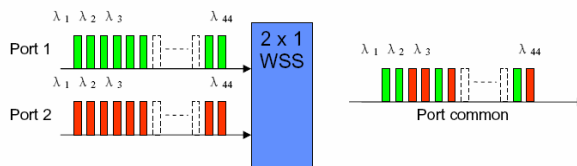


Wavelength Selective Switch 1x2/2x1

(patents pending)

Product Description

The Agiltron Wavelength Selective Switch (WSS) is used to dynamically attenuate, block, and route wavelengths independently. Any wavelength can be routed from a common port to two other ports in any order and vice versa. The optical power at any wavelength channel can be attenuated individually by EVOA or blocking. Based on a proprietary optical design, Agiltron WSS offers unprecedented dynamic channel reconfiguration performance of low loss and PDL, high isolation, and high speed. There is no moving part and the modules have a long lifetime reliability due to the adoption of liquid crystal technology and free space optics. The modules cover C and L bands with a channel space of 50 GHz and/or 100 GHz. The module can handle up to 100 channels. This is an extremely cost effective subsystem for the next generation of optical communications networks.



Performance Specifications

Parameter	Min	Typical	Max	Unit
Wavelength Range	C Band and L Band			
Insertion Loss (channel)		5.5	6	dB
Insertion Loss Uniformity (port)		1	1.5	dB
Pass Band IL Ripple (channel)		0.5	0.7	dB
Polarization Dependent Loss		0.4	0.5	dB
Polarization Mode Dispersion			0.2	ps
Switch Isolation	35			dB
Optical Blocking State Isolation	40			dB
Return Loss	45	50		dB
Channel ITU Shift			4.5	GHz
Switching Time			60	ms
Chromatic Dispersion	-10		+10	ps/nm
Group Delay Ripple	-2.5		2.5	ps
EVOA Attenuation Range	15			dB
EVOA Attenuation Step			0.1	dB
EVOA Repeatability			±0.5	dB
Optical Power Handling		200	250	mW
Operating Temperature	-5		70	°C
Storage Temperature	-40		85	°C
Fiber Type	Corning SMF28			
Package Dimension (Max.)	(L)180x(W)70x(H)20 mm			

Features

- Multiplexer/Demultiplexer
- Dynamic power equalization
- Wavelength blocker
- Any wavelength/any port
- Low insertion loss and PDL
- Flat and wide pass bands
- C band and/or L band
- Ultra-high reliability
- Compact size
- Low cost
- Low power consumption

Applications

- Reconfigurable Optical Add/Drop
- Wavelength Routing
- Optical Cross Connection

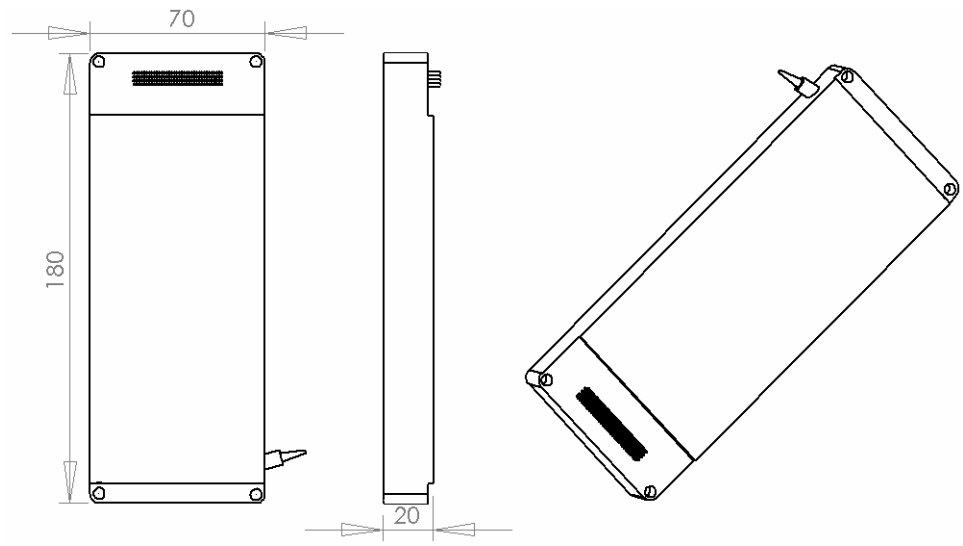


Wavelength Selective Switch

Electrical Requirements

RS-232 interface and Windows™ GUI

Mechanical Footprint Dimensions (mm)



Ordering Information

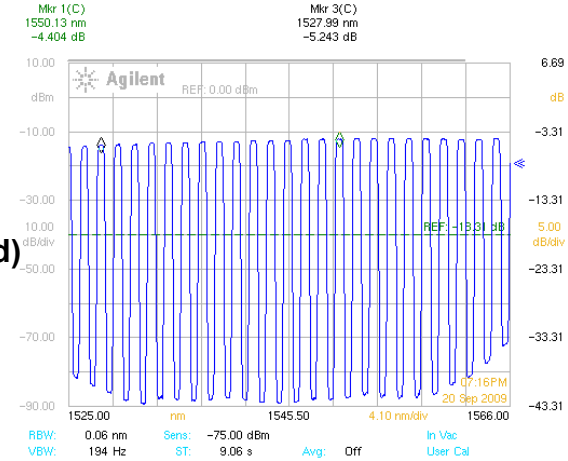
WSSA-	Port	Wavelength	ITU Channel	Spacing	Fiber Type	Fiber Length	Connector
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	3 ports=03 5 ports=05 Special=00	C band=C L band=L Special=0	40 channels=40 80 channels=80 Special=00	50G=5 100G=1 Special=0	SMF-28 250um=1 SMF-28 900um=3 Special=0	0.25m=1 0.5m=2 1.0m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0



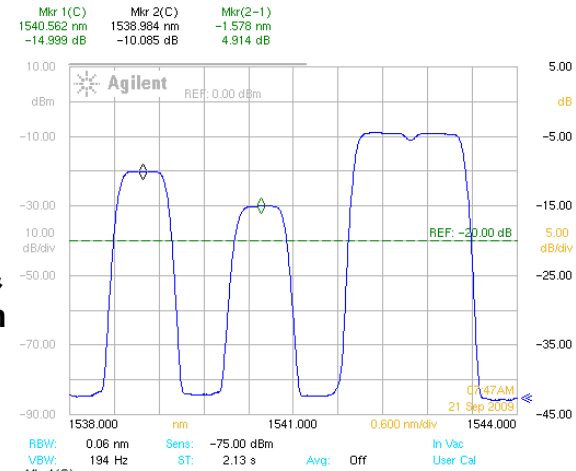
Wavelength Selective Switch

Typical Performance Charts

**Full Band
(interleaved)**



**Arbitrary
Channel
Selection &
Attenuation**



**Passband
Ripple**

