





Key Features



1

Optional camera or camera with monitor (requires trinocular head and adapter).

2

Eyepieces can be locked in to prevent damage.

3

Adjustable interpupillary distance for comfortable viewing.

4

Choice of binocular or trinocular (fixed 50:50 to eyepieces and camera).

5

0.67x – 4.5x 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

Greenough optical design delivers dependable 3-dimensional views of the sample.

8

1x protective glass lens shield with mounting groove for ring lights.

9

Variety of illuminated and non-illuminated stands to meet your needs. External illumination (e.g., ring or goose neck lights) also available.

Solutions for Every Application

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, diascope illumination stands, plus a variety of LED ring lights and fiber optic illuminators.



Z645 with LED stand and integrated LED illumination
(CAT# 13501)



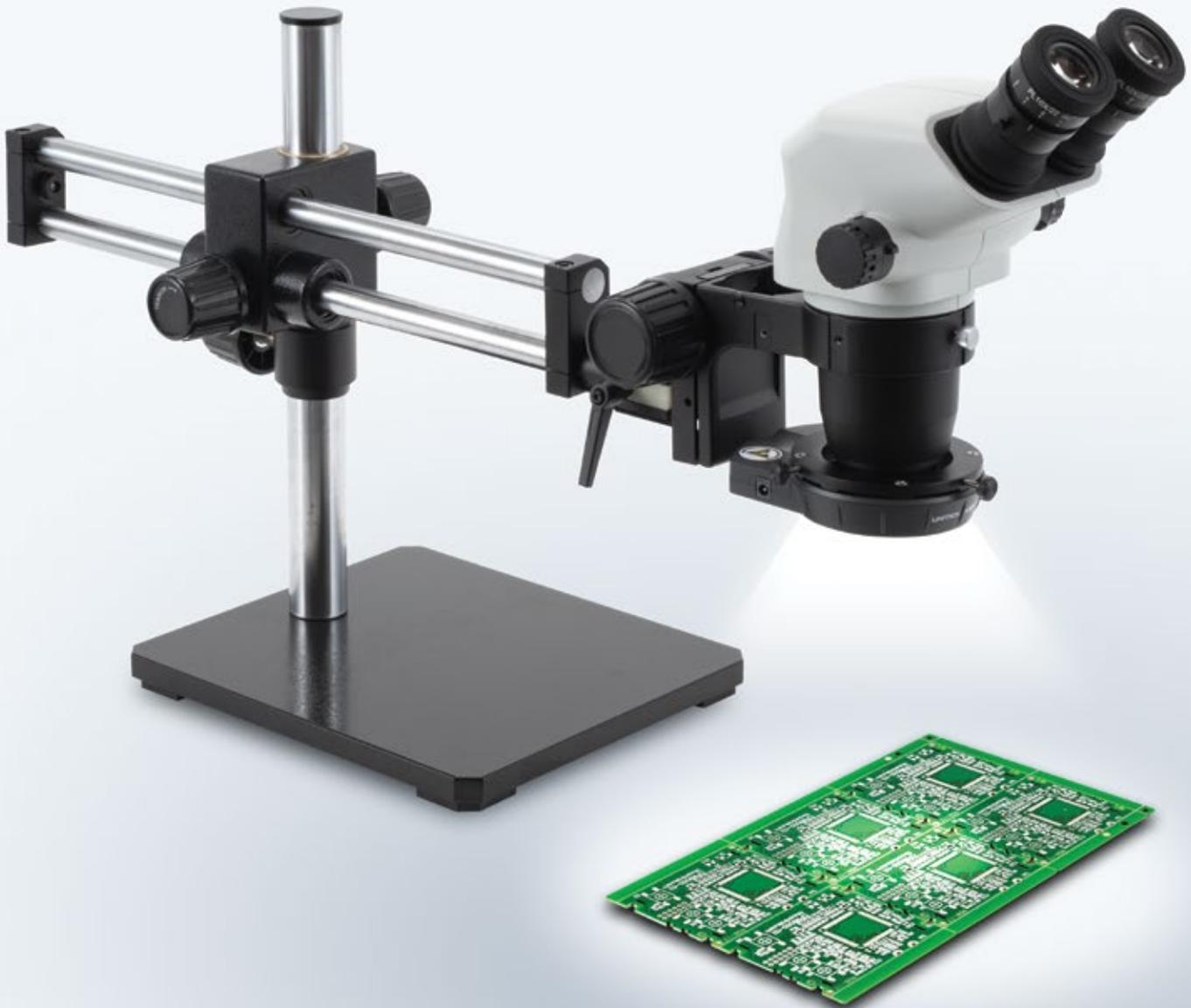
Z645 with diascope stand and integrated LED illumination
(CAT# 13510)



