

# 3DOptix

## Rapid Optical Prototyping

### Why Rapid Optical Prototyping?

Using prototypes to assure that your Optical product or experiment really works is a key to any product or experiment design. Today, the prototyping process is awkward, expensive and take a long time to complete, delaying your time to market. You would need to model the optical bench with a 3D modeling tool, manufacture the design and test it in the lab.

Expediting the Optical prototyping process would make the testing cycle shorter and would help Electro-Optics companies, Laser companies, Microscopy Companies and researchers to rapidly introduce your new product and experiments to the market and to the optical community.

### The problem with the existing process

- Lack of off-the-shelf optomechanical products that can be used as building blocks for assembling a rigid, 3-dimensional optical bench.
- The process of designing an optical bench or a prototype would need to go into the following long phases: 3D modeling, manufacturing, and testing.
- Long and expensive process - It might take twice the time or even more if you find a problem with the design during your testing phase. Problems with the design will force you to run this process again or multiple time until you get a verified setup.

### 3DOptix is different



#### Precise

All optical elements are centered exactly above the fixation location. Dowel pins precisely define the location and position of each optical mount.



#### Modular

A wide variety of structural elements provides you with a modular platform.



#### Compatible

3DOptix platform is compatible with any other commercial optical or optomechanical component.

## Why 3DOptix Rapid Optical Prototyping?

With 3DOptix Breadboard™ platform there is no need to build a custom structure for each prototype. 3DOptix building blocks can be used to design and build any precise three-dimensional structure or optical bench, accelerating the optical prototyping process while maintaining a low cost budget. The highly rigid structural components create a mounting platform with discrete mounting locations specifically for your prototyping design and application. With 3DOptix components and an off-the-shelf CAD software, it is easy to model your entire setup.

- The Breadboard™ basic elements provide you with endless options to assemble any three-dimensional apparatus or an optical bench.
- Discrete mounting locations - with 3DOptix it is easy to register, accurately, any mount to a mounting location with dowel pins and screws.
- Reducing your alignment work - discrete mounting locations plus minimal degrees of freedom will reduce your alignment work.
- Fast and accurate assembly of multiple and synchronized setups across the optical table or your prototype bench.
- There is no need to manually measure the distance between the optical elements in your setup.
- 3DOptix discrete capability is perfect to easily identify spatial and temporal locations for ultrashort laser setups.
- 3-dimensional custom apparatus, such as microscopes and multiple pulses apparatuses are easy to design.
- 3DOptix optomechanics components are designed and manufactured under high tolerance constraints in order to achieve high precision capabilities.



### Agility

Easy to make any structural modification simply by adding or removing 3DOptix modular components, even while the setup is up and running. There is no need for any alignment work when you position or reposition the optical elements in the system.



### 3-Dimensional

Easy to build any three-dimensional structure for rapid optical prototyping or for any optical applications.

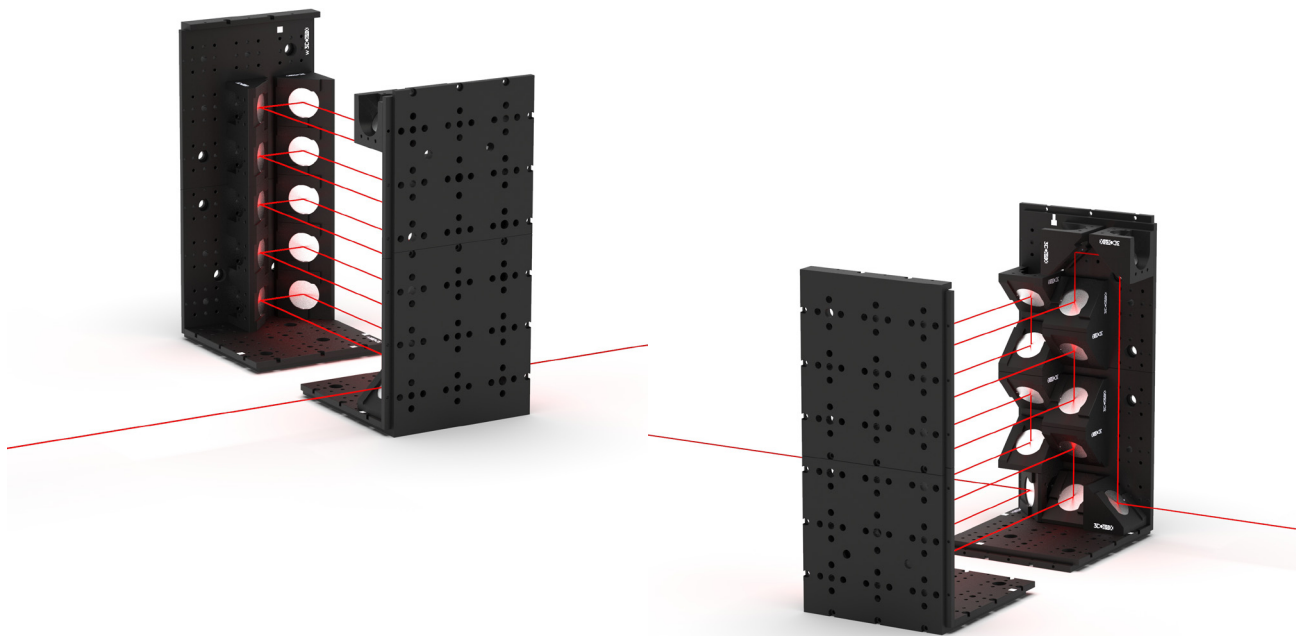


### Discrete Mounting locations

extremely easy to measure the distance between the optical elements.

# 3DOptix offering

- 3DOptix Breadboard™ structure components comes in different sizes to accommodate the design of any three-dimensional structure.
- 3DOptix optomechanics components can be purchased individually or as part of a predefined reference design or a bundle.
- Comparing to the other Cage platforms, 3DOptix Virtual Cage system has the best price-to-performance ratio.



## Contact us



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