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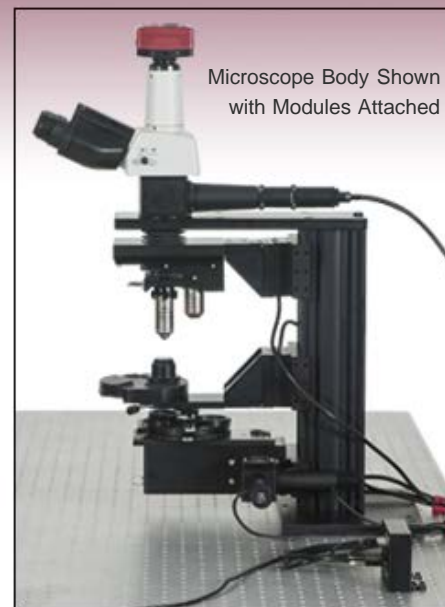
**THORLABS**

## CSB1400 - June 22, 2016

Item # CSB1400 was discontinued on June 22, 2016. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

### CERNA COMPONENTS: MICROSCOPE BODIES

- Rigid Backbones of Cerna Microscopes
- Holds Microscope Modules in Optical Path
- Two Height Options: 350 mm and 400 mm



[Hide Overview](#)

#### OVERVIEW

##### Features

- 350 mm or 400 mm Body Height
- Optical Path is 7.74" (196.5 mm) Away from Edge of Vertical Support Rail
- Enables Large Setups Underneath and Around the Objective
- Linear Dovetail Surface Allows Flexible Positioning of Modules Along the Rail
- Mechanically Compatible with Thorlabs' 95 mm Construction Rail Accessories
- Includes Objective Focusing Module with 1" Travel

For Cerna microscopes, Thorlabs offers two body heights: 350 mm and 400 mm.

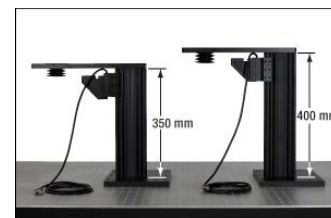
These bodies provide the backbone for constructing widefield imaging, transmitted light imaging, or electrophysiology setups. Based on Thorlabs' 95 mm optical construction rails, these rigid extrusions provide stable long-term support and excellent vibrational damping to the rest of the microscope.

The 400 mm tall version is our most popular model, as it provides extra space underneath the objective. This height provides the largest amount of flexibility for your setup to grow and change with time, and helps make room for our transmitted light imaging modules, which enable DIC imaging, Dodt contrast, and brightfield illumination. To make it easier to reach and operate the trinoculars and epi-illumination filter cubes located at the top of the microscope, we also offer a shorter, 350 mm tall version of the microscope body. However, this body does not provide enough room for DIC imaging setups and leaves only limited room for Dodt contrast and brightfield illumination.

##### Cerna Application Support

[Contact Us](#)

Thorlabs has engineers, application specialists, and a sales team available to discuss the various Cerna options and to work with you to create a system that is optimized for your unique experimental requirements. If you would like to be contacted by a member of our team, please let us know by emailing [ImagingSales@thorlabs.com](mailto:ImagingSales@thorlabs.com).



Click to Enlarge  
The CSB1350 Microscope Body has a 350 mm tall vertical support rail, while the CSB1400 Microscope Body has a 400 mm tall vertical support rail.



Click to Enlarge  
The MCM3000 3-Axis Controller, shown at the bottom right, is used to translate the objective focusing module along the Z-axis. (All items pictured here are sold separately.)

Regardless of the body height chosen, the optical path of Cerna microscopes is positioned 7.74" (196.5 mm) away from the edge of the vertical rail (as shown in the *Drawings* tab), creating a large working volume around the objective. These rails provide a linear dovetail surface that is used for attaching microscope modules such as our fixed sample arms and the previously mentioned trans-illumination modules, allowing you to reconfigure the microscope to your individual needs. Since Cerna modules attach to the body using dovetail clamps that can be freely positioned vertically, you are able to optimize the optical path for your specific experiment. Because the bodies are based upon our 95 mm rails, they are also compatible with our 95 mm rail mounting platforms, which system developers may use to build their own modules.

