



O.C. White Co.

www.ocwhite.com

# NEW PRODUCTS



Super-Scope<sup>®</sup> AF+

MicroZoom VZ Inspection

Ergo-Zoom<sup>®</sup> EPZ Microscope

ProZoom<sup>®</sup> PZE Microscope

Micro-Lite<sup>®</sup> LED Lighting



(800) 381-7308  
(514) 388-7308

**DIVERSE**  
ELECTRONICS

sales@diverseelectronics.com  
diverseelectronics.com



# Super-Scope® AF+

AUTO FOCUS ERGONOMIC INSPECTION

## INTEGRATED INSPECTION SYSTEM FEATURES:

- ▶ Infinite Focal Length - (Inspect from 6" Working Distance to Infinity)
- ▶ Auto Focus Hybrid HDMI/USB Camera
- ▶ Exclusive Design Works Without a PC
- ▶ 1–80x Standard Magnification
- ▶ 24" Tall HD Double Ball Bearing Base
- ▶ No Light Needed; Industry-Leading Low Light Sensitivity
- ▶ Split Screen Displays Captured vs. Live Image



TKSS-AF-LV2

### Standard Onboard Image Controls Including:



Image Capture



Calibrated Measure



Real Time Compare



Ultra-High Sensitivity



	O.C. White Super-Scope® AF+ (TKSS-AF)	Vision Engineering EVO Cam (ECO514)	Unitron® Inspex HD 1080p (UN14800)	Tagarno FHD Trend (000003-1)	Aven SharpVue (26700-135)
Price	\$3,996.00	\$6,545.00	\$4,995.00	\$7,230.00	\$3,495.00
Magnification	80x Optical 10x Digital	30x Optical 2x Digital	50x Optical 2x Digital	30x Optical 10x Digital	30X Optical 10x Digital
Fixed or Adjustable Focal Length	Adjustable from 6" – Infinity	Fixed by Lens	Fixed by Lens	Fixed by Lens	Fixed by Lens
Onboard Image & Video Capture	✓	Still Image	Still Image	Still Image	Still Image
Calibrated Measurement Without A PC	✓	✓	✓	✓	X
Full HD1080 Resolution Over HDMI & USB	✓	✓	✓	✓	1080 HDMI/ 720 USB
Wide Dynamic Range	✓	✓	✓	X	X
Monitor Included Standard	✓	X	X	X	X
Moveable Auto Focus Region	✓	X	X	X	X
Wi-Fi Real Time Streaming	Optional	X	X	X	X

EVO Cam, Inspex HD 1080p, FHD Trend, and SharpVue are trademarks of Vision Engineering Inc., UNITRON®, TAGARNO A/S, and AVEN respectively. All information listed above is from the individual manufacturer's websites, and was current as of 2/19/2018. O.C. White does not claim any association with any of the companies listed above.



**Measurement & Export**

Change unit of measurement: (Pixels, nanometers, micrometers, millimeters, centimeters, meters, and inches)

Point  
 Angle  
 Arbitrary Line  
 Parallel  
 Horizontal Line  
 Vertical Line

Rectangle  
 Center & Radius  
 Three Points  
 Ellipse  
 Annulus  
 Concentric Circles  
 Three Point Con. Circles  
 Arc  
 Polygon  
 Curve