Trinocular Z645 with pole stand
(CAT# 13534) and **Excelis™ HD camera**
(CAT# AU- 600-HD)

More Working Distance, Better Ergonomics

With 110mm of standard working distance (1x objective), operators can easily maneuver and inspect samples with plenty of room for tools. Add a reducing auxiliary objective (0,3x, 0.5x, 0.75x) to get even more working distance.



Z645 with ball bearing boom stand
(CAT# 13506) and **LED ring light**
(CAT# 15864)

Inspection Where You Need It To Be

The Z645 provides versatility, high performance and ergonomics, and is designed for years of heavy use. Choose the Z645 with either a binocular or trinocular (fixed 50:50 light split) viewing head and a wide variety of stands and illumination solutions for your application.

The **UNITRON Z645 Series** features a 6.7:1 zoom ratio, an ideal choice for industrial inspection, assembly, quality control, OEM integration, research and education applications requiring a greater magnification range.

Trinocular Z645 with boom stand (CAT# 13535) and Excelis™ HDS camera (CAT# AU-600-HDS)



Z645 with articulating arm stand (CAT# 13507) and LED quadrant ring light (CAT# 15854)

Specifications

Optical System	Greenough optical design; 0.67x – 4.5x zoom range
Viewing Body	45° inclined binocular head with fixed eyepiece tube or trinocular head with 50:50 light split; Ø76mm body; interpupillary distance 52mm - 76mm; click stops at 0.67, 0.8, 1, 1.2, 1.5, 2, 2.5, 3, 3.5, 4, 4.5; zoom range limits
Eyepieces	WF10x/22mm; WF10x/25mm; WF15x/16mm; WF20x/12.5mm; all with diopter adjustment
Magnification	6.7x – 45x magnification range with 10x eyepieces and included 1x glass lens shield
Auxiliary Objectives	1x glass shield (included); Optional: 0.3x, 0.5x, 0.75x, 1.5x, 2.0x
Working Distance	110mm with included 1x; With optional auxiliary objectives: 287mm with 0.3x, 177mm with 0.5x, 120mm with 0.75x, 47mm with 1.5x, 26mm with 2.0x
Stands & Illumination	Variety of plain focusing stands, pole stands, diascope stands, boom stands, ball bearing boom stands, articulating arms; wide variety of ring lights and fiber optic illuminators
Camera Adapters (trinocular model only)	Optional: 0.35x, 0.5x, 0.65x, 1.0x C-mount adapters; photo tube
Digital Cameras	Excelis™ and Teledyne Lumenera® digital cameras

Optical Data

Working Distance (mm)	Working Distance (mm)	EYEPIECE					
		WF10x/22mm		WF15x/16mm		WF20x/12.5mm	
		Magnification Range	FOV (mm)	Magnification Range	FOV (mm)	Magnification Range	FOV (mm)
1.0x	110	6.7x – 45x	32.8 - 4.8	10.1x - 67.5x	23.8 - 3.5	13.4x – 90x	18.6 - 2.7
0.3x	287	2x - 13.5x	109.3 - 16	3x - 20.3x	79.3 - 11.6	4x – 27x	62 – 9
0.5x	177	3.4x - 22.5x	65.6 - 9.7	5.1x - 33.8x	47.7 - 7.1	6.8x – 45x	37.3 - 5.5
0.75x	120	5x - 33.8x	43.7 - 6.5	7.5x - 50.7x	31.8 - 4.7	10x - 67.6x	24.8 - 3.7
1.5x	47	10.1x - 67.5x	21.8 - 3.2	15.2x - 101.3x	15.9 - 2.3	202.2x – 135x	12.4 - 1.8
2.0x	26	13.4x – 90x	16.4 - 2.4	20.1x – 135x	11.9 - 1.7	26.8x – 180x	9.3 - 1.3