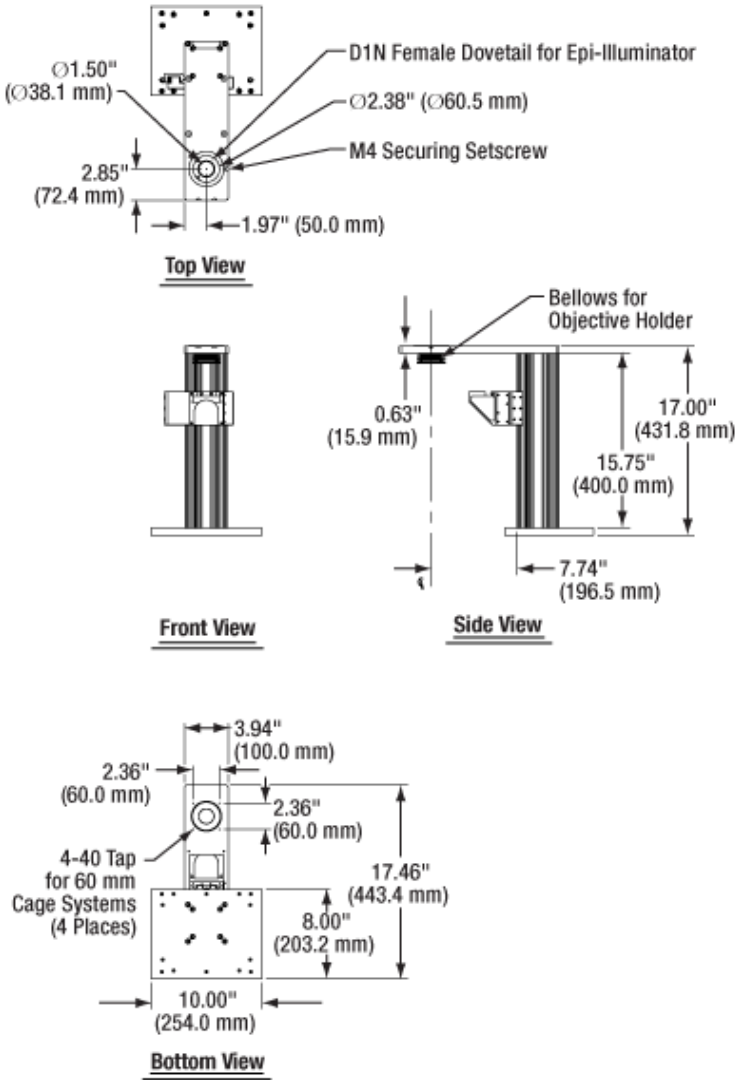
Each microscope body includes an objective focusing module that provides 1" of fine motorized Z-axis travel. This module is shown in the photos above, attached to the side of the vertical support rail. In order to translate the objective along the Z-axis, our standard 3-axis controller is required (Item # MCM3000, sold separately). Each body also ships with a bellows to enclose the optical path between the top of the body and the objective holder. This bellows connects to the body and the objective holder using magnets.

Cerna Components	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
Overview	Microscope Body	Widefield Viewing	Epi-Illumination	Objectives and Objective Holders	Sample Holders	Motion Control	Trans-Illumination

[Hide Drawings](#)

DRAWINGS

This tab gives the dimensions and key mechanical features of the 400 mm tall Cerna microscope body (Item # CSB1400). Except for the height of the rail, the 350 mm tall body is identical. For full details on the Cerna microscope bodies' mechanical features, click on the red Docs icon (📄) below.



