





# Z MODELS' STAND — AND DELIVER

# Ergonomic, slim design for true comfort viewing

- UNITRON's newly designed, slim LED stand delivers superb brightness with a true-color LED illumination system.
- The S-LED transmitted light base measures only 41mm high, allowing the eyepoint to be lowered and making accessing samples simple and easy.
- With its wide stage surface and fine adjustment control offering increased sensitivity, the S-LED stand is an exceptional choice for the inspection and manipulation of petri dishes and other specimen containers.



# STANDS AND ILLUMINATION

A wide range of stands and illumination options are available to meet the needs of any application. UNITRON offers plain focusing stands, LED stands, boom stands, articulating (flex) arm stands, pole stands, diascopic illumination stands, along with a variety of LED ring lights and fiber optic illuminators.



Z10 Pole Stand with MI-LED Dual Gooseneck Illuminator



UNITRON Z10 Series Ergo Ball Bearing Stand with LED Ring Light

# INDUSTRIAL APPLICATIONS

# READY FOR THE WORLD OF HARD WORK

UNITRON's Z Series provides a high value, ruggedly built solution to meet the strict demands required in today's global environment for quality assurance, materials analysis, production lines, assembly and failure analysis.

### **DISTORTION-FREE**

Distortion-free optics for critical inspection provide outstanding images without blur or color fringe, long working distances and shadow-free illumination.

### **ERGONOMIC DESIGN**

Ergonomically designed modular workstation systems promote productivity, improved performance and efficiency, leading to less absences, and helping to improve profitability.

### **WIDE RANGE OF ACCESSORIES**

A large range of objectives, stands and illuminators are available to customize the system to meet your mechanical and optical needs.





# **IMAGING MADE EASY**

### PERFECT FOR PEER REVIEWING

Designed to meet the advanced needs of researchers, medical laboratories and universities, UNITRON's Z Series offers best in class performance, value and versatility for multiple display and group viewing applications.

# **SUPERB DIGITAL IMAGING**

With a wide variety of CCD, CMOS and HD cameras to choose from, digital imaging is fast and easy, allowing for publication grade images.

# **HIGH QUALITY OPTICS**

High resolution, with a high level of chromatic aberration correction to provide outstanding images throughout the magnification range.

A modular configuration allows for dissections and other applications using a wide range of magnifications.

# FLUORESCENCE - BRIGHT, HIGH CONTRAST MAGES

The newly designed epi-fluorescence attachment with 4 position filter slider provides a lower signal-to-noise ratio and a higher transmission optical lens system to produce best-in-class, bright, clear fluorescence images.

Macro imaging of fluorescence is a tremendous tool for biological research and is widely used in genetics, developmental biology and soil studies.

Using the most advanced LED or Metal Halide illumination systems, UNITRON's fluorescence systems offer both tremendous value and performance.



# INNOVATION AT ITS BEST. SUPERIOR OPTICAL PERFORMANCE. UNPARALLELED ERGONOMICS.

# EFFICENCY IN DESIGN FOR INCREASED PRODUCTIVITY

The Z SERIES Parallel-Optics design ensures better, faster and more reliable identifications and sample measurements. With an industry-leading 24mm field of view, the Z Series parallel-optic lens system delivers users an image with extremely high resolution and a large depth of field that avoids distortion or aberration.



# GET CLOSE-UP AND PERSONAL THE FIRST TIME... EVERY TIME

Reliability & Repeatability

A continuous zoom with click stops assures users of consistent reproducible results.



#### **IMAGING MADE EASY**

Digital Imaging

As a modular system, any Z Series Microscope can be turned into a digital imaging system. A wide range of CCD, CMOS and HD cameras allow for image capture, share, measurement, annotation, stacking, archiving and more.



# IT'S EASY TO SEE AT ANY DEGREE

Variety of Observation Tubes

Users can choose either a 20° inclined binocular observation tube with extended eyetubes or a tilting binocular observation tube.

The tilting binocular eyetubes can be inclined from 0 to 35° and the eyetubes can be rotated 180° to increase the height of the eyetubes an additional 3 inches.

For hours of fatigue-free viewing the tilting binocular eyetubes are ideal for long observation periods.



# **EXCELLENCE IN STEREO MICROSCOPY**

For over 60 years UNITRON has continued to deliver best in class solutions to science and industry. Combining outstanding optical performance, high zoom ranges, a modular design and excellent resolution, UNITRON's Z Series delivers a highly versatile instrument for use in a wide variety of applications.

# **DESIGNED FOR YOU**

Modular Design for More Options

- At the core of UNITRON's Parallel-Optics zoom stereo is the modular design
  of the zoom body. The parallel-optic design allows for the utmost versatility
  for advanced functions by allowing the addition of intermediate accessories
  like beam splitters for digital imaging, on-axis coaxial epi-illuminators,
  and iris diaphragms.
- Unitron offers 3 different zoom bodies for a choice of magnification ranges designed to insure the best performance and value.
- With a choice of either an ergo tilting or a 20 degree inclined, extended binocular eyetube, UNITRON can provide a solution for any application or budget.

# BECAUSE CLARITY IS THE ONLY OPTIC OPTION

High Contrast Images. Sharp Crisp Optics Wide Magnification Range

UNITRON's Z Series newly designed optical system delivers high resolution images with no distortion, making these instruments an excellent choice for industrial and biological applications.



	Z10 SERIES ——	Z8 SERIES ———	Z6 SERIES
OPTICAL SYSTEM	PARALLEL OPTICS	PARALLEL OPTICS	PARALLEL OPTICS
ZOOM RATIO	10:1	8:1	6.3:1
ZOOMING RANGE	0.8X - 8.0X	0.8X - 6.4X	0.8X - 5.0X
TOTAL MAGNIFICATION*	8X - 80X	8X - 64X	8X - 50X
WORKING DISTANCE	78MM	78MM	78MM
OBJECTIVES	1X STANDARD	1X STANDARD	1X STANDARD

# Z10 SERIES 10:1 Parallel Zoom Body

		EVEDEGE						
EYEPIECE								
			WF 10X (F.N. 2	24mm)	WF 15X (F.N.	16mm)	WF 20X (F.N.	12mm)
	OBJECTIVE — LENS	WORKING DISTANCE (mm)	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

# **Z8 SERIES 8:1 Parallel Zoom Body**

			EYEPIECE						
ν			WF 10X (F.N. 2	24mm)	WF 15X (F.N. 16mm)		WF 20X (F.N. 12mm)		
•	OBJECTIVE — LENS	WORKING DISTANCE (mm)	TOTAL MAGNIFICATION	VISUAL FIELD (mm)	TOTAL MAGNIFICATION	VISUAL FIELD (mm)	TOTAL MAGNIFICATION	VISUAL FIELD (mm)	
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	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 - 97.50X	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	

# Z6 SERIES 6:1 Parallel Zoom Body

			EYEPIECE					
			WF 10X (F.N. 24mm)		WF 15X (F.N. 16mm)		WF 20X (F.N. 12mm)	
•	OBJECTIVE — LENS	WORKING DISTANCE (mm)	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 APERATURE (N.A.)
8X	289	0.080
6X	256	0.078
4X	228	0.064
3X	204	0.048
2X	128	0.032
1X	64	0.020
0.8X	57	0.0224

ISO-9001 • ISO-14001



