



SwitchPXle-1003

SwitchPXle

Automated Optical Switch

Add optical switching capability to your PXIe test system with SwitchPXle. The fast and reliable optical switch will enable automated sequential testing, saving time and streamlining the test procedures.

Key Features

- Your choice of various port configurations
- Low insertion loss providing higher performance
- Various wavelength options including 850 nm, 1310 nm & 1550 nm
- Built in position monitoring for guaranteed reliability

To find out more, get in touch with us today.

Coherent Solutions Ltd

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Ordering Information

SwitchPXle - XXXX - X - XX - NI

Model number

- 1001** = 1x1 switch, Single mode
- 1003** = 1x4 switch, Single mode
- 1004** = 2x2 crossover switch, Single mode
- 1005** = 1x2 duplex switch, Single mode
- 1006** = 1x16 switch, Single mode
- 1101** = 1x1 switch, Multimode, 50µm core
- 1103** = 1x4 switch, Multimode, 50µm core
- 1104** = 2x2 crossover switch, Multimode, 50µm core
- 1105** = 1x2 duplex switch, Multimode, 50µm core
- 1106** = 1x16 switch, Multimode, 50µm core

* Other fiber core options available. Contact us for details.

Connector Type

- FC = FC/PC
- FA = FC/APC
- SC = SC/PC
- SA = SC/APC

Number of switches

- 1 = 1 switch
- 2 = 2 switches (only available for 1x1 switch type)

Technical Specifications¹

General Specifications	SwitchPXIe
Bus Connector	PXIe
PXI slots	1001, 1003, 1004, 1101, 1103, 1105: 1 slot 1005, 1006, 1104, 1106: 2 slots
Dimensions (HxWxD)	130 mm x 20mm x 215 mm (5.1" x 0.8" x 8.5") 130 mm x 40mm x 215 mm (5.1" x 1.6" x 8.5")
Weight	~ 1 kg (~2.2 lbs)
Operating temperature range	5 °C to 45 °C (41 °F to 113 °F)
Storage temperature range	-40 °C to 70 °C (-40 °F to 158 °F)

1x1 Optical Switch	1001 SMF-28			1101* 50 µm Core MMF		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Wavelength range	1260 nm to 1650 nm			800 nm to 1420 nm		
Insertion loss ²		0.5 dB	1.0 dB		0.3 dB ⁵	0.6 dB ⁵
Return loss ⁶		50 dB			TBD	
Polarization dependent loss ²			< 0.1 dB	NA		
Wavelength dependent loss			< 0.3 dB			
Crosstalk		-80 dB			-80 dB	
Repeatability ⁴			±0.1 dB			±0.1 dB
Damage level			+27 dBm			+27 dBm
Durability	3x10 ⁷ cycles			3x10 ⁷ cycles		
Optical connector type	FC/APC, FC/PC, SC/PC, SC/APC					

1x4 Optical Switch	1003 SMF-28			1103* 50 µm Core MMF		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Wavelength range	1260 nm to 1650 nm			800 nm to 1420 nm		
Insertion loss ²		0.6 dB	0.8 dB		0.8 dB ⁵	1.2 dB ⁵
Return loss ⁶	50 dB			20 dB		
Polarization dependent loss ²			< 0.1 dB	NA		
Wavelength dependent loss			0.2 dB			
Crosstalk			-50 dB		-25 dB	
Repeatability ⁴			±0.02 dB			±0.02 dB
Damage level			+27 dBm			+27 dBm
Durability	10 ⁹ cycles			10 ⁹ cycles		
Switching time			20ms			25ms
Optical connector type	FC/APC, FC/PC, SC/PC, SC/APC					

2x2 Optical Switch	1004 SMF-28			1104* 50 µm Core MMF		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Wavelength range	1260 nm to 1650 nm			800 nm to 1420 nm		
Insertion loss ²		0.8 dB	1.0 dB		0.8 dB ⁵	1.0 dB ⁵
Return loss ⁶		55 dB			TBD	
Polarization dependent loss			< 0.05 dB	NA		
Wavelength dependent loss			< 0.25 dB			
Crosstalk		-55 dB			-50 dB	
Repeatability ⁴			±0.02 dB			±0.02 dB

Damage level			+27 dBm			+27 dBm
Durability	3x10 ⁷ cycles				3x10 ⁷ cycles	
Optical connector type	FC/APC, FC/PC, SC/PC, SC/APC					

1x16 Optical Switch	1006 SMF-28			1106* 50 µm Core MMF		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Wavelength range	1260 nm to 1650 nm			800 nm to 1420 nm		
Insertion loss ²			1.0 dB			1.6 dB ⁵
Return loss ⁶	50 dB			20 dB		
Polarization dependent loss ²			0.15 dB	NA		
Wavelength dependent loss			0.30 dB			
Crosstalk			-50 dB			-25 dB
Repeatability ⁴			±0.05 dB			±0.04 dB
Damage level			+27 dBm			+27 dBm
Durability	10 ⁹ cycles			10 ⁹ cycles		
Optical connector type	FC/APC, FC/PC, SC/PC, SC/APC					

1x2 Duplex (2x4) Optical Switch	1005 SMF-28			1105* 50 µm Core MMF		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Wavelength range	1260 nm to 1650 nm			800 nm to 1420 nm		
Insertion loss ²		0.5 dB	1.0 dB		0.3 dB ⁵	0.6 dB ⁵
Return loss ⁶		50 dB			TBD	
Polarization dependent loss ²			< 0.1 dB	NA		
Wavelength dependent loss			< 0.3 dB			
Crosstalk		-80 dB			-80 dB	
Repeatability ⁴			±0.1 dB			±0.1 dB
Damage level			+27 dBm			+27 dBm
Durability	3x10 ⁷ cycles			3x10 ⁷ cycles		
Optical connector type	FC/APC, FC/PC, SC/PC, SC/APC					

NOTES

- 1 Specifications are valid at 23 °C ± 3 °C
 - 2 Excluding connectors. Add 0.2dB for SMF (0.1dB for MMF) per connector
 - 3 Power off isolation is same as crosstalk
 - 4 Repeatability is defined after 100 cycles
 - 5 IL guaranteed at 850 nm and 1310 nm, 23°C
 - 6 With FC/APC connectors
- * Preliminary specs

Configuration diagrams

