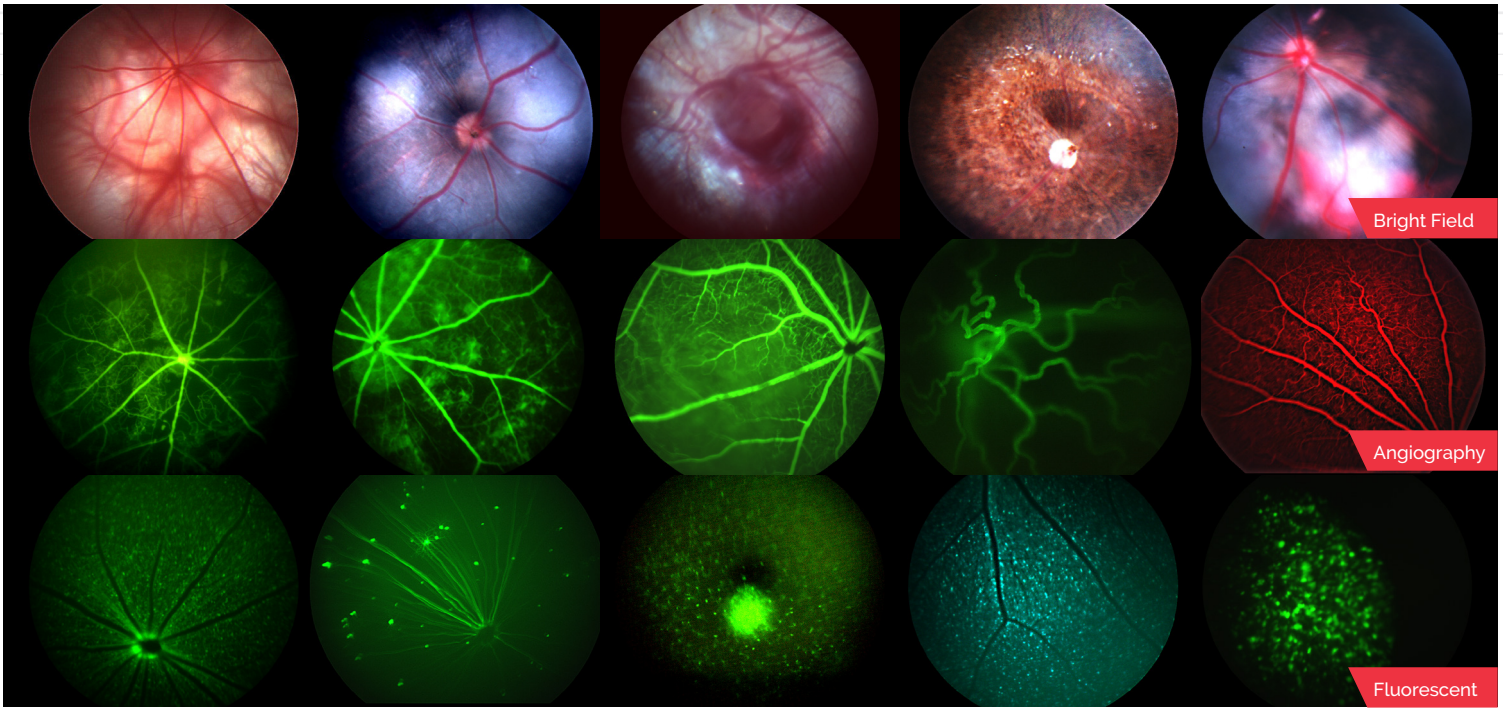
phoenix | MICRON® IV



Exceptional retinal microscopy in 3 unique modalities

The Phoenix MICRON® IV retinal microscope represents a continued commitment to innovation in the field of mouse and rat eye research. The Phoenix Micron IV delivers powerful in vivo imaging capabilities in 3 modalities: bright field, angiography and fluorescent imaging.