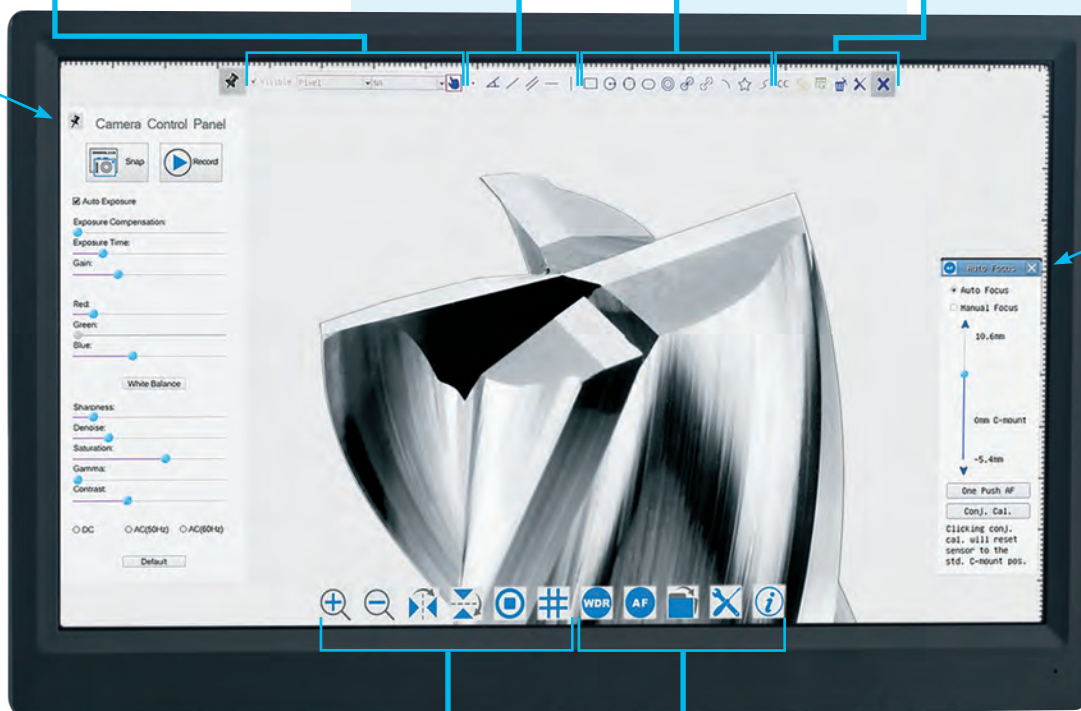
Conj. Calibration  
 Calibration  
 Export to CSV  
 Delete All Objects  
 Settings  
 Close

**Camera Control**

Take a snap shot or video while using auto exposure, or control all image capture features yourself, including exposure time, color balance, white balance and more

**Auto Focus**

Choose Auto Focus or Manual as well as One Push AF



Zoom In  
 Zoom Out  
 Horizontal Flip  
 Vertical Flip  
 Freeze  
 Cross Line

Wide Dynamic Range  
 Auto Focus  
 Compare Image  
 Browser  
 Settings



Optional secure Wi-Fi enabled video stream service to your smart phone or tablet!

**Browse Captured Images**



**Image Compare**



Captured Image

Live Image

# Unrivaled Modular Configurations

In a world of 'one size fits all' solutions, let MicroZoom show you there is a better way! This ultra high magnification inspection family can be configured literally hundreds of ways, to your exact magnification and working distance requirements. Featuring a wide selection of CCD adapters, right angle adapters, auxiliary lenses, and specialized adjustable focal length design, there is certain to be a configuration to meet your specific inspection challenge.



TKVZ-LV2



## Ultra High Resolution Magnification

Let's face it... components are not getting bigger any time soon. You need a next generation inspection system that has the ability to handle today's production & QA tasks, as well as be able to be scaled for future higher magnification requirements. Unlike every other inspection solution currently on the market, MicroZoom gives you the best of all worlds. With the highest resolution lenses, the largest available optical magnification range in the industry (up to 445x), and biggest selection of accessories, you can future-proof your investment. With its simple modular assembly, upgrading to higher magnification ranges and various working distances could not be easier!



TKVZ-HU-LV2

## Specialized Fine Focus Adjustment

If you are inspecting products under a traditional microscope, you have to constantly raise and lower the unit to see components at different heights. With MicroZoom, and its specialized fine focus adjustment feature, that is a thing of the past! At the bottom of the main lens is a special knurled adjustment which allows for fine refocusing both upwards and downwards, without ever changing the height of the inspection system! Especially convenient when working at high magnification, this adjustment allows for precision refocusing without any loss of image fidelity.








