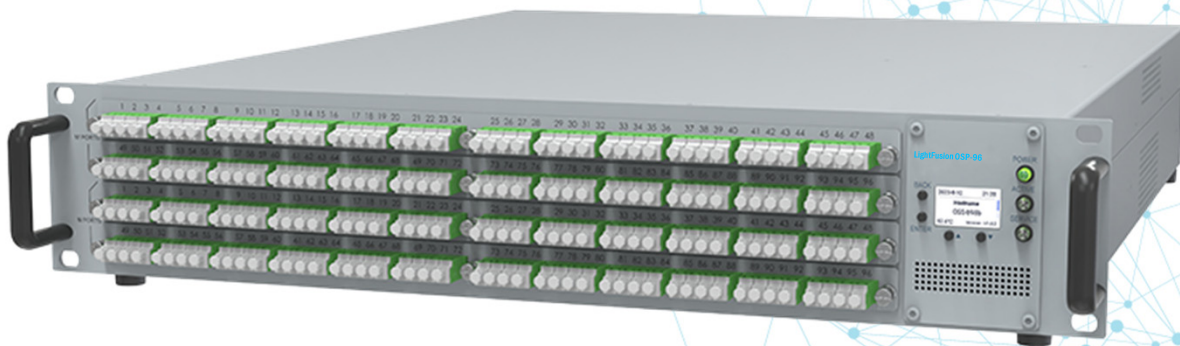


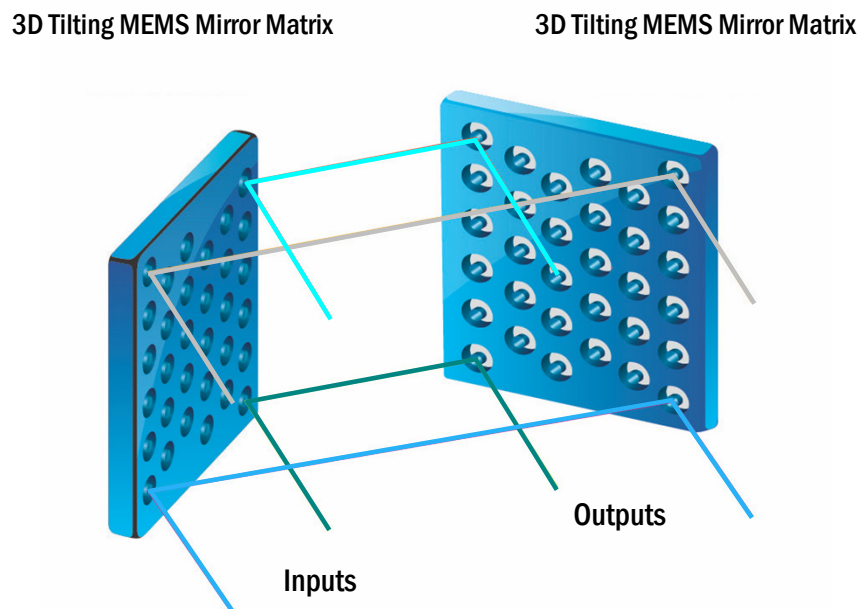


# LEPTON LIGHTFUSION OPTICAL SWITCH PLATFORM (OSP)



Lepton's LightFusion Optical Switch Platform is an optical switch based on MEMS technology providing high density, high performance and carrier class reliable non-blocking all-optical matrix switch. The OSP is designed to provide an exceptional low optical loss, compact size, and rapid switching speeds, it is transparent to data speed and is protocol agnostic.

## OPERATING PRINCIPLE



## FEATURES

- ✓ Non blocking matrix scaling from 32x32 up to 192x192
- ✓ Proven MEMS Technology
- ✓ Industry leading low insertion loss
- ✓ Able to switch dark fibers
- ✓ Protocol agnostic supports speeds up to 800Gb and higher
- ✓ Energy efficient, low power consumption
- ✓ Low latency suitable for latency sensitive applications

