM
MM-85-62	MM 850 62.5/125UM
MM-13-50	MM 1310 50/125UM
MM-13-62	MM 1310 62.5/125UM

* Module Sizes:

K - One Quad slot

2.13" (5.40 cm)

17.25" (43.82 cm)

- Up to 24 ports single (standard connectors)
- Up to 48 ports single (small-form-factor – LX.5®)

L - Two Quad slots

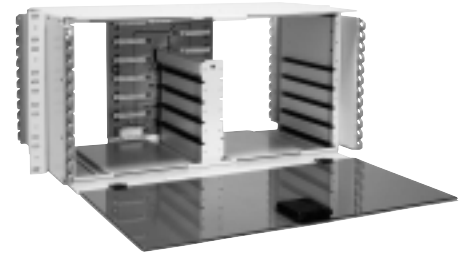4.25" (10.80 cm)

17.25" (43.82 cm)

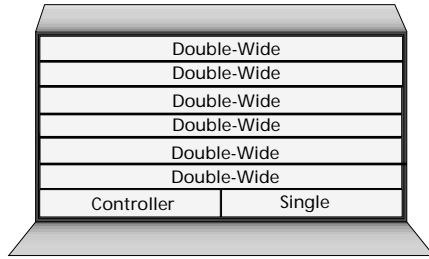- Over 24 and up to 48 ports single (standard connectors)

FSXpert™ 1 x N Optical Switch

Chassis Information

The FSXpert chassis provides power and communications through a backplane to the FSXpert modules. The chassis is available in several configurations. Multiple slots can be used to house larger modules. For instance, two double-wide slots can be used to house a quad size module.
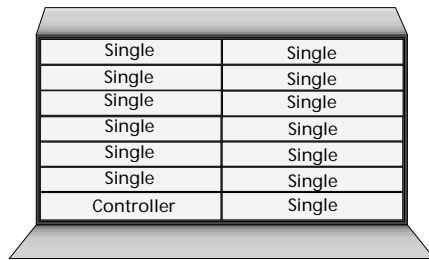
Double-Wide	
Double-Wide	
Double-Wide	
Double-Wide	
Double-Wide	
Double-Wide	
Controller	Single

Catalog Number: FSX-CHAS-5U-2S-3Q

Double-Wide	
Double-Wide	
Single	Single
Single	Single
Single	Single
Single	Single
Controller	Single

Catalog Number: FSX-CHAS-5U-10S-1Q

Single	Single
Single	Single
Single	Single
Single	Single
Single	Single
Single	Single
Controller	Single

Catalog Number: FSX-CHAS-5U-14S

Double-Wide	
Double-Wide	
Double-Wide	
Double-Wide	
Single	Single
Single	Single
Single	Single
Single	Single
Single	Single
Single	Single
Controller	Single
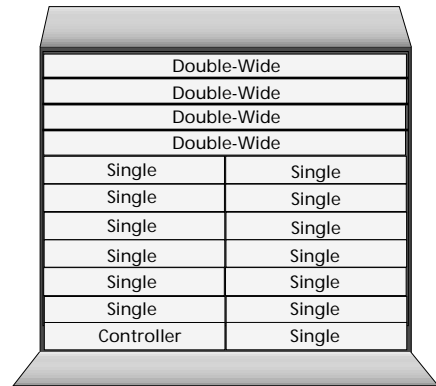
Catalog Number: FSX-CHAS-8U-14S-2Q

Single	Single
Single	Single
Single	Single
Controller	Single
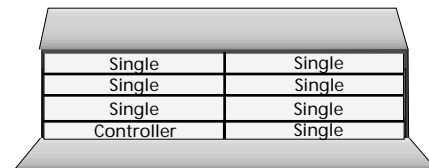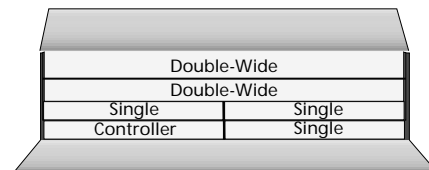
Catalog Number: FSX-CHAS-3U-8S

Ordering Notes: All chassis include mounting brackets for installation into standard 19- or 23-inch racks. Power connectors are also included. Mounting brackets for 600 mm rack mounting are also available, but must be ordered separately. Vertical cable guides (VCGs) are optional and must be ordered separately.

Double-Wide	
Double-Wide	
Single	Single
Controller	Single

Catalog Number: FSX-CHAS-3U-4S-1Q

Chassis Dimensions:

3U: 5.25" x 17.5" x 10.4" (13.34 x 44.45 x 26.42 cm)
5U: 8.75" x 17.5" x 10.4" (22.23 x 44.45 x 26.42 cm)
8U: 14.0" x 17.5" x 10.4" (35.56 x 44.45 x 26.42 cm)

FSXpert™ 1 x N Optical Switch

Specifications

OPTICAL

Insertion Loss 1x4-1x25*:	1.4 dB maximum; 0.8 dB typical
Insertion Loss 1x26-1x48*:	1.5 dB maximum; 0.9 dB typical
Return Loss Singlemode*:	50 dB minimum; 55 dB typical
Return Loss Multimode*:	16 dB minimum; 20 dB typical
Bandpass Singlemode:	1290 - 1330 nm and 1525 - 1610 nm
Bandpass Multimode:	830 - 870 nm and 1290 - 1330 nm
Switching Speed:	65 ms adjacent channels; 10 ms each additional ch.
Repeatability:	+/-0.02 dB max; +/-0.01 dB typical (over 100 cycles)
Polarization Dependent Loss:	0.08 dB maximum; 0.06 dB typical
Crosstalk:	-70 dB maximum
Optical Input Power:	300 mW maximum (continuous wave)

ENVIRONMENTAL

Operating Temperature:	0°C to +50°C
Storage Temperature:	-40°C to +70°C (5%-95% RH, non-condensing)

ELECTRICAL

Input Voltage:	-37 to -60 VDC
Input Current @ -37 VDC:	132 mA
Input Current @ -48 VDC:	80 mA
Input Current @ -48 VDC:	115 mA while switching
Voltage (AC):	88-264 VAC
Line Frequency (AC):	47-63 Hz
Input Current (AC):	0.7 A/115 VAC, 0.4 A/230 VAC

MECHANICAL

Rack Compatibility:	Fits into FSXpert™ chassis (19"/23" EIA or WECO)
Control Interface Connectors:	RS232-DB9, 10BaseT-RJ45 (with controller)
Power Connector:	7-pin plug (provided with chassis)
Fiber Optic Connectors:	SC, FC, ST®, LC, ASC, AFC, LX.5®, E2000™, F3000™
Operational Life:	10 million switch cycles

AGENCY COMPLIANCE

Safety Listing:	UL1459 / CSA22.2 / EN60950 (CE)
EMC:	FCC Part 15, Subpart B, Class A, CISPR 22

* Includes 2 UPC connector losses (add 0.1 dB IL per APC connector and 0.3 dB IL per MM connector)