microworld®

A-Zoom micro™

ANALYTICAL PROBING MICROSCOPE

Manual 7:1 Optical Zoom for Functional Simplicity
and Extended Single-Objective Magnification

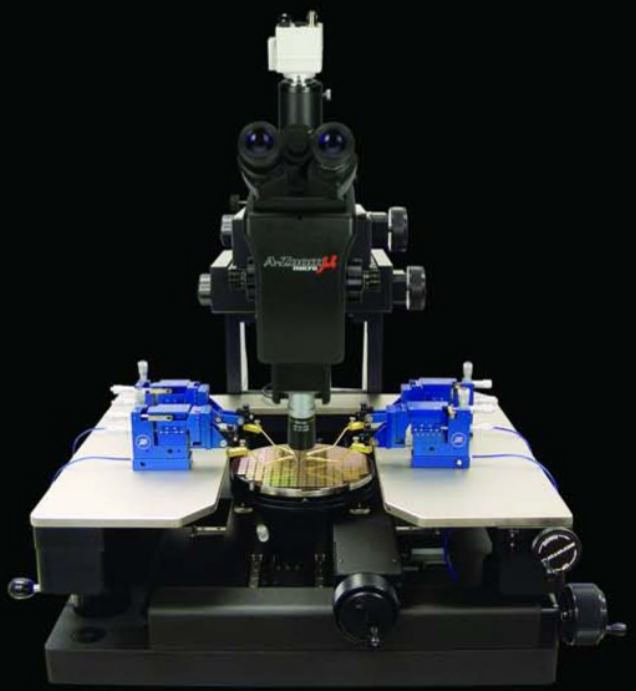
A-Zoom μ micro™

The fusion of simplicity and precision for analytical probing productivity

The New A-Zoom Micro represents the latest addition to the time-tested line of A-Zoom probing microscopes. Designed for streamlined operation and compact integration onto a multitude of probing stations, the A-Zoom Micro offers a high-value solution for circuit board, semiconductor and flat-panel display probing without sacrificing features, function or performance.

With a 7:1 manual zoom range, the A-Zoom Micro when equipped with a single Optem 10X Objective, covers the available magnification range of existing multiple-objective microscopes... and provides imaging access for all fields-of-view in between. On-board LED illumination offers finite adjustability, extended service life, and crisp contrast for crystal-clear imaging.

Choose from a variety of objectives and head/eyepiece options to meet specific imaging needs, and offer greater viewing comfort, flexibility and productivity. The compact, ergonomic design affords 360° access for prober tips and keeps all controls in convenient reach of the operator for maximum imaging throughput.



Camera Flexibility

Standard 38mm ISO port provides camera flexibility to meet most any prober imaging requirement.

Matching Fields

Achieve matching eyepiece and on-screen fields-of-view across the entire 7:1 zoom when you equip your standard *A-Zoom Micro* with 1/2-inch cameras.

On-board LED Illumination

Adjustable 10-watt LED provides crisp contrast for both eyepiece and video viewing without the need for external light source.

Heavy-Duty Focus Block

The Heavy-duty focus block offers 50mm precision travel to establish fine-focus and provide a stable mounting interface for most any probe station.

Single-Objective Design

In keeping with its field-proven heritage, *A-Zoom Micro* features a space efficient and user friendly single-objective design to eliminate cumbersome nose turret manipulation and improve throughput. Select from a wide range of Optem Objectives to meet your specific requirements.

optimized for

OPTEM OBJECTIVES

(see back page)

Trinocular Head Options

A-Zoom Micro comes standard with a fixed trinoc head and 10X eyepieces, offering 50/50 or 100% uni-directional, erect image transmission. Binocular, tilting-eyepiece and camera-only head options are available with a variety of eyepieces to meet your specific imaging needs.

Ergonomic Design

All magnification adjustments are located along right side of instrument and can be easily adjusted with a single hand.

