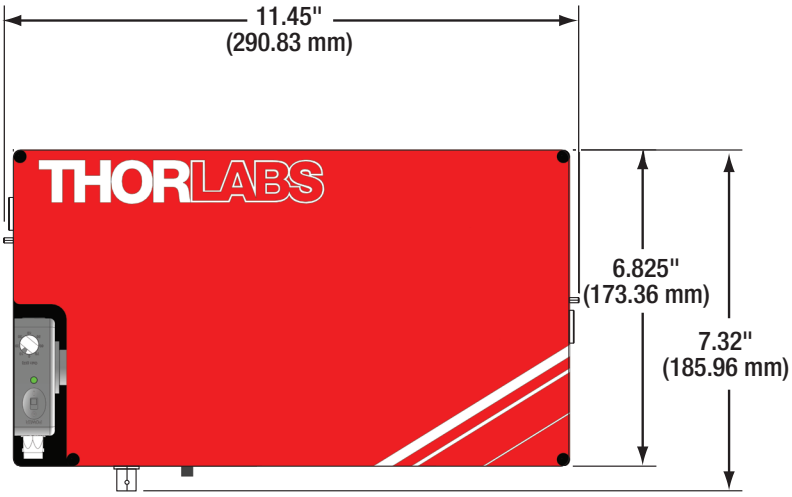
High-Speed Laser Power Modulator

Features

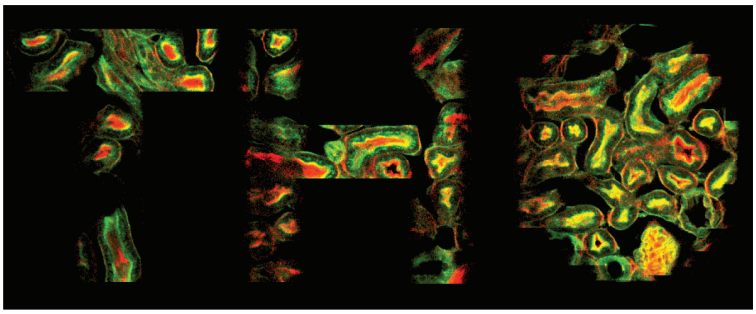
- Modulator and Driver in One Package
- Replaceable External Photodetector for Output Power Calibration
- Continuous Sustained Operation
- Near Zero Dispersion
- No Cooling Required
- No Vibration

High-Speed Modulator

Coming Soon



Laser Power Modulator Housing Dimensions



Two-channel 2P image of mouse kidney cells acquired with Thorlabs Bergamo®II Microscope and Tiberius® Fast-Tuning Ti:Sapphire Laser.

Thorlabs' new laser power modulator relies on deformable mirror technology instead of Pockels cells or acousto-optic modulators. This all-reflective device has minimal (<100 fs^2) dispersion and allows for a clear aperture of Ø3.8 mm.

In contrast to frequently used Pockels cells, the modulator can be used for DC power control as well as high-speed modulation for fly-back blanking or region of interest selection.

The analog 0 to 1 V input allows for control of the modulation depth from any DAQ device. Higher contrast can be achieved by using two modulator devices in cross orientation.

Specifications[a]

Operating Range	700 – 1100 nm
Contrast	Up to 2000:1
Rise/Fall Time	2 µs
Modulation Frequency	0 - 20 kHz
Transmission (at 800 nm)	>80%
Input Energy	Up to 50 nJ
Input Power	Up to 5 W
Internal Aperture	Ø3.8 mm

a. Specifications are subject to change.

To learn more about our High-Speed Laser Power Modulator, please contact LaserSales@thorlabs.com.

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