

# Modular Optical Imaging System

- **Intrinsic Signal Optical Imaging (IOI)**
- **Fluorescence Imaging**
- **Laser Speckle Contrast Imaging (LCSI)**

## Applications:

**Cerebral blood flow – Neurovascular coupling & functional connectivity studies**  
**Neurological disorders – Pharmacology**  
**Optogenetics – Voltage sensitive dyes (VSD)**  
**Epilepsy – Alzheimer’s disease**  
**Aging – Hypertension – Ischemia**



### **Integrated & Ergonomic**

Save lab space and installation time.  
Compatible with multiple applications.

### **Modular System**

Select your LEDs and laser colors and the quantity of auxiliary inputs/outputs.

### **Better Results**

Get better results in your study with reliable images.

### **Increased Performance-Price Ratio**

Get more functionalities at a lower price.



## Specifications

### Articulated Illumination Arms

Illumination can easily be positioned at any angle with a flexible articulated arm

### Optical Enclosure

For light sensitive applications, a 2' X 2' X 2' enclosure is available, with a curtain on the front and access holes on the back

### Camera Positioning

Subject placed on a lab jack for precise focus adjustment

Focus and numerical aperture adjustment on the camera lens

Camera height and angular adjustments (left to right)

### Dimensions

Mounted on a 1' X 1.5' optical breadboard

## Imaging Options

### Intrinsic signal Optical Imaging (IOI)

Red, amber and green illumination

Variable spot size from 3 mm to 30 mm

### Fluorescence Imaging

Filtered LED illumination, filtered detection

### Speckle Imaging

Laser diode with a variable spot size

## Inputs/Outputs Options

### Stimulation

BNC connectors

Digital code (4 to 8 bits) or Analog (1 or 2 channels)

### Auxiliary Inputs

BNC connectors

4 to 8 Inputs, 10 kSamples/second

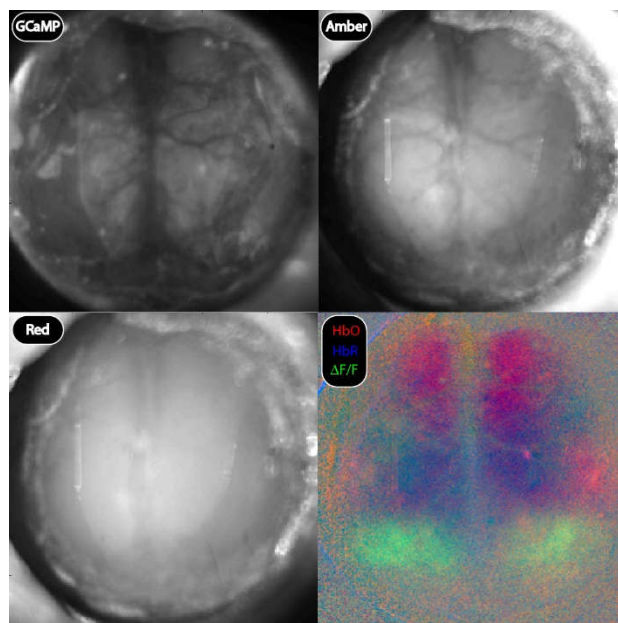
## Software

### Acquisition Parameters

Frame rate up to 480 Hz, exposure time from 0.01 ms, illumination selection, stimulation settings

### Saving

Images, parameters & analog inputs saved on disk (SSD recommended for high frame rates)



## Control Unit

### Illumination Controls

Manual illumination intensity controls

### Compact Size

9" X 8" X 3"