Designed for animal research

The Phoenix MICRON IV system is designed specifically for the challenges of rodent eye and eye-brain research. We've built the Phoenix MICRON IV to fit easily on limited laboratory bench space with a modular design that allows you to scale its capabilities as your research need requires.

Unparalleled imaging capabilities

Our custom built three-chip CCD camera delivers 3 microns resolution for bright field, and has improved sensitivity for capturing faint fluorescent images. Imaging of common reporter molecules such as GFP, YFP, mCherry, and CFP is possible, in addition to fluorescein and Evan's blue angiography.

In vivo validation

Increasing the quality of research through comprehensive, longitudinal in vivo studies is now possible. The Phoenix Micron IVs' scalable design allows you to add Image-Guided OCT2, Image-Guided Laser, Image-Guided Focal ERG or Slit Lamp (all sold separately) in minutes to increase the scope of your research and the efficiency of your time.

Retinal imaging lenses for mice and rats

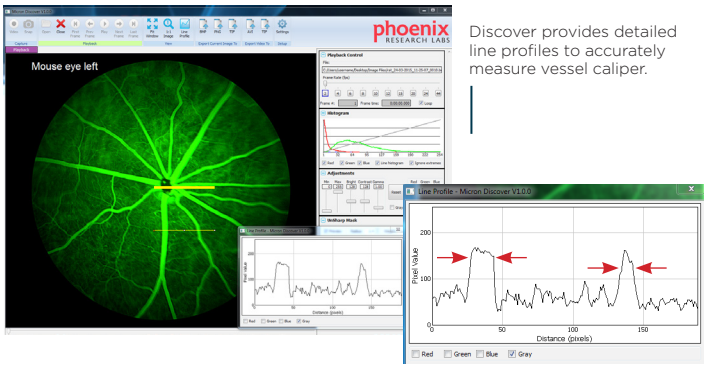
Micron IV:

- Mouse retina resolution below 3 microns
- Fluorescein angiography with resolution to observe RBC's
- Fluorescent imaging
- Real-time display with capture of stills or videos
- New software, 'Discover', gives you the tools to capture and process remarkable images

‘Discover’ powerful image processing

Our new image processing software, Discover, gives you more control and features to ensure you capture the best images possible. New features include:

- Image processing routines
- Contrast stretch
- Increased software usability
- Line profiles



Discover provides detailed line profiles to accurately measure vessel caliper.

Powerful, validated and accepted

Phoenix Micron technology plays an integral role in 200+ research centers in North America, Asia and Europe as well as being cited in over 300 print publications. The Micron has been used to fuel scientific discovery in broad range of applications including basic eye research, toxicology, pharmaceutical efficacy and neurological research.

Specifications:

Retinal imaging resolution	3 µm or better (mouse) 6 µm (rat)	
CCD pixel resolution	2 µm (mouse) 4 µm (rat)	
Image sensor	Custom built, low noise 3 chip CCD	
Pixel count	800 x 800 pixels	
Depth of focus	20 µm	
Range of focus	Retinal surface into crystalline lens	
Field of view	50 degrees; 1.8mm (mouse) 3.6mm (rat)	
Dynamic imaging rate	24 fps to 0.5 fps / 44 fps showing 1/3 screen	
Imaging dynamic range	60db	
Image formats	AVI, BMP, JPEG, PNG, TIFF	
Imaging Modalities	Bright Field:	450-650 nm
	Fluorescein and Evan’s blue angiography	
	Fluorescent imaging of specific fluorophores	
Animal stage	2 degrees of rotation and 3 degrees of translation	
Objective lenses	Separate objective lenses for mouse and rat	
Camera head stand	Rack and pinion motion along axis, 2 axis rotation, vertical	
Exposure time	up to 100x long exposure	
Filter wheels	2 wheels with 4 slots (excitation and emission)	
Light source	Xenon	
CPU	Intel Core i7 3.4GHz w/ MS Windows 7 Professional and proprietary imaging software	
DDR3 Samsung SDRAM	8GB	
Monitor	Wide screen LCD 22 inch	
Accessories	Mouse, Keyboard, Footswitch	

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