UNITRON®

Z750
ZOOM STEREO MICROSCOPE

Exceptional Image Quality
Generous Working Distance
Multiple Observation Methods
Seamless Transition From Macro to Micro



Z750 on the S-LED Stand
(CAT# 75051)
with optional C-mount
adapter and *Excelis*™
4KS camera
(sold separately)



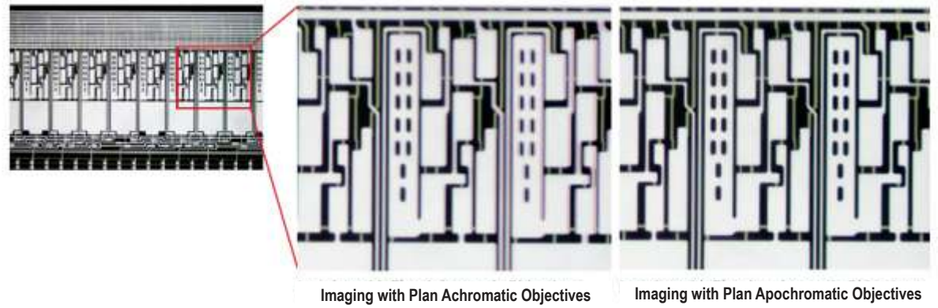
Z750 on the S-LED Stand
(CAT# 75051)

EXCELLENCE BY DESIGN SINCE 1952



Exceptional Image Quality Reveals Stunning Details

Equipped with the groundbreaking NIS apochromatic optical system, the UNITRON Z750 achieves the perfect fusion of high contrast, high resolution, and superior color fidelity. Whether observing fine structures or analyzing complex sample, the Z750 delivers imaging quality that surpasses previous standards – empowering users to obtain precise and detailed sample information with minimal effort.



Imaging with Plan Achromatic Objectives

Imaging with Plan Apochromatic Objectives



Key Features

1. Optional camera or camera with monitor (requires trinocular head and adapter).
2. 10x/23mm eyepieces come standard; optional eyepieces are also available
3. Adjustable interpupillary distance for comfortable viewing.
4. Binocular viewing head, or trinocular viewing head with imaging port
5. 0.67x – 5x zoom range. Knobs on both sides of microscope body for operation with either hand. Zoom locks allow fast changing between two zoom positions.
6. Ø76mm body fits standard stereo microscope focus mounts.
7. NIS Apochromatic optical system achieves the perfect fusion of high contrast, high resolution, and superior color fidelity.
8. Ultra-long 125mm working distance; expands to 220mm with the optional 0.5x auxiliary lens
9. Variety of illuminated and non-illuminated stands to meet your needs. External illumination (e.g., ring or goose neck lights) also available.

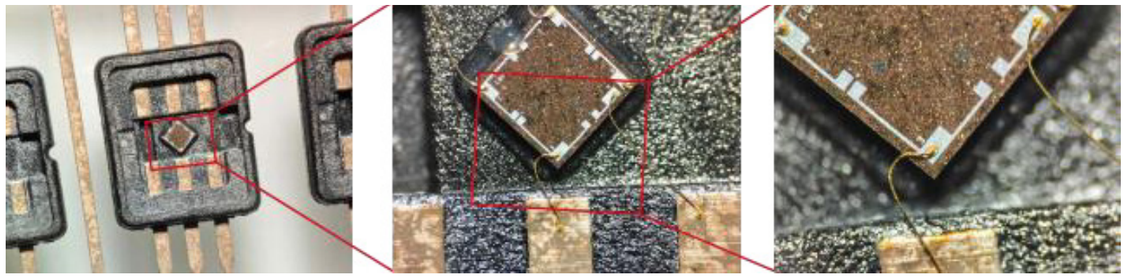
Generous Working Distance, Comfortable Operation

With an ultra-long 125mm working distance, the Z750 provides ample space to protect samples and ensures a spacious, unhindered working environment under the microscope. It eliminates the constraints of traditional, cramped setups—restoring a natural, relaxed operating experience. Users can maintain a comfortable sitting posture for focused observation, minimizing fatigue even during extended use. The result is an operation that combines efficiency with ergonomic comfort.



Seamless Transition From Macro to Micro Observation

With a strong 1:7.5 zoom ratio, the UNITRON Z750 stands out among products in its class. It delivers high quality imaging from 6.7X to 50X (with 10X eyepieces), making it a cost-effective choice for users seeking an optimal balance between performance and budget.



Supports Multiple Observation Methods & Offers Broad Versatility

A wide range of product configurations supports multiple observation modes, including brightfield, darkfield, polarization, and high-contrast imaging. Whether for routine sample observation or specialized sample analysis, it precisely meets diverse user needs.

