



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

General enquiries: info@coherent-solutions.com  
 Technical support: support@coherent-solutions.com  
 Tel: +64 9 478 4849  
 Fax: +64 9 478 4851

[www.coherent-solutions.com](http://www.coherent-solutions.com)

### Ordering Information

SwitchPXle - XXXX - X - XX

**Configuration number**

- 1001** = 1x1 switch, Single mode
- 1002** = 1x2 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
- 1007** = 2x2 bypass switch, Single mode
- 1101** = 1x1 switch, Multimode, 50µm core
- 1102** = 1x2 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

**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)

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



## Technical Specifications<sup>1</sup>

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			850 nm / 1300 nm		
Insertion Loss <sup>2,4</sup>		0.5 dB	1.0 dB		0.3 dB	0.6 dB
Return loss		50 dB			TBD	
Polarization dependent loss <sup>2</sup>			< 0.1 dB		NA	
Wavelength dependent loss			< 0.3 dB			
Crosstalk		-80 dB			-80 dB	
Repeatability <sup>3</sup>			±0.1 dB			±0.1 dB
Damage level			+27 dBm			+27 dBm
Durability	3x10 <sup>7</sup> cycles			3x10 <sup>7</sup> cycles		
Connectors	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			850 nm / 1300 nm		
Insertion Loss <sup>2,4</sup>		0.6 dB	0.8 dB		0.8 dB	1.0 dB
Return loss	50 dB					-20 dB
Polarization dependent loss <sup>2</sup>			< 0.1 dB		NA	
Wavelength dependent loss			0.2 dB			
Crosstalk			-50 dB		-25 dB	
Repeatability <sup>3</sup>			±0.02 dB			±0.02 dB
Damage level			+27 dBm			+27 dBm
Durability	10 <sup>9</sup> cycles			3x10 <sup>7</sup> cycles		
Connectors	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			850 nm / 1300 nm		
Insertion Loss <sup>2,4</sup>		0.8 dB	1.0 dB		0.8 dB	1.0 dB
Return loss		-55 dB				
Polarization dependent loss <sup>2</sup>			< 0.05 dB		NA	
Wavelength dependent loss			< 0.25 dB			
Crosstalk		-55 dB			-50 dB	

Repeatability <sup>3</sup>			±0.02 dB			±0.02 dB
Damage level			+27 dBm			+27 dBm
Durability	3x10 <sup>7</sup> cycles				3x10 <sup>7</sup> cycles	
Connectors	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			850 nm / 1300 nm		
Insertion Loss <sup>2,4</sup>			1.0 dB			1.6 dB
Return loss			50 dB			20 dB
Polarization dependent loss <sup>2</sup>			0.15 dB	NA		
Wavelength dependent loss			0.30 dB			
Crosstalk			-50 dB			-25 dB
Repeatability <sup>3</sup>			±0.05 dB			±0.04 dB
Damage level			+27 dBm			+27 dBm
Durability	10 <sup>9</sup> cycles				10 <sup>9</sup> cycles	
Connectors	FC/APC, FC/PC, SC/PC, SC/APC					

1x2 duplex (2x4) Optical Switch	1105 SMF-28			1105 50 µm Core MMF		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Wavelength range	1260 nm to 1650 nm			850 nm / 1300 nm		
Insertion Loss <sup>2,4</sup>		0.5 dB	1.0 dB		0.3 dB	0.6 dB
Return loss		50 dB				
Polarization dependent loss <sup>2</sup>			< 0.1 dB	NA		
Wavelength dependent loss			< 0.3 dB			
Crosstalk		-80 dB			-80 dB	
Repeatability <sup>3</sup>			±0.1 dB			±0.1 dB
Damage level			+27 dBm			+27 dBm
Durability	3x10 <sup>7</sup> cycles				3x10 <sup>7</sup> cycles	
Connectors	FC/APC, FC/PC, SC/PC, SC/APC					

**Notes:** <sup>1</sup> Specifications are valid at 23 °C ± 3 °C. <sup>2</sup> Excluding connectors. <sup>3</sup> Repeatability is defined after 100 cycles. <sup>4</sup> IL is measured at specified wavelength, 23 °C. For any special wavelength request, please contact us.

## Configuration diagrams

