

## NanoSpeed<sup>™</sup> 1x2 Solid-State Variable Fiberoptic Splitter

(Protected by U.S. patent 7,403,677B1 and pending patents)

### **Product Description**

The NS 1x2 Solid-State Variable Fiber Optic Splitter splits an incoming optical signal among two output optical fibers with an electrically variable power ratio. This is achieved using a patent pending non-mechanical configuration. When the electrical control signal is removed, the splitter latches to a pre-determined ratio with a standard version of 100:0. The device is bidirectional, transmitting light in both direction simultaneously. The all-solid-state crystal design eliminates the need for mechanical movement and organic materials. The NS Fiber Optic Splitter is designed to meet the most demanding switching requirements of ultra-high reliability, fast response time, and continuous operation.

#### **Performance Specifications**

NS 1x2 Sp	litter		Min	Typical	Max	Unit
Central Wavelength			780		2000	nm
Insertion Loss <sup>[1]</sup> 1260~1650nm 900~1260nm 760~900nm			0.6	1	dB	
		900~1260nm		0.8	1.3	dB
		760~900nm		1	1.5	dB
Cross Talk at 100% splitter		20	25	35	dB	
Splitting Variation	Output 1		100~0			%
	Output 2		0~100			%
	Туре			Continuo	us	
Response Time (Rise, Fall)					300	Ns
Repetition Rate [2]			DC	5		kHz
Polarization Dependent Loss				0.1	0.35	dB
IL Temperature Dependency				0.25	0.5	dB
Polarization Mode Dispersion				0.1	0.2	Ps
Return Los	Return Loss			50	60	dB
Operating Temperature			-5		70	°C
Optical Power Handling [3]				300		mW
Storage Temperature			-40		85	°C
Package Dimension				65.8x8.5x	8.4	mm
[1] Exc	luding c	connectors.				

[2] Standard driver. High repetition rate (up to 100 KHz) is available with special circuit, please call us.

[3] Defined at 1310/1550nm. For the shorter wavelength, the handling power may be reduced.

#### **Features**

- · Solid-State High Speed
- · Ultra-High Reliability
- Low Insertion Loss
- Compact

#### **Applications**

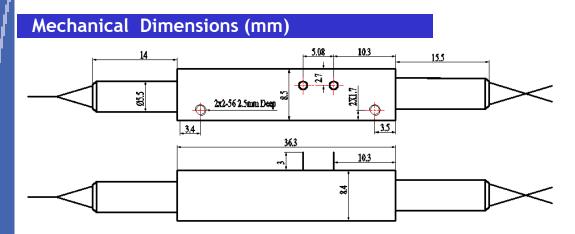
- · Optical Channel Blocking
- System Monitoring
- Instrumentation

Revised on 07-18-16

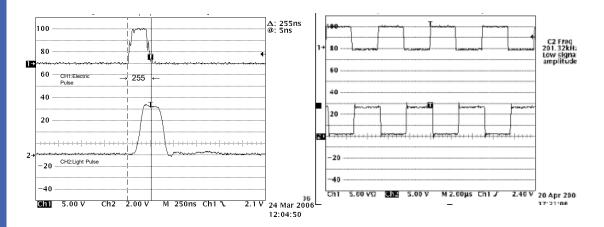
15 Presidential Way, Woburn, MA 01801 Tel:(781)935-1200 Fax:(781)935-2040



# NanoSpeed<sup>TM</sup> 1x2 Solid-State Variable Fiberoptic Splitter



### Speed and Repetition Measurement



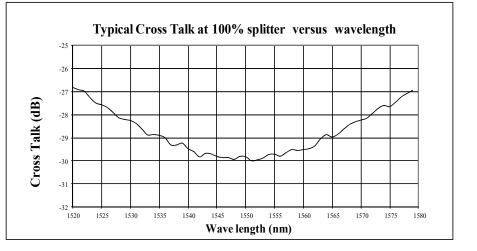
15 Presidential Way, Woburn, MA 01801 Tel:(781)935-1200 Fax:(781)935-2040

www.agiltron.com



# NanoSpeed<sup>TM</sup> 1x2 Solid-State Variable Fiberoptic Splitter

### Bandwidth Measurement



### Ordering Information

NSSW-	30		1	1	1			
	Туре	Wavelength	Configuration	Package	Fiber Type	0	Fiber Length	Connector
	Splitter=30	1060=1 L Band=2 1310=3 1550=5 780=7 850=8 980=9			SMF28e=1 Special=0	Bare fiber=1 900um loose tube=3 Special=0	0.25m=1 0.5m=2 1.0 m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC/PC=7 LC Duplex=8 LC/APC=9 Special=0

15 Presidential Way, Woburn, MA 01801 Tel:(781)935-1200 Fax:(781)935-2040

www.agiltron.com