Extended Magnification

Instantaneously double your magnification range for quick and easy viewing flexibility using the 2X slider.

7:1 Optical Zoom

Engage precision optomechanics with a smooth, graduated zoom dial for precision field-of-view adjustment across an expansive single-objective magnification range.

Maximize Working Space

The unique single-objective design and compact lower housing combine to offer 360° probe tip access maximizing work space, safeguarding your specimen and maintaining environmental chamber integrity. Optem Objectives further increase space with a generous 95mm parfocal distance from objective shoulder to object plane.

A-Zoom Micro Configuration Options

A-ZOOM MICRO HEAD AND EYEPIECE OPTIONS

58-01-00-000 ..... Fixed **Trinocular** Head (38mm ISO port), 2.75X, 78mm eyepiece extender

58-01-25-000 ..... Fixed **Trinocular** Head (38mm ISO port), 2.75X, 130mm eyepiece extender

58-01-50-000 ..... Fixed **Trinocular** Head (38mm ISO port), 1.8X, 35mm eyepiece extender

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58-02-00-000 ..... Fixed **Binocular** Head, 2.75X, 78mm eyepiece extender

58-02-25-000 ..... Fixed **Binocular** Head, 2.75X, 127mm eyepiece extender

58-02-50-000 ..... Fixed **Binocular** Head, 1.8X, 35mm eyepiece extender

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58-03-00-000 ..... **Tilting Trinocular** Head, 2.75X, 127mm Erecting eyepiece extender

58-03-25-000 ..... **Tilting Binocular** Head 2.75X, 127mm Erecting eyepiece extender

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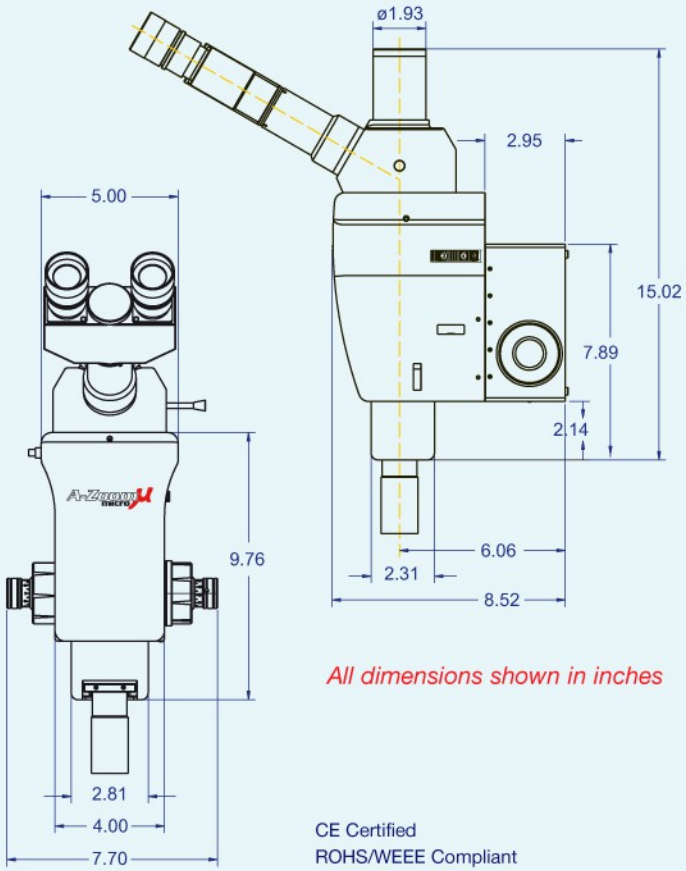
58-04-00-000 ..... 38mm ISO **Camera port ONLY**

SPECIFY THE OPTEM OBJECTIVE TO MEET YOUR SPECIFIC IMAGING NEEDS. *(Refer to back page)*

System Dimensions *(58-01-00-000 shown with Optem 10X/0.45NA high-Resolution Objective)*



