

Advanced Digital Stereo Zoom Microscope System with Integrated Imaging Solution

Experience precision, performance, and digital integration like never before with our fully apochromatically corrected microscope system—engineered for demanding laboratory and industrial environments. Designed for unparalleled clarity and accuracy, this all-in-one solution combines cutting-edge optics, superior imaging, and ergonomic design.

Optical System & Magnification

This high-performance microscope delivers a wide coded magnification range from **6.3x to 55x** with a **coded, continuous 9:1 zoom ratio**. The system is fully upgradeable to a magnification of **440x**, ensuring adaptability to a variety of applications. With automatic saving of zoom and magnification settings embedded into image metadata, documentation and traceability become seamless.

- **Eyepieces:** Widefield 10x / 23 mm high eye point eyepieces with diopter adjustment
- **Interpupillary Distance:** Adjustable between 50 mm
- **Viewing Angle:** Comfortable 35° inclination
- **Working Distance:** 121 mm for hassle-free specimen handling
- **Object Field Diameter:** 37.7 mm
- **Depth of Field:** 12 mm for superior 3D observation
- **Resolution:** Up to 500 lp/mm
- **Unique Feature:** Differentiated numerical apertures on left and right objectives provide enhanced resolution and depth of field simultaneously

Illumination System

A highly versatile LED lighting system ensures optimal illumination for a range of specimen types and contrast methods.

- **Incident and Transmitted LED Illumination Stand**
- **4-Point High-Brightness Ring Light** for uniform lighting
- **3-Point Oblique Arc Light** for enhanced topographical detail
- **Center-Aligned Transmitted LED Light** to boost contrast during transparent specimen examination
- **Integrated Power Supply:** Universal voltage compatibility (100 – 240V)
- **Supplied with Antistatic Dust Cover** for safe storage
- **UPS Backup:** Included unit offers 30 minutes of operation during power interruptions



STEREO ZOOM MICROSCOPE DSZ-99



ACVT-32 12mp Camera

Integrated Digital Camera

Capture every detail in stunning 4K resolution with the built-in 12 MP CMOS camera—ideal for high-resolution live imaging, documentation, and analysis.

- **Sensor:** 1/2.3" CMOS, 7.81 mm diagonal
- **Pixel Size:** 1.55 μm x 1.55 μm
- **Image Output:** Live 4K video at up to 60 fps (3840 × 2160 pixels)
- **Connectivity Options:**
 - **USB Mode:** Direct PC/Mac connection via 4 x USB 2.0 ports
 - **Ethernet Mode:** Network integration via RJ45
 - **HDMI Mode:** Direct monitor output for standalone operation





To ensure optimal performance, a professional-grade PC workstation is bundled with the system:

- **Processor:** Intel Core i5, 12th Generation
- **Memory:** 16 GB RAM
- **Storage:** 512 GB SSD
- **Graphics:** 2 GB Dedicated Graphics Card
- **Display:** 24" Full HD Monitor
- **OS & Software:** Windows 10 Pro with MS Office (latest version), keyboard, and optical mouse

