

CrystaLatch™

8x8 Fiberoptic Switch

Product Description

The CL Series 8x8 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. The 8x8 fiber optic switches are designed to meet the most demanding switching requirements of ultra-high reliability and fast response time with minimum mechanical footprint. Agiltron also offers customized designs to meet special control requirements and applications.

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

Performance Specifications

CL Series 8x8 Switch	Min	Typical	Max	Unit
Operation Wavelength	C Band and L Band			
Insertion Loss		2.7	4.2	dB
Uniformity		0.7	1.5	dB
Polarization Dependent Loss		0.15	0.40	dB
Cross Talk	Single Stage	20	25	dB
	Dual Stage	50	70	
Polarization Mode Dispersion			0.2	ps
Return Loss	50			dB
Switch Time		50	200	µs
Repetition Rate		5K		Hz
Operating Temperature	-5*		70	°C
Optical Power		400		mW
Storage Temperature	-40		85	°C
Switch type	Solid-State Latching			
Fiber Type	Corning SMF28			
Rough Package Dimension	127(W)X230(L)X50(H)			mm

* -40°C version is also available

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Electrical Connection 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)

- The dimension in the SPEC excludes the control circuit.

Ordering Information

LCSW-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	Switch	Package	Fiber Type		Fiber Length	Connector	
	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	