

## Agiltron 1x1,1x2纳秒级超快光开关



### 产品描述:

Agiltron CrystaLatch 系列 筴晓光子引进的高性价比 CrystaLatch 1x1, 1x2 CL 系列 1x1, 1x2 带尾纤光开关可以将输入光通道和被选的输出光通道连接起来，实现不同光路之间的切换。光路间的切换基于已获得专利权的结构设计和电信号驱动来实现。本产品具有独特的闭锁功能，从而保证光路在断电后仍稳定可靠的运行。全固态设计的 CL 系列 1x1, 1x2 带尾纤光开关具有低插入损耗，高消光比和良好的重复性等优点。该产品响应速度快，可以满足大部分光开关应用领域的需求，实现光路的不间断、无故障传输，对复杂环境如机械震动、冲击，和温度冲击具有优异的适应能力。

### 产品特点:

- 无异动部件，使用寿命长
- 切换速度超快
- 极其稳定的锁存模式
- 低功耗
- 一端出纤-易于绕纤
- 具有超常的可靠性和稳定性

### 产品应用:

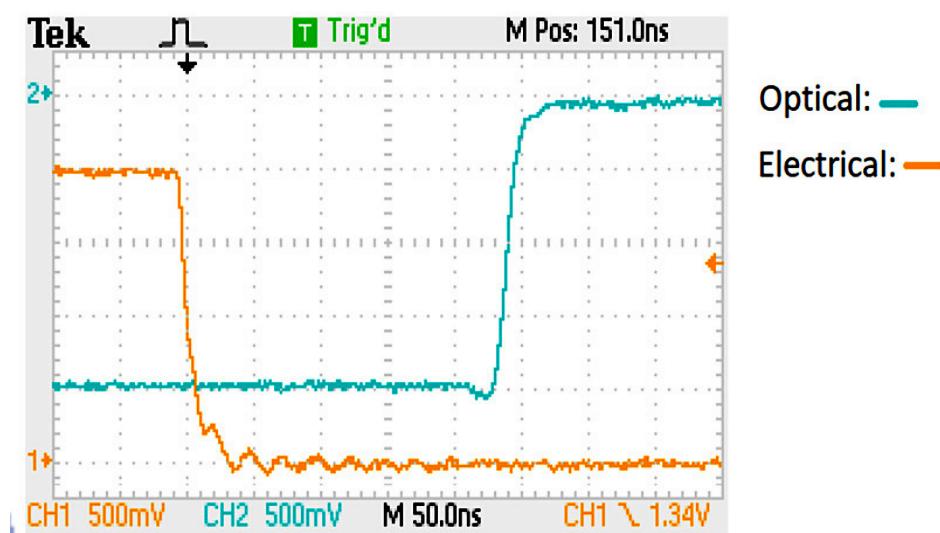
- 光路切换
- 高速保护系统
- 系统监控
- 测试测量
- 光纤传感系统



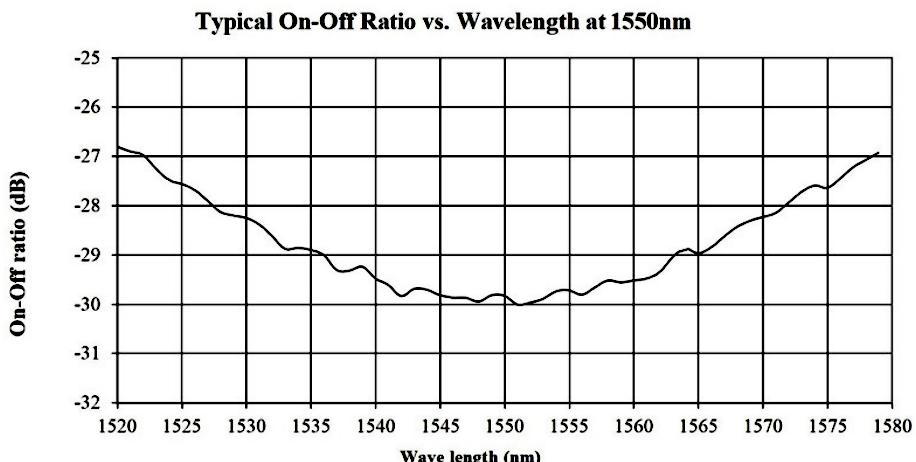
## 产品参数:

NS系列 1X1光开关/调制器		最小值	典型值	最大值	单位
工作波长		780		1800	
插入损耗	1260-1800nm		0.6	1.0	dB
	960-1260nm		0.8	1.3	
	760-960nm		1.0	1.5	
隔离度		20	25		dB
偏振相关损耗			0.15	0.35	dB
插入损耗温度相关性			0.25	0.5	dB
偏振模式色散			0.1	0.3	ps
回波损耗		45	50		dB
响应速度(上升沿, 下降沿)				300	ns
重复频率		DC	2k		Hz
工作温度		-5		70	°C
光功率限制			300	500	mW
储存温度		-40		85	°C
封装尺寸		57.5x7.35x9.7			mm

## 典型响应速度测量:



## 典型带宽测量:



## 光路驱动表:

Optical Path	TTL Signal
ON for normal-open or OFF for normal-dark	L (< 0.8V)
OFF for normal-open or ON for normal-dark	H (> 3.5V)