All dimensions shown in inches

CE Certified
ROHS/WEEE Compliant

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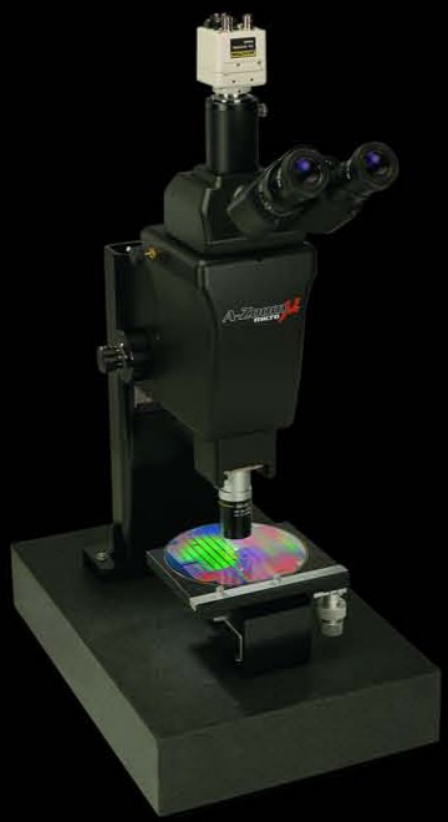
A-Zoomμ Performance Specifications

Infinity-Corrected Objective	Working Distance	Visual Magnification	Visual Field-of-View (Ø)	Video Field-of-View Low – High
Optem 5X High Res 28-20-44-000	34mm	54X–381X	4.0–0.58mm	2.4x3.2 – 0.35x0.46mm
Optem 10X High Res 28-20-45-000	19mm	109X–762X	2.0–0.29mm	1.2x1.6 – 0.17x0.23mm
Optem 20X High Res 28-20-46-000	13mm	218X–1525X	1.0–0.14mm	0.6x0.8 – 0.09x0.12mm
Optem 2x M-Plan Apo 28-21-02-000	34mm	22X-152X	10.1-1.44mm	6.1x8.1 – 0.87x1.15mm
Optem 5x M-Plan Apo 28-21-05-000	34mm	54X-381X	4.0-0.58mm	2.4x3.2 – 0.35x0.46mm
Optem 10x M-Plan Apo 28-21-10-000	34mm	109X-762X	2.0-0.29mm	1.2x1.6 – 0.17x0.23mm
Optem 20x M-Plan Apo 28-21-11-000	20mm	218X-1525X	1.0-0.14mm	0.6x0.8 – 0.09x0.12mm
Optem 50x M-Plan Apo 28-21-50-000	13mm	545X-3812X	0.4-0.06	0.24x0.32 – 0.03x0.05

- Recommended for use with Optem High Resolution Objectives (M-Plan Apo objectives will exhibit empty magnification through much of zoom range)
- Values given assume 2X flip-in is not engaged.
- Camera FOV is calculated with recommended 1/2" sensor format
- When using Widefield eyepiece adapter, Visual FOV is increased by 1.5X factor
- When using Optem 0.67X DC coupler, Camera FOV is increased by 1.5X factor



OPTEM® OBJECTIVES

HIGH-RESOLUTION OBJECTIVES

- 28-20-44-000 .....5X / 0.225NA / 34mm WD
- 28-20-45-000 .....10X / 0.45NA / 19mm WD
- 28-20-46-000 .....20X / 0.60NA / 13mm WD

M-PLAN APO, LONG-WORKING OBJECTIVES

- 28-21-02-000 ..... 2X / 0.055NA / 34mm WD
- 28-21-05-000 ..... 5X / 0.14NA / 34mm WD
- 28-21-10-000 .....10X / 0.30NA / 34mm WD
- 28-21-11-000 .....20X / 0.42NA / 20mm WD
- 28-21-50-000 .....50X / 0.55NA / 13mm WD

ISO 9001:2000