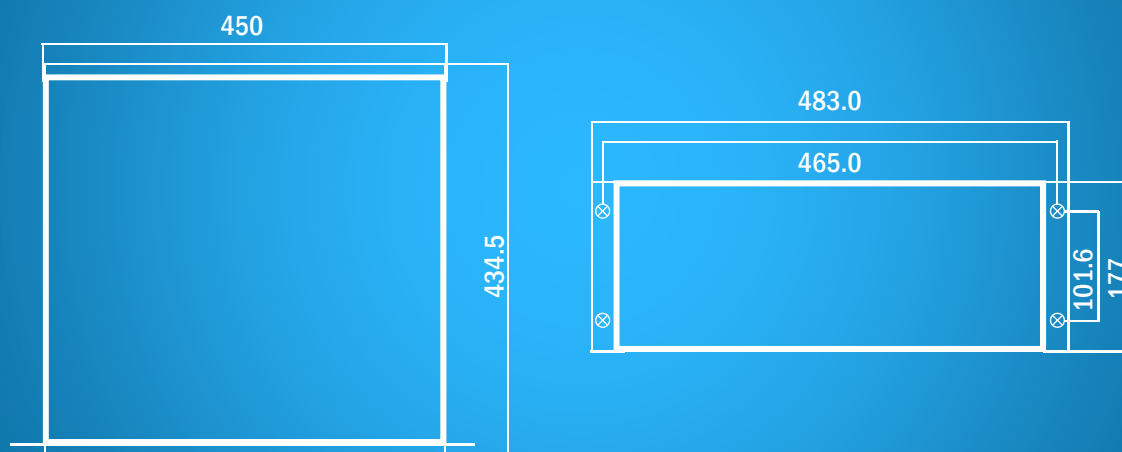
## OPTICAL SPECIFICATIONS

Power Supply Specifications		Rating
Insertion Loss <sup>2</sup>	64x64	0.8 dB typ. 1.4 dB max.
	96x96	0.8 dB typ. 1.4 dB max.
Crosstalk		-70 dB typ. -55 dB max.
Back Reflection		-55 dB typ. -45 dB max.
Switching Time		15 ms typ. 20 ms max.
TDL		0.1 dB typ. 0.4 dB max.
WDL <sup>3</sup>		0.1 dB typ. 0.4 dB max.
PDL		0.08 dB typ. 0.25 dB max.
Repeatability <sup>4</sup>		0.01 dB typ. 0.06 dB max.
Durability		10 <sup>9</sup> cycles min.
Optical Power		500 mW max.
Operating Temperature		-5 to 70°C
Storage Temperature		-40 to 85°C
Fiber Type		9/125 μm Single-mode

1. All specifications are without connectors for the set wavelength band index. Note: Each wavelength band has its own wavelength index, which can be set to optimize the optical performance for that band. Only one wavelength index band can be selected at a time and it applies to all the ports on the module.
2. IL is measured at CWL for the set wavelength index at 23° C +/- 5° C. Operation in 1290-1330nm or 1570-1610 nm bands add 0.1 dB to the typical IL and add 0.2 dB to the maximum insertion loss.
3. WDL is measured from CWL in a +/- 20nm range at 23° C +/- 5° C.
4. Repeatability is defined within 100 cycles

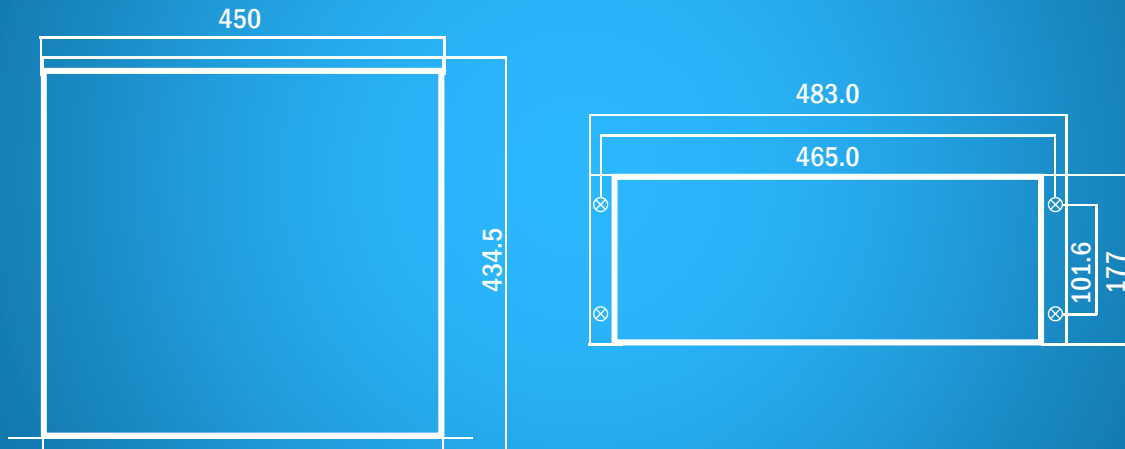
## MECHANICAL DIMENSIONS

4U 19" Rackmount chassis



# MECHANICAL DIMENSIONS

4U 19" Rackmount chassis



# MANAGEMENT INTERFACE

Interfaces	GUL, CLI and SSH
Application Program Interface (API) and Scripting Languages	Python API, RESTful
Test Automation Software Integration	Quali Systems (CloudShell) Spirent (Velocity)

# ELECTRICAL SPECIFICATIONS

Parameter		Rating
Control Type		Ethernet or RS232
Input Voltage		90 - 264 VAC
Connector Type	Ethernet	RJ45
	RS232	9 Pin DB9

# LEPTON SYSTEM



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