



#### High Performance Optics, Unsurpassed Ergonomics,

The Z850 Series is a versatile, high performance, ergonomically designed zoom stereo microscope ruggedly built to withstand years of heavy usage. With a zoom ratio of 6.3:1 the Z850 provides superior optical performance at an affordable price. Key features include:

- Binocular or trinocular viewing heads are inclined 45° and can rotate 360°.
- A best-in-class 8x to 50x magnification range with click-stops at 1x, 2x, 3x, 4x and 5x to ensure quick and consistent measurement results.
- 115mm working distance allows easy access to specimens.
- WF10x/22mm and WF15x/15mm field of view eyepieces with built-in diopter adjuster allow the image and reticle to be brought into focus at the same time. WF20x/12mm eyepieces with built-in diopter adjuster are also available, but without a reticle holder.
- Utilizing advanced design techniques the Z850's assembly is airtight preventing contamination from dust, water, oil or other particles leading to cost savings in maintenance.
- An anti-mold design, in addition to being air tight, allows the Z850 to be used in areas of high heat and humidity without concern.



### Plain Focusing Stand Cat# 13130-Trinocular

The Plain Focusing Stand's thin design helps keep sample positions low resulting in increased user comfort. The focus mount is easily removable and can be positioned at two different points on the dovetail to offer maximum flexibility when working with small or large size samples. The trinocular Z850 is pictured with an optional Micrometrics™ CCD camera and c- mount adapter.



# LED Illuminator Stand Cat# 13101-Binocular

Simultaneous variable reflected and transmitted LED illumination can be utilized on this stand. The compact, thin design of the base allows users to keep sample positions low and maintains easy accessibility to the variable light controls. The reflected LED illuminator is powered by a 12 volt 2 watt LED system and the transmitted LED illuminator by a 12 volt 4 watt LED system. Both light sources are variable and controlled by a universal power supply (110v – 240v).



### Boom Stand / Cat# 13105-Binocular

A variety of stands are available for the inspection of large size specimens. The boom stand features safety tracks on the horizontal arm and Delrin<sup>®</sup> inserts in the focus block to ensure smooth, precise movements.



# Articulating Swing Arm Stand Cat# 13107-Binocular

Designed for maximum freedom and flexibility this stand will deliver the adjustability you need. Ideal for the inspection of specimens that require a lot of movement or to scan a large sample area, the articulating arm can be easily adjusted into hard to reach positions and moved easily out of the way.



#### Ball Bearing Boom Stand Cat# 13136-Trinocular

For users seeking precise, stable movements the ball bearing boom stand is the recommended choice. Sturdy and ruggedly built the ball bearing boom stand is ideal for observation applications where magnification adjustment and the ability to move across a sample are important considerations. The trinocular Z850 is pictured with an optional Micrometrics™ CCD camera and c- mount adapter.



#### Diascopic/Embroyo Transfer Stand Cat# 13103-Binocular

This cost-effective transmitted illumination stand provides bright, even illumination across the entire magnification range. A tiltable mirror provides direct and oblique illumination for low contrast specimens. This unit can be configured with either a 6v20w halogen illuminator or 150 watt fiber optic illuminator.

## UNITRON Z850

#### **Z850 SPECIFICATIONS VIEWING BODY Optical System** Twin zooming objective **Viewing Bodies** Binocular or Trinocular with 50/50 light split **Anti-Mold** Anti-mold and airtight design Magnification 0.8x to 5.0x with click stops at 1x, 2x, 3x, 4x and 5x **Zoom Ratio** 6.3:1 **Working Distance** 115mm (4.5 inches) **Viewing Angle** 45 degrees Interpupillary 52mm - 75mm **Distance Adjustment** Camera Adaptability 0.4x or 0.5x c-mount adapters, photo tube **Eyepieces** (with WF10x/22mm with reticle holder (reticle size: 27mm), WF15x/16mm with reticle holder (reticle size: 20mm), WF20x/12 5mm diopter adjustment) 0.5x (211mm working distance) and 2.0x (43.5mm working distance) **Auxiliary Objectives STANDS Plain Focusing Stand** 76mm focus mount diameter, 100mm focusing stroke, 240mm (l) x 290mm (d) x 318mm (h), 125mm black & white plate 76mm focus mount diameter, 100mm focusing stroke, 240mm (I) x 292mm (d) x 318mm (h), 100mm clear glass and **LED Reflected/ Transmitted** black & white plate. Variable Transmitted & Reflected LED illumination. Average LED life expectancy - 7,000 hours, **Illuminated Stand** Color temperature: 6200° - 7000° Kelvin 76mm focus mount diameter, 100mm focusing stroke, 255mm (l) x 310mm (d) x 382mm (h), 280 mm clear glass plate. **Diascopic Stand** with Transmitted Tiltable mirror provides direct and oblique illumination. Choice of 6v20w halogen or 150w fiber optic illuminators **Illumination Attachment Pole Stand** 76mm focus mount diameter, 305mm pole height, 193mm focusing stroke, 240mm (I) x 290mm (d) x 318mm (h), 125mm black & white plate **Boom Stand** Base dimensions: 254mm x 254mm (10" x 10"), Vertical Post - 365mm, Horizontal Post - 518mm. Physical weight 37 lbs. **Ball Bearing Boom Stand** Base dimensions: 254mm x 254mm (10" x 10"), Vertical Post - 394mm, Horizontal Post - 585mm. Physical weight 42 lbs. The Swinging Arm has a 3 foot scanable range and a lockable 14.5" vertical motion range with an adjustable FlexArm/Swing Arm Stand counterbalanced support. Horizontal or vertical clamp mount **OPTIONAL ACCESSORIES** LED ring & fluorescent ring lights, Fiber Optic illuminators **Light Sources** Micrometrics® CCD and CMOS cameras with image analysis software **Digital Camera System**

#### **OPTICAL DATA**

Г	Auxiliary Objective	Working Distance (mm)	EYEPIECE					
			WF10X/22		WF15X/16		WF20X/12.5	
			Total magnification	Visual Field (mm)	Total magnification	Visual Field (mm)	Total magnification	Visual Field (mm)
Г		115	8-50X	27.5-4.4	12-75X	20.0-3.2	16-100X	15.6-2.5
	0.5X	211	4-25X	55.0-8.8	6-37.5X	40.0-6.4	8-50X	31.2-5.0
	2X	43.5	16-100X	13.8-2.2	24-150X	10.0-1.6	32-200X	7.8-1.3



73 Mall Drive Commack, NY 11725 Tel: (631) 543-2000 Fax: (631) 589-6975

Email: info@unitronusa.com Website: www.unitronusa.com