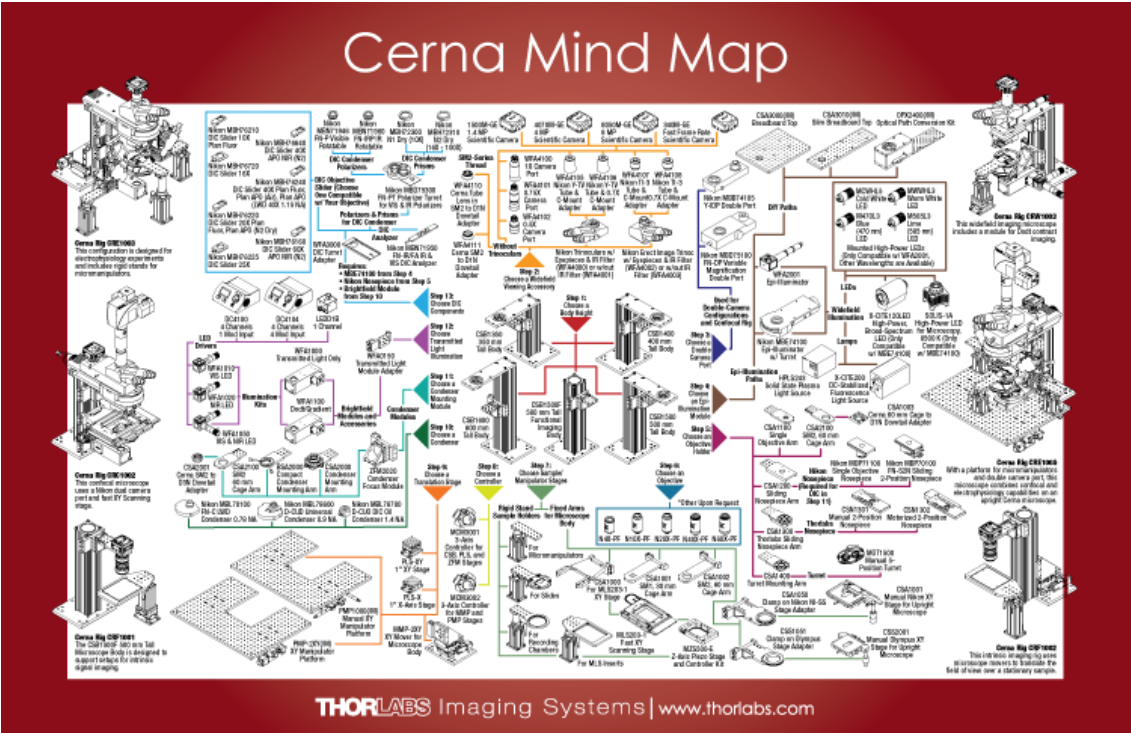
Click to Enlarge  
Drawing of 400 mm Tall Microscope Body

[Hide Cerna Mind Map](#)

CERNA MIND MAP

The Cerna Series Mind Map is a visual tool for selecting the modules that make up a complete Cerna microscope. Created as a supplement to the information provided directly on our website, it lays out both the required and optional components in a single 11" x 17" printed sheet. We have designed it to be used as a flowchart, starting from the red arrow at the center of the document and following the steps in order.

Click [here](#) or on the image below to download a printable PDF (6 MB). The microscope bodies sold on this page correspond to Step 1 in the mind map.



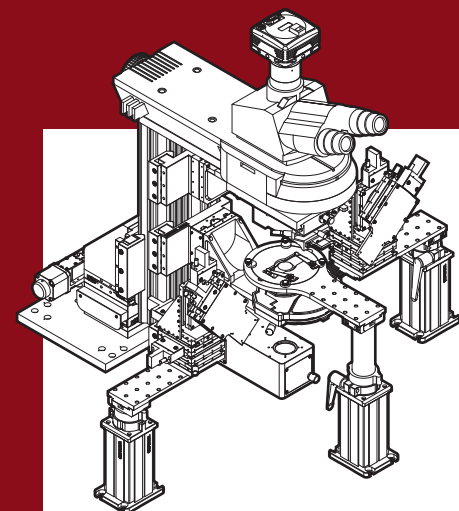
[Hide Part Numbers](#)

Part Number	Description	Price	Availability
CSB1350	Cerna Microscope Body with Objective Focusing Module, 350 mm Tall	\$3,542.63	Lead Time
CSB1400	Cerna Microscope Body with Objective Focusing Module, 400 mm Tall	\$3,874.70	Lead Time
MCM3000	3-Axis Controller	\$4,500.00	Lead Time

