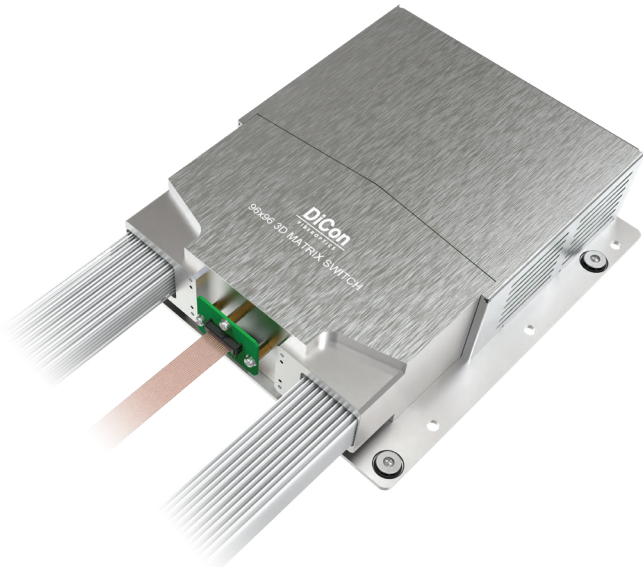


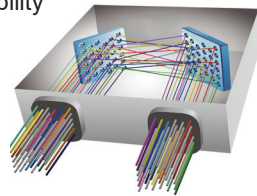
MEMS 96X96 OPTICAL MATRIX SWITCH MODULE

SX3 Model, Single Mode Fiber, Standard Grade



MEMS Optical Matrix Switch Module is built with DiCon's proprietary MEMS technology. Each module contains 2 sets of MEMS mirrors for making 1-to-1 connections between input and output ports. The MEMS mirrors are held in position using precisely calibrated voltages and require no feedback control. This unique quality enables the switch to maintain stable connections and allows the device to function when there is no light in the fiber. This innovative platform has an outstanding track record and delivers best-in-class optical performance

- Proven MEMS technology
- Lifetime > 10⁹ switch cycles
- No dithering or active alignment artifacts
- Switches and holds dark fiber connections
- Low insertion loss with excellent stability
- Compact and lightweight
- Asymmetric MxN available



About DiCon

- Headquartered in California since 1986
- US based in-house MEMS fab
- Over 3 million MEMS mirrors produced since 1999
- Manufactures TAA compliant products

ORDERING INFORMATION

SX3 - T - **9** - **C** - **T** - - **N** -

Grade

T Standard

Switch Configuration

96x96 96x96

MxN M≤96, N≤96

Fiber Type

9 9/125 μm SMF

**Other fiber options available upon request*

Selectable Wavelength Ranges

C 1530-1625 nm

Fiber Jacket

T 900 μm Tight Buffer

**Other fiber options available upon request*

Connector Type

N None

FC FC/UPC

FC/APC FC/APC

LC LC/UPC

LC/APC LC/APC

SC SC/UPC

SC/APC SC/APC

**Other connector types available upon request*

Connector Key Orientation

N None

Pigtail Length

1 1 Meter

X Specify X Meters

**Tolerance is +/- 0.05 m*

MEMS 96X96 OPTICAL MATRIX SWITCH MODULE

SX3 Model, Single Mode Fiber, Standard Grade

OPTICAL SPECIFICATIONS

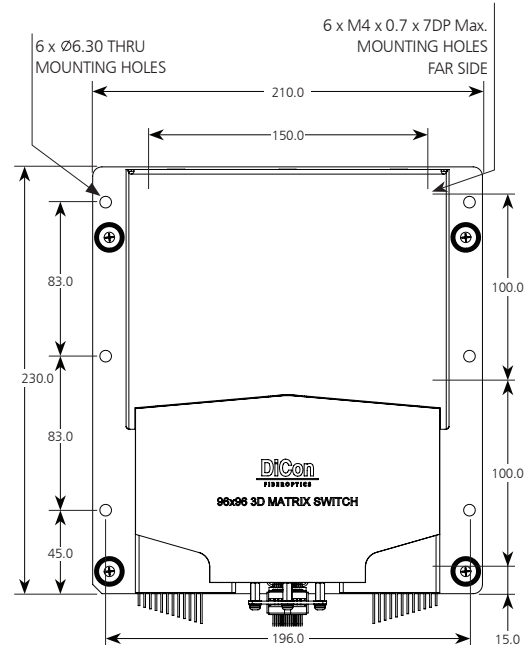
Wavelength Range	1260 to 1675 nm
Insertion Loss ¹	< 1.2 dB
Loss Repeatability ²	+/- 0.03 dB
Connection Stability ³	+/- 0.03 dB
PDL, C+L Band (1530-1625 nm)	< 0.1 dB
WDL, C+L Band (1530-1625 nm)	< 0.3 dB
Crosstalk	< -60 dB
Back Reflection	< -50 dB
Switching Time, All Channels	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Input Power Range	Dark to +27 dBm

1. Measured at optimized λ (e.g. 1550 nm), 25°C, excluding connectors (Each pair of connectors will add extra 0.2 dB loss.)

2. Over 100 cycles

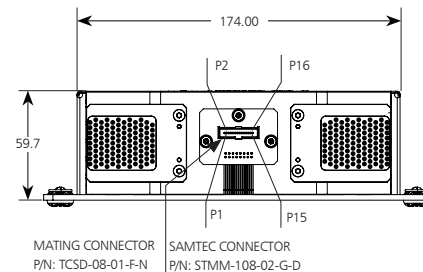
3. 1 Hz sampling rate for 15 min

Dimensions in mm



ELECTRICAL SPECIFICATIONS

Module Power Consumption	19 W max. Operating 24 W max. Start Up
Supply Voltage	12V DC
Module Interface	16-Pin Samtec
Module Control	USB, RS232, I ² C



MATING CONNECTOR P/N: TCSD-08-01-F-N
SAMTEC CONNECTOR P/N: STMM-108-02-G-D

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

MECHANICAL SPECIFICATIONS

Module Size	230 mm x 210 mm x 59.7 mm
Module Weight (with fibers)	3.3 kg