- ▶ ESD Safe
- ▶ Magnification Up To 445x
- ▶ Made in the USA with Domestic & Global Parts
- ▶ 5MP Hybrid HDMI/USB Camera
- ▶ Exclusive Design Works Without a PC
- ▶ Onboard Imaging Tools Include Capture, Calibrated Measurement, Split Screen, & More
- ▶ Available as Camera Only, or with Choice of 12.1" or 22" LCD Screen
- ▶ Ultra High Image Resolution for Mission-Critical Applications
- ▶ 5 Year Mechanical Warranty



# AIMS *ADVANCED IMAGING & MEASUREMENT SUITE*

## INTEGRATED SOFTWARE FUNCTIONS FOR ALL CAMERA BASED SYSTEMS

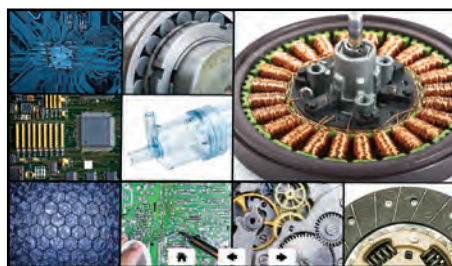
All MicroZoom inspection packages ship with our exclusive 5MP Hybrid HDMI/USB Camera. This exceptional smart camera pulls double duty for both production and quality assurance needs. It features both HDMI and USB outputs, and has integrated smart camera controls with a host of onboard software features including:

Standard Onboard Image Controls Including:				9 Languages Supported	Exclusive PC Suite Features:	
						
<b>Image Capture</b>	<b>Real Time Compare</b>	<b>Calibrated Measure</b>	<b>Ultra-High Sensitivity</b>	<b>Language Support</b>	<b>Extended Depth of Focus</b>	<b>Image Stitching</b>
Quickly capture image and videos while inspecting directly to the 8GB SD card. Sort and archive to a PC.	Compare live video feed with previous captured images. Search and sort for instant comparison.	An entire array of Measurement Tools for high precision and repeatable measurements without a PC!	Industry leading low light sensitivity allows for crystal clear images where competitors cameras fail. The result means less glare!	Currently, 9 languages are supported, including: English, Spanish, German, French, Japanese, Italian, Korean, & both traditional and modern Chinese.	This specialized tool allows for 'stacking' of multiple images of tall objects taken at various focal lengths, into a single super high clarity image.	Inspecting something that is just too big to view all at once? Capture multiple images of the object, then 'stitch' them together digitally to create a single extra-large image.



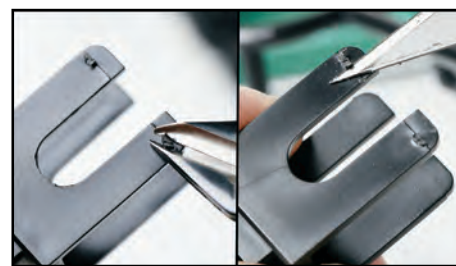
### Browse Captured Images

Quickly scan through previously saved image and video captures. This full field archive allows for quick image pull-up and the ability to sort and delete images no longer needed. An 8GB SD card is included with every system to transfer images and videos from system to remote PC for archiving, emailing, etc.



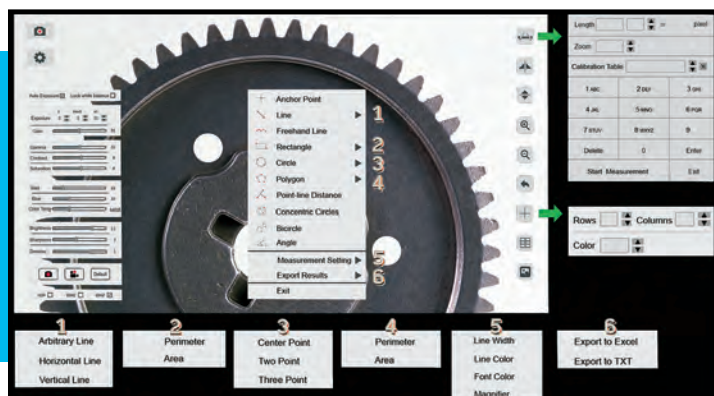
### Compare While Working

Upper Right-hand window features the live video feed, while all previously captured images are tiled around it. This feature allows for real-time searching of previously captured good (or bad) examples for instant comparison.