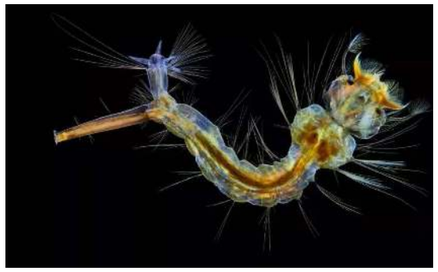
Transmitted/Reflected Brightfield

The UNITRON Z750 series delivers an optimal balance between high resolution and large depth of field in brightfield observation. Whether examining plant cell morphology or insect surface textures in life sciences, or inspecting solder joints and assembly gaps on PCB boards in industrial applications, the system provides delicate, true-to-life imaging with accurate color reproduction and crisp, well-defined edges.



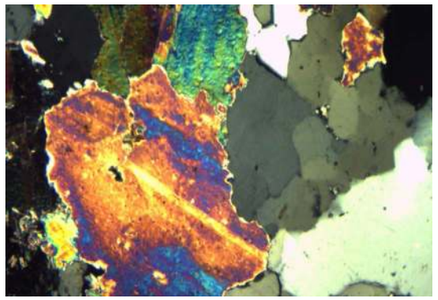
Darkfield

Professional-grade darkfield illumination components can be configured to precisely control the angle and intensity of light, ensuring optimal illumination of the sample. In industrial quality control, this allows for the sensitive detection of surface scratches, cracks, and microscopic short circuits on PCB boards.



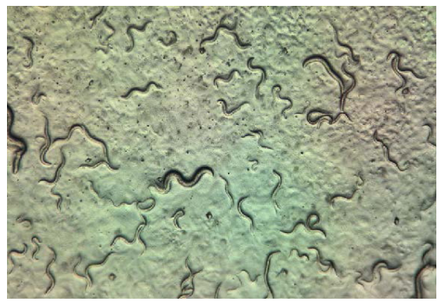
Polarization

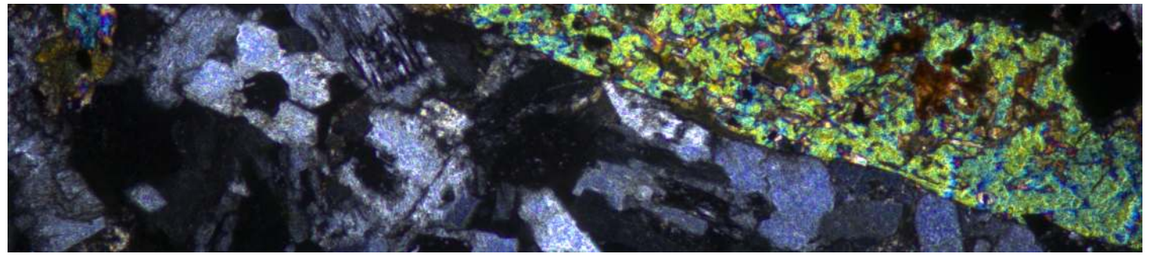
High-precision polarizing components are available to enable accurate control of polarization angles. Whether analyzing mineral crystals in geology, inspecting internal stress distribution in plastics for the polymer industry, or observing birefringence in biological samples such as starch grains or bone tissue, the Z750 delivers clear, detailed, and richly colored microscopic images.



High-Contrast Imaging

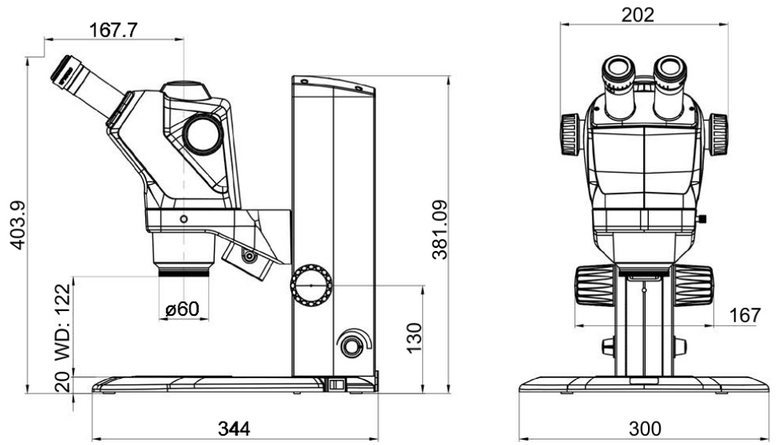
A variety of illumination solutions enhance the light and dark differences and boundary features of sample structures, delivering clear, layered, three-dimensional visual effects even when observing low contrast or transparent specimens.



