

# CrystaLatch™ 16x16 Fiberoptic Switch Module

## Product Description

The CL Series 16X16 fiber optic switch connects optical channels by redirecting incoming optical signals into a selected output fibers. This is achieved using patent pending non-mechanical configurations and activated via an electrical control signal. Latching operation preserves the selected optical path after the drive signal has been removed. The solid-state optical crystal design eliminates all mechanical movement and organic materials, achieving fast switching in a reliable bi-state operation. The 16X16 fiber optic switches are designed to meet the most demanding switching requirements of ultra-high reliability and fast response time.

The device is a integrated module with driving electronics and interface software. Agiltron also offers customized designs to meet special control requirements and applications.



## Performance Specifications

CL Series Mini 1x8 Switch	Min	Typical	Max	Unit
Operation Wavelength	C Band and L Band			
Insertion Loss		5	8	dB
Uniformity		0.7	3	dB
Polarization Dependent Loss		0.2	0.9	dB
Cross Talk	20	25		dB
Polarization Mode Dispersion			0.2	ps
Return Loss	50			dB
Repeatability			±0.02	dB
Switching Time (Rise, Fall)		50	200	µs
Repetition Rate		5K		Hz
Operating Temperature	-5*		65	°C
Optical Power		400		mW
Storage Temperature	-40		85	°C
Switch type	Solid-State Latching			
Fiber Type	Corning SMF28			
Package Dimension				mm

\* -40°C version is also available

## Features

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

## Applications

- Optical Signal Routing
- Network Protection
- Burst Switching
- Configurable Add/Drop
- Signal Monitoring
- Instrumentation

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### Electrical Connector For Each Switch Core

Parameter	Typical	Minimum	Maximum	Unit
Switch Voltage	2.5	2.3	3	V
Switch Current	140	130	200	mA
Pulse Duration	1	0.1	100	ms

### Mechanical Footprint Dimensions (Unit:mm)

Standard version is a rack mount box with a dimension of 430mmx450mmx50mm

### Ordering Information

LCMS-	Type	Wavelength	Switch	Package	Fiber Type	Fiber Length	Connector	
<div style="display: flex; justify-content: space-around;"> <span>[1][6]</span> <span>[ ]</span> <span>[ ]</span> <span>[1]</span> <span>[ ]</span> <span>[ ]</span> <span>[ ]</span> <span>[ ]</span> </div>		1310=3 1550=5 Special=0	Single stage=1 Dual Stage=2		SMF-28=1 Special=0	Bare fiber=1 900µm loose tube=3 Special=0	0.25m=1 0.5m=2 1.0=3 Special=0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0