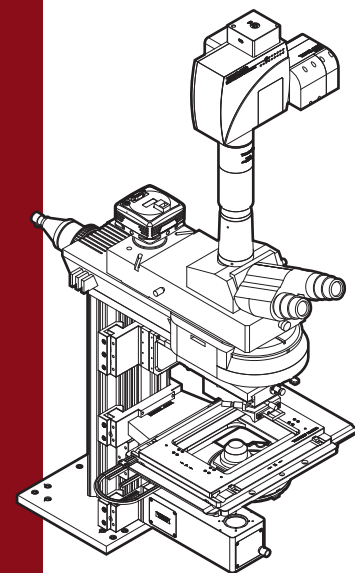
Visit the *Cerna Components: Microscope Bodies* page for pricing and availability information:  
[https://www.thorlabs.com/newgrouppage9.cfm?objectgroup\\_id=8563](https://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=8563)



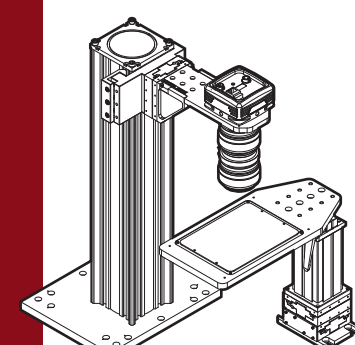
# Cerna Series Microscopy Platform



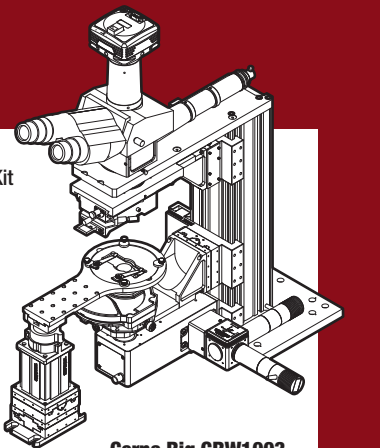
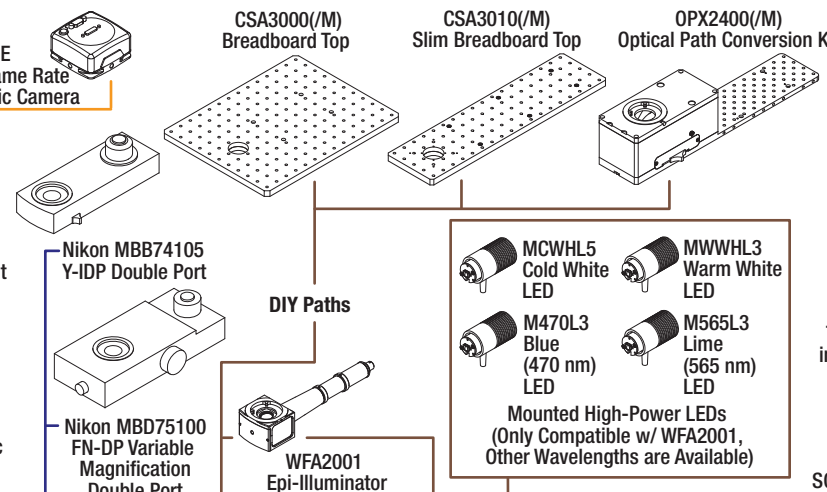
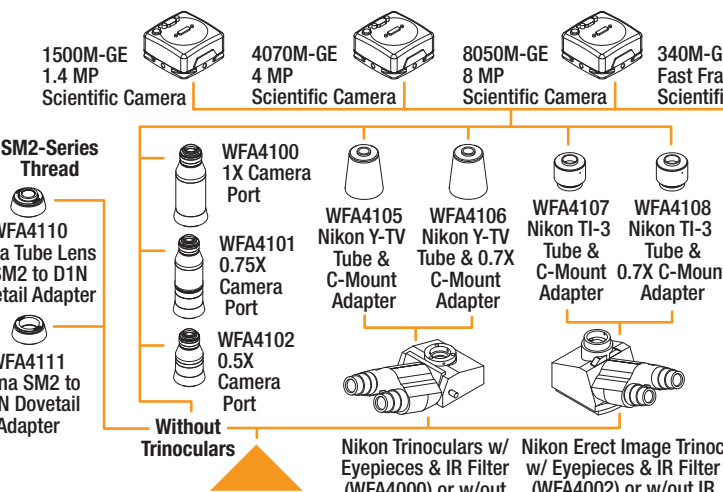
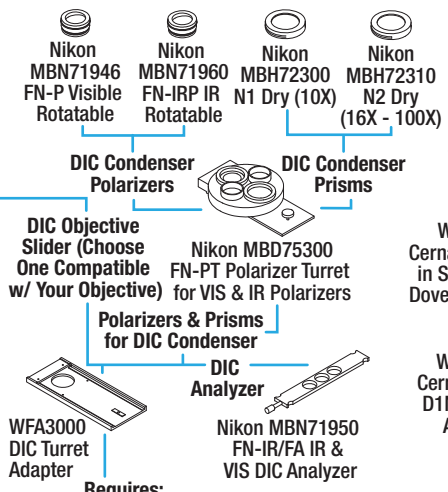
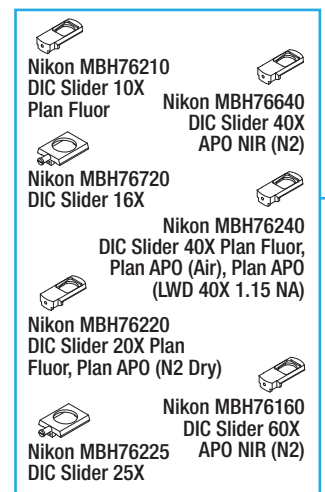
**Cerna Rig CRE1003**  
This configuration is designed for electrophysiology experiments and includes rigid stands for micromanipulators.



