

Since 1981

Buyer's Guide

Innovation in Engineering



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Modulation Systems - MPM

Conoptics, a pioneer in the manufacturing of optics and laser accessories has developed a solution for Multi-Photon Microscopy (MPM).

Multiphoton fluorescence microscopy is a powerful research tool that combines the advanced optical techniques of laser scanning microscopy with long wavelength multiphoton fluorescence excitation to capture high-resolution, three-dimensional images of specimens tagged with highly specific fluorophores.

Conoptics' Model 350-80LA with BK (resonance-dampened) Option is a KD*P Series Electro-Optic modulator. When configured with our Model 302RM amplifier offers the ability to control laser intensity as well as high-speed shuttering. In addition, this solution can control beam attenuation and fly-back blanking with minimal dispersion and full modulation over the lasers bandwidth. The system operates center in/out with no spatial dispersion and rise/fall times of 1 micro-second.



Pulse Selection System

Conoptics has developed a complete line of Pulse Selection Systems for use with Ti:Sapphire, YAG, YLF and OPO's from 350nm-to 1600nm applications. Customized options are also available.

Specifications:

- Select from single shot to 30 MHZ rep rate for middle locked lasers running as high as 100 MHZ.
- Low Temperal Dispersion, compatible with FSEC pulses, no spatial dispersion.
- Optical, Transmission > 80%
- Available for TI: Sapphire and OPO's 350 to 1600 nm



Made in USA

Deflection System

Conoptics' series of electro-optic deflectors are the most efficient mechanisms for changing the angle of a laser beam. Conoptics EOD's can scan a laser beam over a range of angles, or control the output angle of a laser beam with great accuracy. We employ a quadrapole electric field in an electro-optic material to produce a linear refractive index gradient proportional to the applied sig-

Our electro- optics deflectors are configured to eliminate the piezo-electric ringing that is normally found in EOD's. Equally impressive is that our design has no moving parts, they do not fatigue with prolonged use, and an entire beam is deflected (unlike the acousto-optic devices). The angular deflection of E- O Deflectors is small and has rapid random access response and is extremely precise.



Noise Eaters

Conoptics Laser Stabilization System (LASS-II) is designed to lower the noise intensity in laser beams. The LASS-II significantly enhances the signal to noise ratio of a laser over a broad bandwidth. Customized options are also available upon request.

The LASS-II is particularly convenient for use in recording systems where laser power must be varied as a function of position on the recording medium (i.e. video disc, flat bed recorders, etc.). The system is composed of feedback electronics, power supply and electro-optic modulator with integrated beam-splitter and photodiode amplifier

Optical Isolators



Made in USA

All Isolators are supplied 5mm aperature , (2) GLAN type polarizer's with double escape ports.

700 Series Tuning Ranges

| Model Number | Tuning Range | Isolation | Transmission |
|--------------|------------------|-----------|--------------|
| 711A | 500- 645 | 37-40 dB | 92% |
| 711C-1 | 350-390 | 28-30 dB | 85% |
| 711C-2 | 390-450 | 28-30 dB | 85% |
| 711C-3 | 425-500 | 28-30 dB | 85% |
| 712A | 532-715 | 37-40 dB | 92% |
| 712B | 644-780 | 37-40 dB | 92% |
| 712TGG | 700-900 | 37-40 dB | 92% |
| 713A | 650-900 | 37-40 dB | 92% |
| 713B | 790-980 | 37-40 dB | 92 % |
| 714 | 680-1080 | 37-40 dB | 92% |
| 715 | 965-1135 | 37-40 dB | 92% |
| 716 (Double) | SPECIFY CENTER 🛛 | 56-60 dB | 88% |
| 716TGG | 1064 | 56-60 dB | 88% |
| 815 | 1020-1100nm | 30 dB | 92% |



Mounts and Accessories

Conoptics Accessories

-Conoptics has developed a complete line of mounts for use with our modulators and deflectors. Customized options are also available.

Modulation Systems – Input Polarizer

-Input Polarizer is used to improve the purity of the laser beam entering the pockel-cell. The performance of our modulators in particular the extinction ratio and transmission, are dependent on proper alignment of the laser beam and its polarization.

Beam Blocker

-Conoptics' new "Beam Block" assembly allows an integrated solution that terminates the rejected component of the polarizer. This innovative design eliminates the need for any external beam block, and provides a safer setup design.

Model 201 – Laser Attenuator/Power Splitter

-Conoptics has released the Model 201 Laser Attenuator / Power Splitter that permits the end user to split the laser beam exiting the Ti:Sapphaire into (2) distinct beams and control the power for each instance.

Global Representatives

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Global Representatives

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About Us

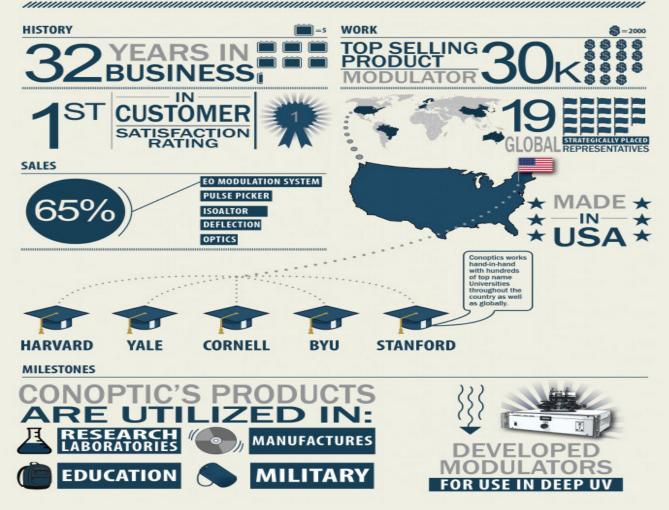
A leader in optics & laser accessories

-Conoptics was founded in 1981 by former product managers of the Coherent Modulator Division and is a global leading manufacturer of laser accessories. Our products are utilized at research laboratories, disc manufactures, universities, military and laser manufactures.

Conoptics Milestones:

- Designed the first DC to 100MHz air-cooled modulation system
- Developed e-o modulators for color-separation systems used in laser scanners
- Developed modulation systems for video-disc mastering systems which included Noise-eaters for removing laser noise and exposure control. These systems also included high speed modulation for video content and multi-function deflector for code tracking
- Developed modulators for use in deep UV (257nm)
- Developed modulators and high speed drivers for use in pulse selection systems and regen switches
- Developed optical isolators for use over the Visible and near IR
- Worked jointly with Cornell University (Webb Group) to develop low dispersion modulator for use in Multi-Photon Microscopy (MPM)
- Designed miniature optical isolators for use in 3-D measuring systems
- Developed high speed, high extinction ratio modulation system for the semi-conductor industry

CONOPTICS Since 1981 HISTORY



CONOPTICS INC.

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