Western
Biotron Experimental
Climate Change Research

Stereo Microscopes

StereoLumar V12– Fluorescent Stereomicroscope (Carl Zeiss Canada, North York, ON)

Our Stereo Lumar can provide a true stereo image at up to 125× magnification with sub-micrometer resolution, in three fluorescent channels (please see Table) using either transmitted or reflected light. This microscope is perfect for materials characterization or developmental biology projects, especially those looking at fluorescent protein expression (e.g. GFP, RFP) in whole organisms or tissues. Ours offers 4 lighting sources: transmitted light, incident/reflected light, top-down ring lighting, and up to 3 – channel fluorescence.

The motorized features of this system include automated focus and zoom allowing for z-stacks, 3D reconstruction, multichannel imaging, extended depth of focus and time lapse imaging.

Zeiss StereoLumar V12 Technical Specifications

Filters	01 (UV) 49 (UV) 38 (Green) 20 (Red)	Excitation: 353-377 Excitation: G365 Excitation: BP 470/40 Excitation: BP 546/12	Emission: LP 395 Emission: BP 445/50 Emission: BP 525/50 Emission: BP 575-640
Objectives		**Lens type** **Working Distance** 1.5x NeoLumar S WD = 30 mm 0.8xNeoLumar S WD = 80 mm	**Field of View:** 17 mm Ocular, 7mm ICc Camera 37 mm Ocular, 14 mm ICc Camera
Cameras Available (3)		**ON SCOPE:** **Zeiss ICc5 Camera:** 5 MPx CCD with 2452 x 2056 pixels, up to 15 FPS, 12 bit RGB Bayer filter **AVAILABLE:** **Zeiss MRC 5 (Colour):** 12 acquisition modes, 5 megapixel, 1:1300 dynamic range, high sensitivity 2/3” CCD sensor, up to 16 frames/sec, 36 bit RGB, perfect colour accuracy **Monochrome MRm (Fluorescence):** 1.4 megapixel, 1:2200 dynamic range, high sensitivity 2/3” CCD sensor, up to 48 frames/sec, 12 bit, expanded spectral range to near-IR, barrier filter-free for extremely high fluorescence sensitivity on dim samples.	

Discovery V8 Stereo Microscopes (2 onsite)

Our Discovery V8 stereoscopes are available for dissection, trimming and mounting specimens, and as an alternative to the StereoLUMAR V12 for imaging when a wider field of view is required.

Zeiss Discovery V8 Technical Specifications

Objectives	**Lens type** **Working Distance** 0.3x Achromat S WD = 236 mm	**Field of View:** 17 mm Ocular, 7mm ICc Camera