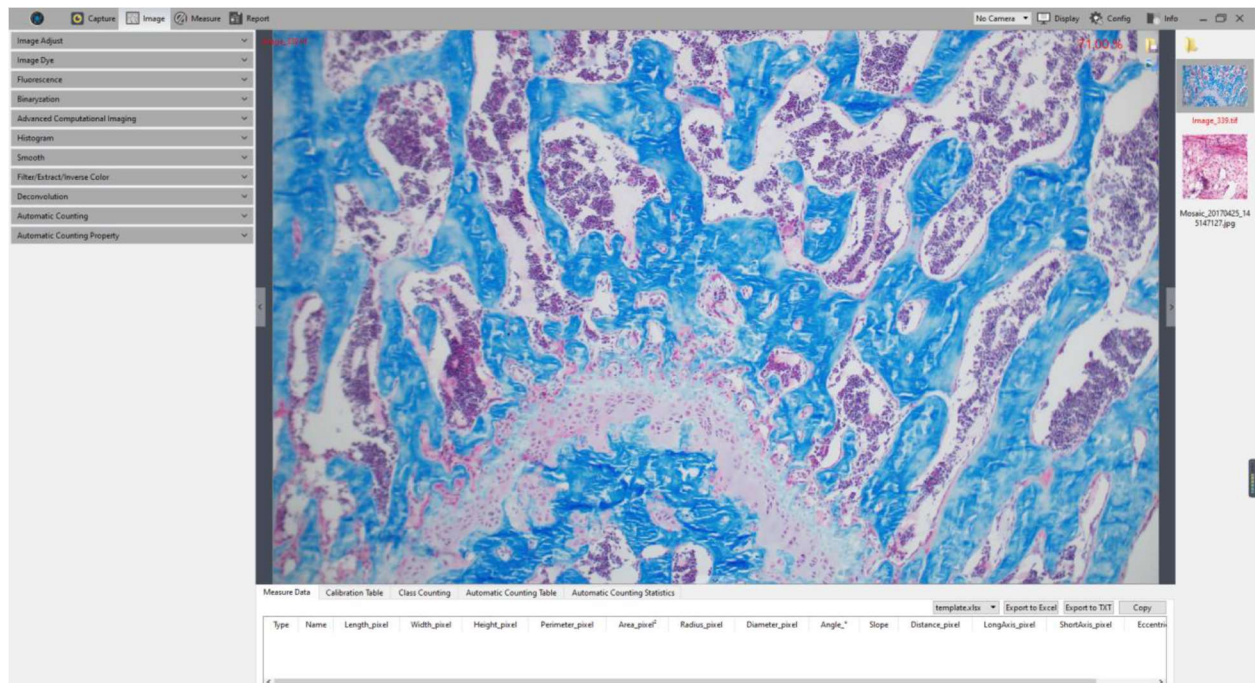


Microscope Imaging Software Specification

Key Features and Functionalities

1. Capture

- **High-Resolution Image Capture:** Supports detailed and accurate imaging with a variety of resolution settings.
- **Binning Capability:** Allows pixel binning to enhance signal-to-noise ratio.
- **Exposure Control:** Adjustable exposure settings for precise imaging under various lighting conditions.
- **White Balance Adjustment:** Ensures accurate color reproduction.
- **Bit Depth (Monochrome Cooling Camera):** High bit-depth support for enhanced grayscale imaging.



2. Image Processing

- **Image Adjustment Tools:** Comprehensive tools for brightness, contrast, and color adjustments.
- **Histogram Analysis:** Real-time histogram display for detailed image analysis.
- **Temperature Control (Cooling Cameras):** Maintains consistent sensor performance.
- **Region of Interest (ROI):** Selectable areas for focused image processing.
- **Masking Options:** Apply masks for isolating specific regions during analysis.
- **Imaging Stitching (Live):** Seamlessly combine multiple images for high-resolution composite views.
- **Extended Depth of Field (EDF, Live):** Create images with extended focus depth.
- **Real-Time Dye Adjustment:** Adjust dye parameters in live imaging mode.
- **Video Recording:** Capture and save high-quality videos.
- **Delay Capture:** Scheduled or delayed imaging for specific requirements.
- **Trigger Functionality (Monochrome Cooling Cameras):** External triggering for synchronized imaging.
- **Advanced Image Processing:** Features like deconvolution and advanced filters.

3. Measurement and Analysis

- **Measurement Tools:** Tools for length, area, and angle measurements.
- **Calibration Options:** Ensure accurate measurements with user-defined calibration.
- **Layer Management:** Organize and analyze data on multiple layers.
- **Metrics Flow:** Streamlined data collection and analysis.
- **Graphics Properties:** Customize graphical overlays for better visualization.
- **Fluorescence Intensity Analysis:** Quantify and analyze fluorescence signals.
- **Manual Class Counting:** Interactive counting tools for classification tasks.
- **Scale and Ruler Properties:** Adjustable scales and rulers for detailed measurements.
- **Grid Settings:** Overlay grids for precise alignment and analysis.

4. Reporting

- **Template Reports:** Predefined templates for generating professional reports.
- **Customizable Reports:** Flexibility to create tailored reports with imaging and analysis data.

5. Image Display and Configuration

- **Real-Time Display:** High-quality, real-time image rendering.
- **Advanced Display Features:** Fluorescence visualization and computational imaging capabilities.
- **Configuration Options:** Fine-tune capture, image, and measurement settings.

6. Additional Features

- **Automatic Counting:** Automate object counting with customizable properties.
- **Auto Focus (Auto Focus Cameras):** Real-time auto-focusing for precise imaging.
- **File Saving Options:** Multiple formats supported, including JPEG and RAW.
- **Light Frequency Adjustment:** Minimize flicker and ensure stable lighting.
- **User Settings:** Save and load user preferences for a consistent workflow.

7. Advanced Computational Imaging

- **Binaryzation Tools:** Convert images to binary for enhanced analysis.
- **Smoothing Filters:** Reduce noise while preserving critical details.
- **Color Filters:** Extract or invert colors for enhanced visualization.

8. System Information

- **Detailed Info Panel:** Access detailed system and software information.
- **Customizable Settings:** Tailor the software to meet specific imaging requirements.

9. Supported Applications

- **Biological Imaging:** Ideal for fluorescence, brightfield, and phase contrast imaging.
- **Industrial Applications:** Precision imaging for quality control and analysis.
- **Educational Use:** Interactive and user-friendly interface for teaching and demonstrations.

Technical Compatibility

- Compatible with a wide range of camera models, including monochrome cooling and auto-focus cameras.
- Supports integration with microscopes from various manufacturers.
- Operates on Windows and MacOS platforms.

Config				
Capture	Name	Visible	Up	Down
Image	Resolution	<input checked="" type="checkbox"/>	↑	↓
Measure	Binning	<input checked="" type="checkbox"/>	↑	↓
Jpeg	Exposure Control	<input checked="" type="checkbox"/>	↑	↓
	Bit Of Depth	<input type="checkbox"/>	↑	↓
	White Balance	<input checked="" type="checkbox"/>	↑	↓
	Image Adjust	<input checked="" type="checkbox"/>	↑	↓
	Histogram	<input checked="" type="checkbox"/>	↑	↓
	Temperature Control	<input type="checkbox"/>	↑	↓
	File Save	<input checked="" type="checkbox"/>	↑	↓
	ROI	<input checked="" type="checkbox"/>	↑	↓
	Mask	<input checked="" type="checkbox"/>	↑	↓
	Image Stitching(Live)	<input checked="" type="checkbox"/>	↑	↓
	EDF(Live)	<input checked="" type="checkbox"/>	↑	↓
	Realtime Dye	<input type="checkbox"/>	↑	↓
	Dark Field/Fluorescence Imaging	<input checked="" type="checkbox"/>	↑	↓
	Video Record	<input checked="" type="checkbox"/>	↑	↓

Close