

Z10 Zoom
Stereo Microscope Series



Z10 Features

- Magnification range of 8x to 80x
- Seven defined, step magnification levels
- Sharp, crisp optics with outstanding depth of field and no image distortion

Z8 Features

- Magnification range of 8x to 64x
- Seven defined, step magnification levels
- High contrast optical system with no image distortion

Z6 Features

- Magnification range of 8x to 50x
- Seven defined, step magnification levels
- Excellent contrast and depth of field, images are undistorted

Shared Features

- Common Main Objective system with carefully selected lens surface coating and glass materials provide distortion free, original true color images.
- Modular product design allowing for easy customization and upgrading
- Parfocal optical design assures images remain sharp and in focus throughout the magnification range
- 24mm field of view
- 76mm standard interface allows for easy integration and compatibility with industry standard equipment.
- Variety of plan apochromatic, plan achromat and achromat objective lenses
- Ergonomic design provides outstanding user comfort

Unitron's New Z10 Series

Innovation at its Best
Superior Optical Performance
Unparalleled Ergonomics

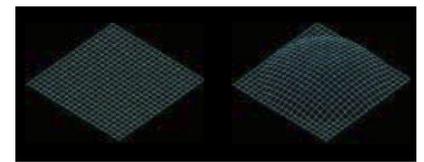
Utilizing state of the art design and lens coating techniques, Unitron's Z10 Series provides users with an ergonomically designed, high magnification stereomicroscope series that is ideal for routine inspections, failure analysis, quality control and life science applications.

Reliability and Repeatability

With seven defined, step magnification levels on each model users are assured of consistent reproducible results for repeated examinations.

Distortion Free

Producing images that cause less strain on the users eyes was a critical consideration in the design of the Unitron Z10 Series. Typical stereo-microscopes images suffer from problems caused by chromatic aberration and distortion in the lens that cause surface irregularities in the image. Unitron's Z10 Series design eliminates the problems associated with chromatic aberration and distortion allowing the user to see the specimen undistorted and in its true, authentic colors.



Ergonomic Modular Design

Designed as a modular system the Z10 Series is offered with an Ergonomic Viewing Body (0° - 35°) or a 20° inclined binocular viewing body. The standard 10x eyepieces provide a best in class, 24mm field of view. Eyepieces are also available in 15x, 20x and 25x magnification.

The Z10 Series features a choice of three different optical carriers. The Z10 has a magnification range of 0.8x to 8.0x, the Z8 offers a magnification range of 0.8x to 6.4x and the Z6 provides a magnification range of 0.8x to 5.0x.

A wide range of objectives are available to customize the Z10 Series for various applications. Plan achromat objectives are available in 1x (W.D. 78mm) and 2x (W.D. 32.5mm). A 0.5x Plan Apo objective (W.D. 126mm) and a 0.3x achromat (W.D. 280mm) and 0.5x achromat (W.D. 186mm) are also available.

Accessories

Integrating an imaging system to the Z10 Series is easy with the addition of either the single or dual port beam splitter and iris diaphragm. Accessories are available for fluorescence, simple polarization, coaxial illumination and darkfield.

Industrial Applications Function and Productivity, The Benefits of Ergonomics

In today's competitive environment productivity and efficiency are the benchmarks of performance. Ergonomically designed workstations that can help improve work processes and benefit the welfare of people in the workplace can be motivating and performance enhancing.

The Unitron Z10 is a best in class value with unrivaled optical performance for the demanding work required in today's global environment for quality assurance, materials analysis,



Life Science Applications - See More!

Whether performing botanical analysis, entomological identification, anatomical dissection or marine biology investigation the Z10 Series provides a path to discovery. With a best in class 24mm field of view and resolution of 289 lp/mm with a numerical aperture of 0.08 N.A. seeing more, faster, more reliably and accurately has never been easier or more affordable.

