ALMICRO®
since 1978

BLXL-Plus is designed keeping user comfort in mind. Conveniently placed controls for fast and efficient observations. With multi layer coating on our objectives having FOV upto 26.5mm, reduce chromatic aberration to low levels, resulting bright and high contrast images even for low light applications like Fluorescence dark field etc. With quintuple nose piece user have choice for extra objectives and multiple illumination techniques. Features adding to user comforts are Light preset switch; Light intensity LED indicator, Built-in filters and many more.

TRINO

360°

LED

TL

ABBE

230 V

2 DAY

Microscope Frame and Optical System:
- Sturdy microscope frame tailored for transmitted light microscopy.
- Integrated Köhler illumination with a built-in field iris diaphragm.
- Transmitted light via high-efficiency white LED for consistent illumination.
- **Precision focusing:**
  - Fine focus: 0.1 mm per rotation.
  - Coarse focus: 15 mm per rotation.
  - Travel stroke: 25 mm with 1 µm graduation for fine measurements.

Optical System: UIS (Universal Infinity System) for modular component integration and superior image fidelity.

Illumination System:
- Pre-centered lamp housing with integrated long-life white LED.
- High Color Rendering Index (CRI) ensures accurate color visualization.
- LED lifespan rated at a minimum of 100,000 hours.
- Power supply integration through included connecting cable.

Viewing Head:
- Ergonomically designed telescopic trinocular head for user comfort.
- Integrated three-way light path selector (0:100, 50:50, 100:0) for flexible image sharing and documentation.
- Supplied with dust-proof eyepiece caps.

Eyepieces:
- Wide Field 10X eyepieces with FN22 field number.
- Includes one additional 10X eyepiece with focusable diopter adjustment for customized viewing.

Mechanical Stage:
- Ceramic-coated stage surface for durability and resistance to scratches and corrosion.
- Right-hand low-position drive control with long-arm ergonomics.
- Adjustable tension controls on both X and Y axes.
- Rotatable stage (up to 230°) for versatile sample orientation.
- Thick-type dual-slide holder included for simultaneous slide analysis.

Condenser:

- Universal condenser system for Brightfield and Darkfield microscopy.
- High Numerical Aperture (N.A. 1.1) for enhanced resolution.

Objectives and Nosepiece:

- Six-position revolving nosepiece with slot for DIC slider or polarization analyzer.

Supplied Objective Lenses:

- Plan Achromat 4X
- Plan Achromat Phase 10X/0.25, WD 10.6 mm
- Plan Achromat Phase 20X/0.4, WD 1.2 mm
- Plan Achromat Phase 40X/0.65, WD 0.6 mm (Spring-loaded)
- Plan Achromat 100X/1.25 Oil, WD 0.13 mm (Spring-loaded)

Upgradability and Application Compatibility

Microscope supports future upgrades including:

- DIC (Differential Interference Contrast) attachment.
- Minimum 8-position fluorescence turret for advanced fluorescence applications.
- Compatible with Karyotyping and FISH workflows.
- **Optional:** Manual karyotyping software with integrated database.

Standard Accessories:

- Includes protective dust cover and immersion oil at no additional cost.

Warranty: Backed by a comprehensive 3-year warranty covering the entire system including optics, mechanical parts, digital camera, and supplied accessories.

Packaging: Inner Thermocol/Styrofoam Packing and Outer Cardboard Box.

Optional Packaging:

1) Wooden Box outer cabinet with lock and key (Chargeable).

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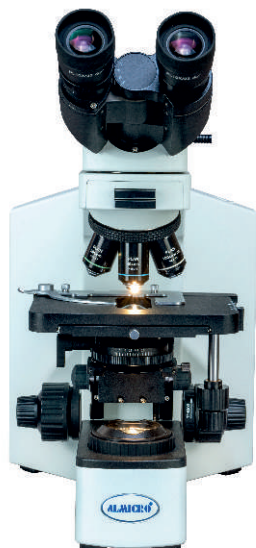
Digital Microscope Camera (ACVT 32B)

ACVT32B Series cameras are high end microscope cameras, specially designed for microscope application. Adopt large area array high performance SONY sensor, with image buffer technology.

Have various outstanding features like: Low noise, High definition, Excellent color reproduction and stable transmission etc.

FEATURES

- With 32MB image buffer, fast and stable image transmission; faster than ordinary 34% USB2.0 camera.
- Specially optimized for the microscope environment image effects.
- Very low power consumption;
- Support small resolution high-speed preview, full-resolution camera.
- Provide development kit, SOK support VC, VB, C # development language, driver support TWAIN and Direct Show.