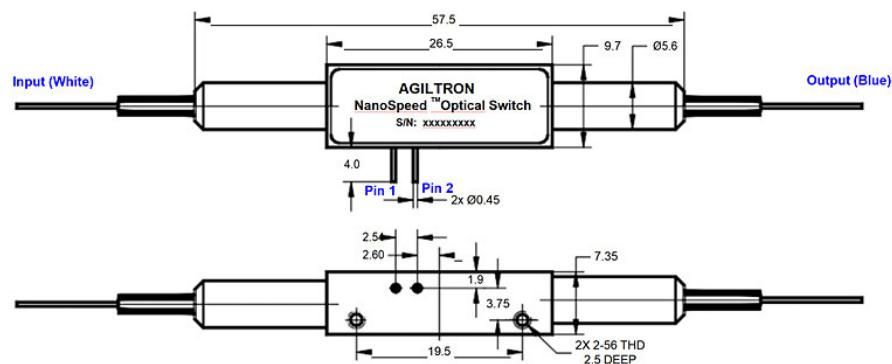
## 驱动电路板:

Maximum Repetition Rate	Part Number (P/N)
5kHz	SWDR-11a251111
100kHz	SWDR-11a261111
500kHz	SWDR-11a291111

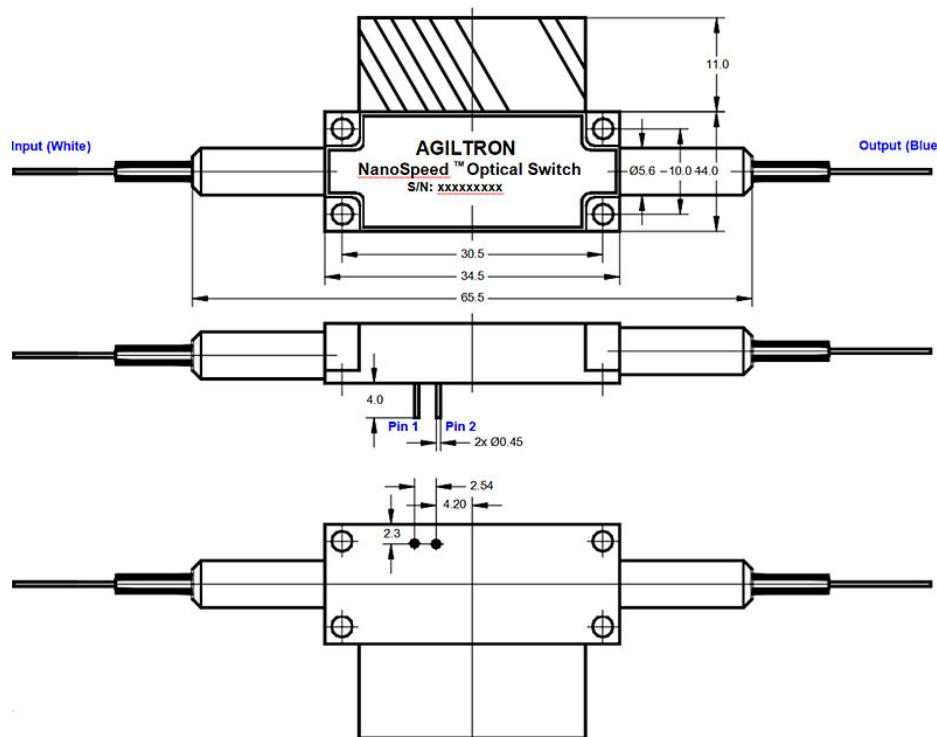
备注: 对于自己设计其驱动电路的客户, 他们负责光学性能。有关更多技术信息, 请与我们联系。

## 封装及尺寸:

### 普通功率版本



## 高功率版本



## 订购信息：

	11						
	Type	Wavelength [1]	Configuration	Fiber Type			
NSSW=Normal Power	1x1=11	1060nm=1	Normally open /	SMF-28=1	Bare Fiber=1	Fiber Length	Connector [2]
NHSW=2W		2000nm = 2	Single Stage= 11	HI1060=2	900um Tube=3	0.25m=1	None=1
NHHW=5W		1310nm=3	Normally Opaque/	HI780=3	Special=0	0.5m=2	FC/PC=2
		1410nm=4	Single Stage=21	PM1550=5		1.0m=3	FC/APC=3
						Special=0	SC/PC=4
		1550nm=5	Normally open/				
			Dual Stage= 12	PM980=9			SC/APC=5
			Normally Opaque/				
			Dual Stage=22				
		1625nm=6		Special=0			
		850nm=8					ST/PC=6
		780nm=7					LC/PC=7
		650=E					Duplex LC=8
		550=F					LC/APC=9
		400=G					Special=0
		Special=0					

## 常见问题解答：

Q: Does NS device drift over time and temperature?

A: NS devices are based on electro-optical crystal materials that can be influenced to a certain range by the environmental variations. The insertion loss of the device is only affected by the thermal expansion induced miss-alignment. For extended temperature operation, we offer special packaging to -40 -100 0C. The extinction or cross-talk value is affected by many EO material characters, including temperature-dependent birefringence, V<sub>p</sub>, temperature gradient, optical power, at resonance points (electronic). However, the devices are designed to meet the minimum extinction/cross- talk stated on the spec sheets. It is important to avoid a temperature gradient along the device length.

Q: What is the actual applying voltage on the device?

A: 100 to 400V depending on the version.

Q: How does the device work?

A: NS devices are not based on Mach-Zander Interference, rather birefringence crystal's nature beam displacement, in which the crystal creates two different paths for beams with different polarization orientations.

Q: What is the limitation for faster operation?

A: NS devices have been tested to have an optical response of about 300 ps. However, practical implementation limits the response speeds. It is possible to achieve a much faster response when operated at partial extinction value. We also offer resonance devices over 20MHz with low electrical power consumption.