Digital Imaging Made Easy

Never before has imaging been so simple. Unitron's integrated hi-resolution Digital LCD Stereo Zoom Microscope is an all in one solution for capturing, analyzing and storing your images.

A 2 megapixel CMOS camera is built into the beam splitter and connects directly to the hi-resolution, LCD computer monitor. With a Windows CE operating system and Unitron's NMS image analysis software user's can measure, annotate, capture, store and e-mail images with a few simple clicks!

With a built-in Ethernet port, Wi-Fi capability and 2 MB SD card user's can store their images anywhere. The 8.4" touch screen allows easy and simple annotations.



UNITRON® Z10 Series

Modular Components Made Easy

- 1 Optical body—6.3:1, 8:1, 10:1
- 2 20 degree binocular viewing head
- 3 0-35 degree ergonomic viewing head
- 4 Beam splitter/photo port
- 5 Iris diaphragm
- 6 Eyepieces
- 7 Auxiliary objectives
- 8 C-mount or photo tube



Z6 Series 6.3:1 Parallel Zoom Body

Objective Lens	Working Distance (mm)	EYEPIECE					
		WF 10X (Ø24mm)		WF 15X (Ø16mm)		WF 20X (Ø12mm)	
		Total Magnification	Visual Field (mm)	Total Magnification	Visual Field (mm)	Total Magnification	Visual Field (mm)
0.3x	280	2.4X-15X	100-16	3.6X-22.5X	66.7-10.67	4.8X-30X	50-8
0.5X	126	4X-25X	60-9.6	6X-37.5X	40-6.4	8X-50X	30-4.8
1X	78	8X-50X	30-4.8	12X-75X	20-3.2	16X-100X	15-2.4
2X	32.5	16X-100X	15-2.4	24X-150X	10-1.6	32X-200X	7.5-1.2

Resolution and N.A.

Magnification	Resolution (Lp/mm)	Numerical Aperture (N.A.)
8X	289	0.08
6X	256	0.078
4X	228	0.064
3X	204	
2X	128	0.032
1X	64	0.02
0.8X	57	0.0224

Z8 Series 8:1 Parallel Zoom Body

Objective Lens	Working Distance (mm)	EYEPIECE					
		WF 10X (Ø24mm)		WF 15X (Ø16mm)		WF 20X (Ø12mm)	
		Total Magnification	Visual Field (mm)	Total Magnification	Visual Field (mm)	Total Magnification	Visual Field (mm)
0.3x	280	2.4X-19.5X	100-12.3	3.6X-29.3X	66.7-8.2	4.8X-39X	50-6.15
0.5X	126	4X-32.5X	60-7.4	6X-52X	40-4.9	8X-65X	30-3.7
1X	78	8X-65X	30-3.7	12X-97.5X	20-2.5	16X-130X	15-1.85
2X	32.5	16X-130X	15-1.85	24X-195X	10-1.23	32X-260X	7.5-0.9

Z10 Series 10:1 Parallel Zoom Body

Objective Lens	Working Distance (mm)	EYEPIECE					
		WF 10X (Ø24mm)		WF 15X (Ø16mm)		WF 20X (Ø12mm)	
		Total Magnification	Visual Field (mm)	Total Magnification	Visual Field (mm)	Total Magnification	Visual Field (mm)
0.3x	280	2.4X-24X	100-10	3.6X-36X	66.7-6.67	4.8X-48X	50-5
0.5X	126	4X-40X	60-6	6X-60X	40-4	8X-80X	30-3
1X	78	8X-80X	30-3	12X-120X	20-2	16X-160X	15-1.5
2X	32.5	16X-160X	15-1.5	24X-240X	10-1	32X-320X	7.5-0.75

Design, features and specifications are subject to change without notice.

ISO 9001
Certification
 Design and production adheres to ISO9001 international quality standard.



ISO 14001
Certification
 Design and production meets the requirements of international standard ISO 14001 for environmental management.



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