

Model 7090 1xN Series Optical Switch Card Specifications

General Specifications:

Switching Time ⁽¹⁾		1x4	1x8	1x16
	Reset/Open	250ms	315ms	450ms
	Settle/Close	450ms	500ms	630ms
Maximum Switch Drive Current:		300mA	300mA	300mA
Dimensions	Width	114 mm [4.5 in]		
	Length	272 mm [10.75 in]		
	Height	32 mm [1.25 in]		
Weight		0.66kg		
Temperature	Operating	0 to 40 °C ⁽²⁾		
	Storage	-20 to 65 °C		
Relative Humidity		Up to 35 °C <80% RH Non-Condensing		
EMC		European Union Directive 89/336/EEC EN61326		
Safety		European Union Directive 73/23/EEC EN61010-1		

Referenced Switch Manufacturer Optical Specifications⁷:

	Typ.	Max.	Units
Wavelength Range	780 to 1650		nm
Switch Life	> 10 million cycles (min.)		
Insertion Loss ³	0.6	1.2	dB
Repeatability ⁵	-	+/-0.03	dB
Back Reflection (SM/MM) ⁴	-60 / -20	-55 / -	dB
Polarization Dependent Loss (PDL) ⁶	-	0.05	dB
Crosstalk	-	-80	dB

NOTES:

1. Actuation time measured from system trigger. Reset/Open refers to Channel N to Reset time. Settle/Close refers to Reset to Channel N or Channel N to Channel M time. Reset position is optically blocked.
2. At higher operating temperatures, a typical 0.1 dB and 0.3dB additive insertion loss for each channel should be expected for the strain relief and bulkhead models respectively.
3. Measured at 23 ± 5 °C.
4. Based on standard 1m pigtail length.
5. Sequential repeatability for 100 cycles at constant temperature after warm up. (Difference in Insertion Loss).
6. Measured at 1550 nm.
7. All optical specifications are referenced without connectors and are guaranteed by switch manufacturer only. Connectorization data will be provided for Insertion Loss and Back Reflection for each channel per switch card.

Specifications are subject to change without notice.

Model 7090 Switch Properties

Configuration	Single Channel, 1xN non-blocking switch				
Model Number	# of Channels	Fiber Type	Wavelength (nm)	Connector	FiberLength
7090-4-1	1x4	Single-Mode fiber (SMF-28) 9/125 each ch.	1290-1650	FC/APC	1 meter
7090-4-2BH ⁽⁸⁾	1x4	Single-Mode fiber (SMF-28) 9/125 each ch.	1290-1650	FC/SPC	Bulkhead Connector
7090-8-3	1x8	Single-Mode fiber (SMF-28) 9/125 each ch.	1290-1650	FC/APC	1 meter
7090-8-4	1x8	Multi-Mode fiber (MMF) 62.5/125 each ch.	780-1350	FC/SPC	1 meter
7090-8-5	1x8	Single Mode fiber (SMF-28) 9/125 each ch.	1290-1650	FC/SPC	1 meter
7090-16-6	1x16	Single Mode fiber (SMF-28) 9/125 each ch.	1290-1650	FC/SPC	1 meter
7090-16-7	1x16	Single Mode fiber (SMF-28) 9/125 each ch.	1290-1650	FC/APC	1 meter

NOTE:

8. This model contains a back plate with 5 FC/PC mating sleeve adapters. The fiber length is not applicable compared with the other models that are fiber pigtailed. Additional insertion loss due to the mating sleeve adapter is not accounted for in the referenced switch specification.