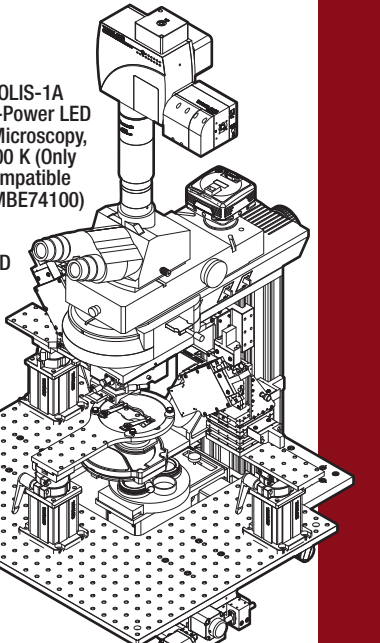
**Cerna Rig CRC1002**  
This confocal microscope uses a Nikon dual camera port and fast XY Scanning stage.



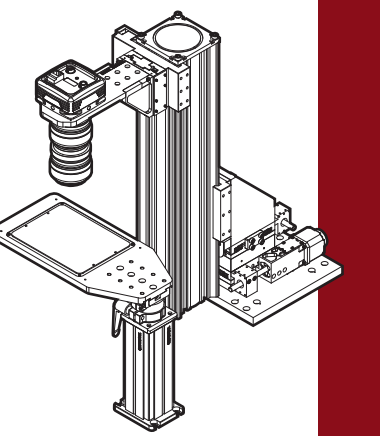
**Cerna Rig CRF1001**  
The CSB1500F 500 mm Tall Microscope Body is designed to support setups for intrinsic signal imaging.



**Cerna Rig CRW1003**  
This widefield imaging microscope includes a module for Dof contrast imaging.



**Cerna Rig CRE1005**  
With a platform for micromanipulators and double camera port, this microscope combines confocal and electrophysiology capabilities on an upright Cerna microscope.



**Cerna Rig CRF1002**  
This intrinsic imaging rig uses microscope movers to translate the field of view over a stationary sample.