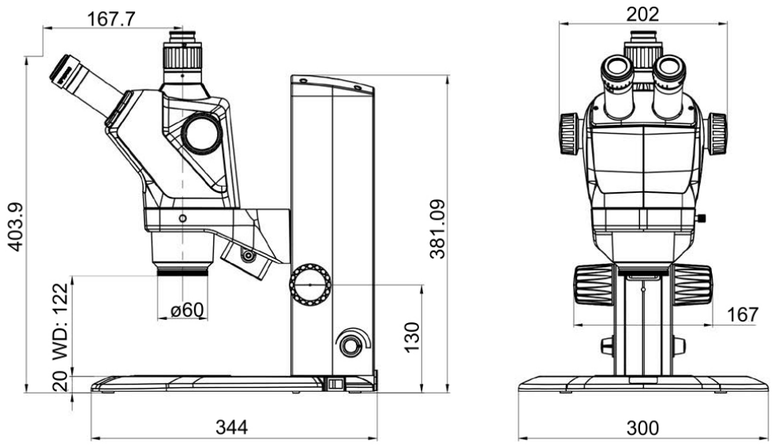


Dimensional Diagrams
(in mm)

Binocular



Trinocular



Above trinocular diagrams shown with optional C-mount adapters

Solutions for All Applications



Z750 on the S-LED Stand
(CAT# 75051)
with optional C-mount adapter
and ALTRA PathoPix 4K camera
(sold separately)

Stands & 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, plus a variety of LED ring lights and fiber optic illuminators.



Z750 (Binocular) on the Advanced Diascopic Stand
(CAT# 75011)



Z750 on the Plain Stand
(CAT# 75030)



Z750 on the Pole Stand
(CAT# 75034)

Inspection Right Where You Need It

The Z750 provides versatility, high performance and ergonomics, and is designed for years of heavy use. Choose the Z750 with a wide variety of stands and illumination solutions for your application.



Z750 on the Boom Stand
(CAT# 75035)



Z750 on the Ball Bearing Boom Stand
(CAT# 75036)
with optional C-mount adapter,
Excelis™ AU-600-HDS camera,
and LED quadrant ring light
(sold separately)



Z750 on the Articulating Arm Stand
(CAT# 75037)

The **UNITRON Z750 Series** features a 7.5:1 zoom ratio, an ideal choice for industrial inspection, assembly, quality control, OEM integration, research and education applications requiring a greater magnification range.

Z750
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Specifications

Optical System	Apochromatically-corrected optics; Greenough optical design; 0.67x to 5.0x zoom range
Viewing Bodies	45° inclined binocular head with fixed eyepiece tube or trinocular head with 50:50 light split eyepieces:camera port; interpupillary distance 50mm - 76mm
Eyepieces	WF10x/23mm, with diopter; optional WF15x/16mm and WF20x/12.5mm
Zoom Ratio	7.5:1
Zoom Range	0.67-5X
Magnification	6.7-50X with 10x eyepieces and 1x glass lens shield
Auxiliary Objectives	1x glass lens shield (included); optional: 0.5x, 0.7x and 2.0x
Working Distance	125mm with included 1x; With optional auxiliary objectives: 220mm with 0.5x, 150mm with 0.7x, 45mm with 2.0x APO
Observation Methods	Brightfield (standard) Optional: darkfield, simple polarization and oblique illumination
Stands & Illumination	Available on a variety of plain focusing stands, pole stands, diascopic stands, boom stands, ball bearing boom stands, articulating arm stands, and illuminated stands
Optional Accessories	Eyepieces: WF10x/22mm, WF15x/16mm and WF20x/12.5mm Reticles: 26.5mm fits WF10x/22mm and WF10x/23,mm; 20mm fits WF15x/16mm Auxiliary objectives: 0.5x auxiliary lens (WD 220mm), 0.7x auxiliary lens (WD 150mm), 2.0x APO auxiliary lens (WD 45mm) Simple polarizer/analyzer Ring lights and fiber optic illuminators
Camera Adapters (trinocular models only)	Optional: 0.55x, 0.75x and 1.0x C-mount adapters
Digital Cameras	*Excelis*™, Altra, and Teledyne Lumenera® digital cameras
Warranty	5 year limited warranty for parts and labor 1 year warranty on electronic components and LED bulb

Optical Data

Auxiliary Objective	Working Distance (mm)	EYEPIECE					
		WF10x/23mm		WF15x/16mm		WF20x/12.5mm	
		Magnification Range	FOV (mm)	Magnification Range	FOV (mm)	Magnification Range	FOV (mm)
0.5x	220	3.35x – 25x	68.6 – 9.2	5x – 37.5x	47.7 – 6.4	6.7x – 50x	37.3 – 5.0
1.0x	125	6.7 – 50x	34.3 – 4.6	10x – 75x	23.8 – 3.2	13.4x – 100x	18.6 – 2.5
0.7x	150	4.7x – 35x	49 – 6.57	7.0x – 52.5x	34.12 – 4.57	9.4x – 70x	26.65 – 3.57
2x	45	13.4x – 100x	17.16 – 2.3	20.1x – 150x	11.94 – 1.6	26.8x – 200x	9.3 – 1.25

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ISO 9001:2015 ISO 14001:2015 RoHS