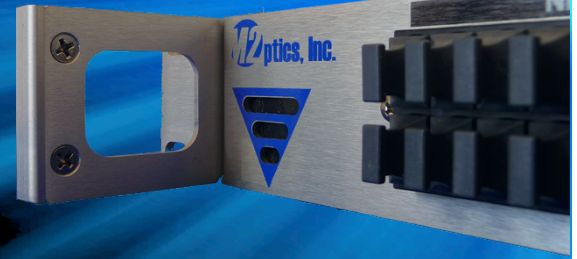


SWITCHLIGHT™

S.M.A.R.T. Optical Solutions



Switch Monitor Amplify Replicate Tap

Features...

- Multi-functional, S.M.A.R.T. device with extremely small footprint
- Selective optical signal filtering
- Lossless optical signal multicasting
- Affordable customization and scalability

Benefits...

- Reduce size and increase flexibility & manageability of active & passive optics
- Access individual optical signal(s) for monitoring purposes
- Eliminate additional IL incurred with traditional optical multicasting
- Simplify management & integration with existing resources

M2 Optics' *patent-pending* SWITCHLIGHT™ integrates a number of optical technologies, both active and passive, into a single 1RU or 2RU platform. The SWITCHLIGHT™ has a separate subsystem for each of these functional areas, which allows for customizable, build-to-order systems without sacrificing affordability. The subsystems are **S**witching, **M**onitoring, **A**mplifying, **R**eplicating, and **T**apping. Using subsystems also enables cost-effective scalability and simplified management of the entire system making the SWITCHLIGHT™ the **S.M.A.R.T.** choice!

▶ Switching

- Supports asymmetric, full duplex switching for one-to-many (up to 1x128) and many-to-one (128x1) apps with ultra-low insertion loss (~ <1.0dB)
- Enables tool sharing for testing or monitoring applications
- Allows for any bit-rate or service over SM or MM fiber

▶ Monitoring

- Captures all traffic on the fiber network via passive optics
- Distributes selected optical signals to the correct monitoring, storage, or analysis device
- Automates physical layer control for upper layer monitoring applications

▶ Amplifying

- Up to 4 amplifiers with a max gain of 35dB
- Reduces space associated with typical amplifier solutions
- Eliminates or reduces loss associated with optical multicast applications and boosts signal strength in low power monitoring environments

▶ Replicating

- Multicasts 1 signal up to 64 times or 8 signals up to 12 times each in a single RU
- Enables individual light paths to be remotely turned on/off
- Increases resource efficiency

▶ Tapping

- Provides "intelligent" passive optical taps
- Creates multicast groups based on internal connectivity
- Transforms high-touch, labor intensive tasks to remotely accessed and controlled configuration changes

Each SWITCHLIGHT™ comes equipped with LIGHTCLICK™ software as a standard feature. LIGHTCLICK™ offers both an easy-to-use, web-based GUI utilizing HTML5 for fast response times and TCL, PERL, and Python APIs to simplify integrating the SWITCHLIGHT™ into your network.



120 Penmarc Drive, Suite 109, Raleigh, NC 27603
PH: 919-342-5619 F: 919-341-1672 TF: 866-269-2902

Version Drawings

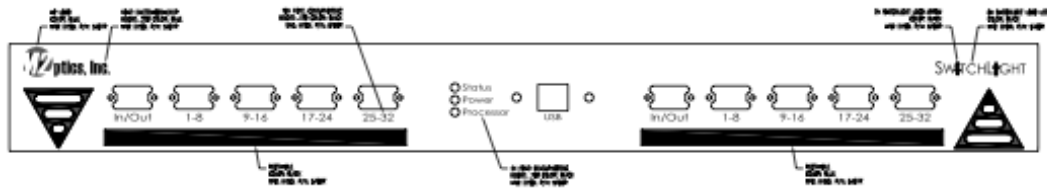


Figure 1: 1RU SWITCHLIGHT™

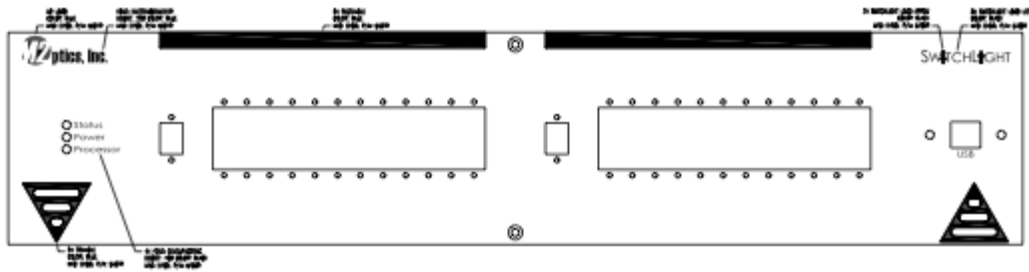


Figure 2: 2RU SWITCHLIGHT™

Typical Specifications

Characteristic	Switch	Amplifier	Taps
Fiber Type	Single-mode or Multimode	Single-mode	Single-mode or Multimode
Wavelength Range	850+/-40nm; 1260-1650nm	1530-1565nm	850+/-40nm; 1260-1650nm
Max. Input Signal	N/A*	0dBm	-
Min. Input Signal	N/A*	-30dBm	-
Max. Output Signal	N/A*	10dBm	-
Min. Output Signal	N/A*	-10dBm	-
Gain	-	30-35dB	-
Insertion Loss	1.0dB	-	1x2 = 3.4dB 1x4 = 7.1dB 1x8 = 10.2dB 1x16 = 13.5dB 1x32 = 16.5dB 1x64 = 20.5dB
Return Loss	≥50dB	≥40dB	≥55dB
Crosstalk	≥65dB	-	-
PDL	≤0.05dB	0.3dB	0.1dB
WDL	≤0.25dB	-	0.3dB
Switching Time	25ms** / 25ms+(10xn)***	-	-
Storage Temp.		-40° to +85°	
Operating Temp.		0° to +65°	
Power	24VAC/5A/120W External Power Supply (UL / CUL / TUV / BSMI / CCC / CB / FCC / CE)		

* The switch is capable of dark fiber switching and extremely high-powered switching, so the minimum and maximum optical signal outputs are inconsequential.

** 25ms for adjacent port connections.

*** 25ms + 10ms per port for non-adjacent port connections

For specific ordering information, please contact M2 Optics' sales at sales@m2optics.com or call 919-342-5619 or toll-free at 866-269-2902.