TECHNICAL SPECIFICATIONS

Camera Resolution: 5 MP (2160 × 1620 pixels)

Sensor: 1/2.5-inch CMOS, pixel size 2.64 × 2.64 μm

A/D Conversion: 10-bit for accurate image digitization

Exposure Time Range: 25 μs to 1.5 s

Frame Rate: Up to 40 fps

Interface: High-speed USB 3.1 connectivity

Mount: C-mount compatible

Supplied Accessories: Camera head, USB 3.1 cable, and safety manual

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.

Imaging Software Capabilities: Supports Brightfield, Phase Contrast, Polarizing, Darkfield, and DIC imaging modes.
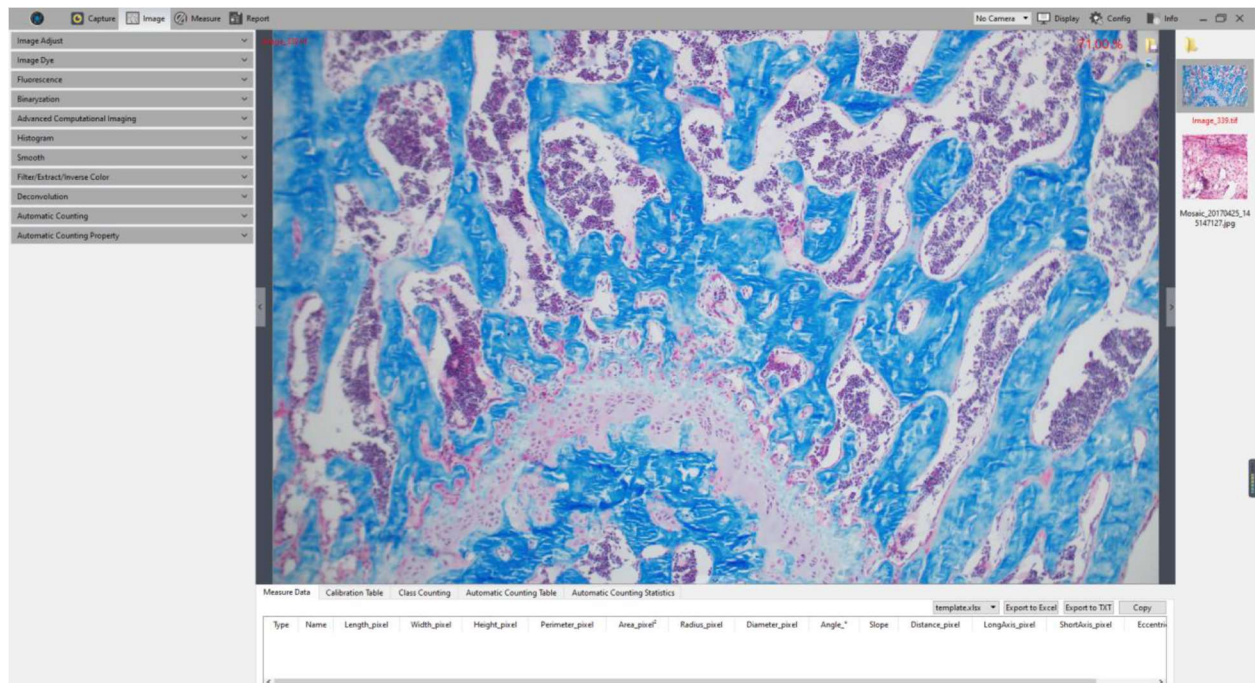
2. Image Processing

- **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.

	Name	Visible	Up	Down
Capture	Resolution	☑	↑	↓
Image	Binning	☑	↑	↓
Measure	Exposure Control	☑	↑	↓
Jpeg	Bit Of Depth	☐	↑	↓
	White Balance	☑	↑	↓
	Image Adjust	☑	↑	↓
	Histogram	☑	↑	↓
	Temperature Control	☐	↑	↓
	File Save	☑	↑	↓
	ROI	☑	↑	↓
	Mask	☑	↑	↓
	Image Stitching(Live)	☑	↑	↓
	EDF(Live)	☑	↑	↓
	Realtime Dye	☐	↑	↓
	Dark Field/Fluorescence Imaging	☑	↑	↓
	Video Record	☑	↑	↓

Config — Close