Rev. 1.0 - November 14

4 x 4 Industrial Bypass Optical Switch

OSW Mode	Optical Path	
Normal Mode	TX1→A0	TX1 — A0
	RX1→A1	RX1 — A1
	TX2→B0	TX2 — B0
	RX2→B1	RX2 — B1
Bypass Mode	TX1→RX2	TX1 — A0, RX1 — A1
	TX2→RX1	TX2 — B0, RX2 — B1

Description:

The 4x4 Industrial Bypass Optical Switch utilizes fiber-to-fiber technology over an angled surface to achieve ultra-low losses and crosstalk. It is suitable for all bi-directional protection switching applications where premise-side connectivity is not required in the bypass state. Compact and competitive cost, this optical switch provides excellent performance on your network. Fibernet 4x4 Industrial Bypass Optical Switch fully complies with RoHS Directive 2002/95/EC (2008/385/EC).

Features:

- Fast switchover time
- Compact Size
- Low Loss and Return-Loss
- Available in Single Mode / Multi Mode
- Non-Latching Type

Benefits:

- Network resiliency during power down at specific node

Applications:

- Node Bypass Protection
- Network Maintenance
- Industrial Ethernet Ring Switch
- SDH ADM Ring

Specifications:

Parameter	9µm Core Single Mode			50µm or 62.5µm Core Multi Mode		
	Min.	Typ.	Max.	Min.	Typ.	Max.
Wavelength range (nm)	1260-1630			850/1300		
Straight Insertion loss (dB)		0.5	1.0		0.4	0.8
Bypass Insertion loss (dB)		0.8	1.6		0.6	1.3
Return Loss (dB)		-50				
Crosstalk (dB)		-80			-80	
WDL (dB)		0.3				
PDL (dB)		0.1				
Switching time (ms)		5			5	
Repeatability (dB)			+/-0.1			+/-0.1
Optical Input Power (mW)			500			500
Power Supply (VDC)	4.5	5	5.5	4.5	5	5.5
Power Consumption (mW)	130		155	130		155
Switching Life Expectancy (cycles)	3×10^7			3×10^7		
Operating Temperature (^{O}C)	-5		70	-5		70
Operating Humidity (%RH)	5		85	5		85
Dimensions HxWxL (mm)	22x108x126					
Weight (g)	635					

Ordering Information:

The product is available with a range of standard options, to specify your need, simply choose one option from the column on the right of each character.

FOBP-4FTC

Fiber Type	
SM	SM
OM2	62.5/125um
OM3	50/125um

Connector	
SC	SC/UPC
SA	SC/APC
LC	LC/UPC

Example: **FOBP-4SMSC** represents 4 x 4, SingleMode Optical Bypass switch with SC/UPC connectors.