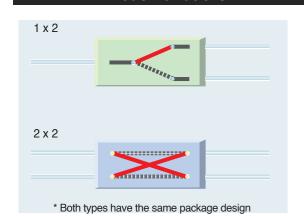


1x2, 2x2 OPTICAL SWITCH MODULE **OSW-20**



Santec's mechanical fibre optic switch is a compact device suitable for a wide range of applications; for example, Add/Drop Multiplex Systems, Network Fault Protection, Automated Measurement/Test Systems. It has low insertion loss, low PDL and excellent repeatability and includes a latching mechanism which ensures the switch status remains unchanged during power failure. In addition, both input and output fibres are located on the same side for ease of board design. The package is hermetically sealed to eliminate degradation due to environmental effects and ensure long term reliability.

Model Variations



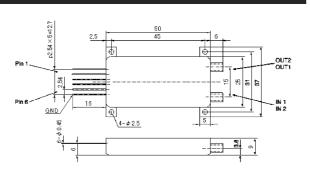
Features

- ► High reliability (Hermetically Sealed)
- ► Fiber In/Out Position on one side
- Low loss, low PDL
- ► Excellent repeatability
- ► Electricity failure tolerant
- ► Compact size suitable for system integration

Applications

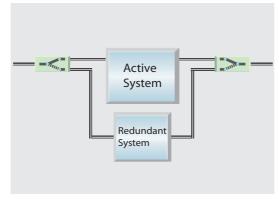
- ► Add/Drop multiplex system
- Network fault protection
- Signal monitoring
- Doptical auto measurement and adjustment system

Dimensions

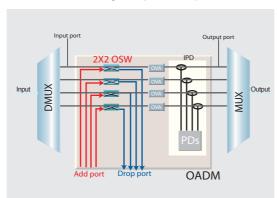


Unit: mm

Typical Applications



1x2: Path change for system fault protection



2x2: Bypassing for Add/Drop applications

■ Specifications

Parameter		Unit	1 x 2	2 x 2	Notes
Insertion Loss	Max.	dB	0.8	1.0	
Repeatability	Max.	dB	± 0.02		
Crosstalk	Min.	dB	60		
Optical Input Power	Max.	mW	100		
Return Loss	Min.	dB	50		
PDL	Max.	dB	0.15		
Switch Time	Max.	msec	10		
Electric Power to Switch	Max.	mW	200		No holding power needed for latching
Operating Temperature		°C	0 to +70		
Storage Temperature		°C	– 40 to	0 +75	
Maximum Relative Humidity		%	8	5	

■ Pin Assignment

Pin No.	Parameter	Notes				
		1 X 2	2 X 2			
1	Control 1	If control voltage is applied across	If control voltage is applied across			
		pins 1 and 3 then In -> Out 1	pins 1 and 3 then In 1 -> Out 1 & In 2 -> Out 2			
2	Control 2	If control voltage is applied across	If control voltage is applied across			
		pins 2 and 3 then In -> Out 2	pins 2 and 3 then In 1 -> Out 2 & In 2 -> Out 1			
3	GND	Ground used for switching	Ground used for switching			
4-5	Monitor	Used to test position of switch.	Used to test position of switch			
		For the condition; In -> Out 1 : Open Circuit	For the condition;			
		In -> Out 2 : Closed Circuit	In 1 -> Out 1 & In 2 -> Out 2 : Open Circuit			
			In 1 -> Out 2 & In 2 -> Out 1 : Closed Circuit			
6	Case ground	Case ground	Case ground			

Ordering Code

