



## CrystaLatch™ 4x4 Non-Blocking Switch Module

(Protected by U.S. patents 7224860, 6757101, and 6577430

### The Cryst

The CrystaLatch<sup>TM</sup> (CL) type 4x4 fiber optic switch connects optical channels by redirecting any incoming optical signal into any selected output fiber. This is achieved using patented non-mechanical configurations and activated via an electrical control signal. It is a truly non-blocking switching matrix. Latching operation preserves the selected optical path after the drive signal has been removed. The all solid state CL 4x4 fiber optic switch features low insertion loss, high extinction ratio, high channel isolation, and extremely high reliability and repeatability.

It is designed to meet the most demanding switching requirements of continuous operation without failure, longevity, operation under shock /vibration environment and large temperature variations, and fast response time. Comes with

**Product Description** 



## **Performance Specifications**

computer interface and software.

CL Series 4x4 Switch	Min	Typical	Max	Unit				
Operation Wavelength [1]	1520	1550	1580	nm				
operation wavetength —	1295	1310	1325	nm				
Insertion Loss [2]		1.5	2.8	dB				
Cross Talk	30			dB				
Optical Switching Speed (Rise, Fall)	5		10	μs				
Repetition Rate		2K		Hz				
Durability	10 <sup>14</sup>			cycle				
Polarization Dependent Loss		0.1	0.3	dB				
Polarization Mode Dispersion			0.2	ps				
Return Loss [2]	50			dB				
Operating Temperature	0		70	°C				
Storage Temperature	-40		85	°C				
Optical Power Handling [3]		300	500	mW				
Fiber Type	Corning SMF28							

- [1]. L band version available, please call
- [2]. Measured without connectors
- [3]. High power version available.

#### **Features**

- Non-Blocking
- High Speed
- High Reliability
- Fail-Safe Latching
- Low Insertion Loss
- Rugged
- Compact
- Direct Low Voltage Drive

## **Applications**

- Optical Signal Routing
- Network Protection
- Signal Monitoring
- Instrumentation



# CrystaLatch™ 4X4 Non-Blocking Switch Module



Driving kit with variety of control interface, such as USB, RJ45, RS232 with Windows™ GUI, is available.

## **Ordering Information**

CLSW-						
Type Wavelengt	Driver	Package		Fiber Type	Fiber Length	Connector
4x4=44 4x2=42 4x3=43 3x3=33 1310=3 1550=5 Special=0	No driving Kit=1 Driving Kit=2	Standard=1 Module in box=2 Special=0	SMF-28=1 Special=0		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 Duplex LC=8 Special=0

\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.