



Innovating direct-view 3D microscopes

## Edge-3D Multi-Function Microscope with Z-Axis Stacking

### Physical Specifications:

- Size: 30 x 30 x 36 cm
- Weight: 14 kg
- Construction: Anodized aluminum
- Electrical requirement: 100V-240V; 50-60HZ
- Electrical connections: 1 USB2 output, and one transformer connection
- Reflected lights: 2 LED's rated at 1 Watt each
- Transmitted lights: 2 LED's rated at 1 Watt each
- T-2adapter to connect to a large range of different cameras
- Camera: Samsung NX 2000 included with system
  - 20 megapixel still images
  - HD video output 1920 x 1080
  - ISO sensitivity from 100 to 25,600
- Lens turret: places for 4 RMS objective lenses (M25 optional accessory)
- Optical system:
  - Compatibility with 160mm tube length objective lenses
  - Infinity tube length objective lenses (optional accessory)
- Objective lenses: 2x to 100x (not included)
- Condenser lens: achromatic
- Stage focus: Automated motorized stage controlled by Edge-3D software
- Focus travel range: 50mm in 1 micron steps
- X-Y Stage Dimensions: 220mm by 150mm

### Application Specifications:

- Edge Panfocal 3D software controls stage focus, illumination, image capture, and performs 3D image analysis
- Computer requirements: PC computer with 4GB RAM; Windows 7 or newer

#### Illumination:

- transmitted illumination
- reflected illumination
- epi-fluorescence illumination (optional accessory)
- Compatibility with most optical systems, including:
  - brightfield
  - darkfield
  - phase contrast
  - DIC
  - polarization
  - epi-illumination (optional accessory)
  - oblique illumination
- Magnification range:
  - 2x to over 5,000x (as seen on computer monitor)
- Resolution (x-y dimension)
  - 200nm (using 1.4 NA plan apo optics)



Industrial Design by Ted Tokio Tanaka

The Edge-3D Light microscope delivers three-dimensional imaging with extreme versatility. Packaged in an anodized aluminum body, the Edge-3D microscope is a truly high-performance bench-top microscope. With the innovative Edge Deep-Focus Stacking 3D software package, the user is able to control stage focus, illumination, image capture, and perform 3D image analysis.

### Six modes of three-dimensional imaging:

1. Stereo viewing in real-time
2. Motion parallax 3D viewing in real-time
3. Automated Z-Focus Stacking up to 1mm thickness
4. Full-focus image stacks in Stereo 3D
5. 3D profiling of surface topology
6. Full-focus motion parallax movie loops

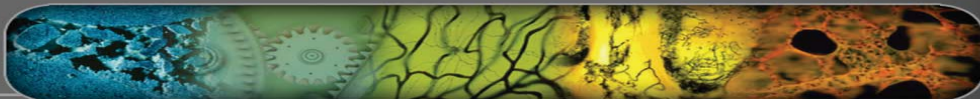
#### Basic System includes:

- Edge-3D microscope body
- Edge-3D software package
- Samsung camera
- Digital head compatible with 160mm tube length objective lenses

#### Optional Accessories:

- Digital head compatible with infinity tube length objectives
- Turret for 25mm diameter objective lenses
- Epi-illumination/Fluorescence system (filter sets not included)

www.edge-3d.com

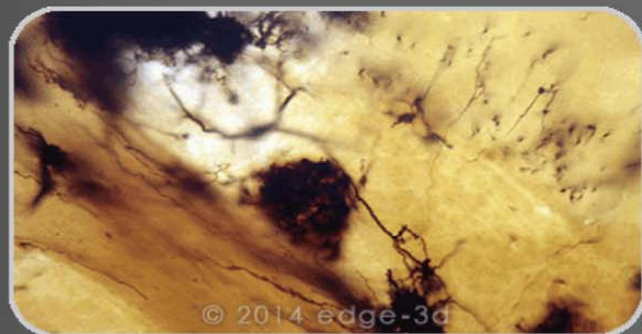


### Conventional microscopes:



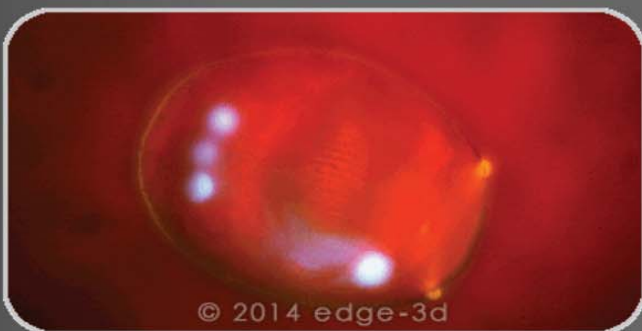
Conventional microscopes only allow you to see **small portions** of the image in focus at a time

### Conventional microscopes:



With conventional microscopes most of the image is out of focus.

### Conventional microscopes:



With conventional microscopes it is sometimes very difficult to make clear observations.

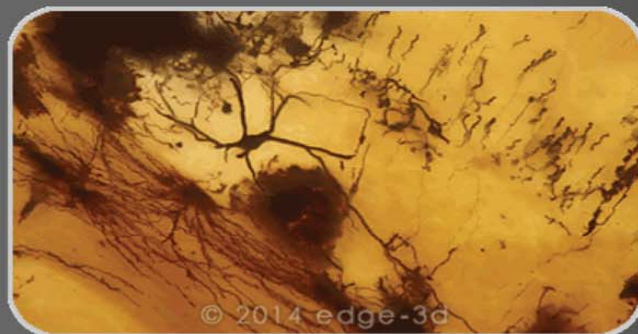
The edge-3D MICROSCOPE is a highly sophisticated digital 3D microscope with a **wider variety of features** than are found in expensive 3D confocal microscopes, and, **for a fraction of the cost!**

### Edge-3D Microscope Z-Focus Stacking:



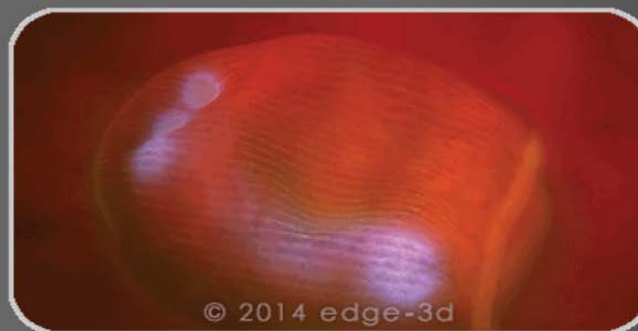
Edge-3D microscopes allow you to **see the entire image in focus** with Z-Focus Stacking technology

### Edge-3D Microscope motion parallax mode:



The Edge-3D microscope's Motion Parallax mode provides rich visual depth information.

### Edge-3D Microscope 3D Model mode:



The Edge-3D microscope's 3D Model mode provides valuable perspective and control to your samples.