### Split Screen Viewing

Excellent training tool! Pull up a previously saved capture (left pane) and compare with live image on the right! This interactive screen is excellent for showcasing pass/fail to multiple people at once. Ever have to train a group of new employees all at once? It has never been easier for all employees to see the same details, at the same time.



## Full Functionality Without Using a PC!

*Calibrated On-board Measurement Couldn't be Easier.*

This built-in **Advanced Imaging & Measurement Suite** comes out-of-the-box, ready for Bench Production. Complete with an entire array of Measurement Tools for High Precision, Repeatable Measurements.

# ProZoom® PZE-4.5

EXTENDED WORKING DISTANCE MICROSCOPE



Detents are included standard, an O.C. White exclusive



## ESD Safe for Mission-Critical Inspection

We understand the critical nature of electrostatic sensitive environments, and actively design products for use in these specialized arenas. The ProZoom® PZE is the newest inspection tool, in a long and illustrious history of providing high quality products to the most demanding customer base. **Don't accept second best.** Choose the market leader in ESD Safe inspection products.

- ▶ Built with ESD Safety Specifically in Mind
- ▶ 7–45x Standard Magnification Range (up to 270x with options)
- ▶ Super-Wide 28mm High Eyepoint Wide Field Eyepieces
- ▶ 45° Eyepiece Angle with 360° Rotation in Focusing Arm
- ▶ 190mm of Working Distance with .5x Aux Lens (standard)
- ▶ +/- 6 Diopter Eyepiece Adjustment Range
- ▶ Interpupillary Distance Adjustment on Eyepiece Tubes
- ▶ Double Ball Bearing Arm Base Assembly for Precision Movement
- ▶ 5 Year Mechanical Warranty



Need a trinocular?  
See our ProZoom® 6.5 Series



# The Standard Has Been Upgraded

The most common microscope you will find across all factory floors are 7-45x models. These have always been the workhorse of industry, and there are no signs that this will change. We are proud to offer our ProZoom® PZE model as the New Standard in production microscopy. With the largest standard working distance & largest standard eyepieces available, next level performance meets budget-friendly price.



## PROZOOM® PZE-4.5 TECHNICAL DATA:

Eyepiece		Main Body	0.37x PZ-OB-037	0.5x PZ-OB-050	0.7x PZ-OB-070	1.5x PZ-OB-150	2x PZ-OB-200
10x	MAG:	7x~45x	2.59x~16.65x	3.5x~22.5x	4.9x~31.5x	10.5x~67.5x	14x~90x
	FOV: (mm)	Φ32.8~Φ5.1	Φ88.8~Φ13.8	Φ65.7~Φ10.2	Φ46.9~Φ7.3	Φ21.9~Φ3.4	Φ16.4~Φ2.6
15x	MAG:	10.5x~67.5x	3.89x~25x	5.3x~33.8x	7.4x~47.2x	15.8x~101.3x	21x~135x
	FOV: (mm)	Φ24.3~Φ3.8	Φ65.6~Φ10.2	Φ48.6~Φ7.6	Φ34.7~Φ5.4	Φ16.2~Φ2.5	Φ12.1~Φ1.9
20x	MAG:	14x~90x	5.18x~33.3x	7x~45x	9.8x~63x	21x~135x	28x~180x
	FOV: (mm)	Φ20~Φ3.1	Φ54.1~Φ8.4	Φ40~Φ6.2	Φ28.6~Φ4.4	Φ13.3~Φ2.1	Φ10~Φ1.6
30x	MAG:	21x~135x	7.77x~50x	10.5x~67.5x	14.7x~94.5x	31.5x~202.5x	42x~270x
	FOV: (mm)	Φ12.9~Φ2	Φ34.7~Φ5.4	Φ25.7~Φ4	Φ18.4~Φ2.9	Φ8.6~Φ1.6	Φ6.4~Φ1
Working Distance (mm)		110	275	195	145	50	35

# Ergo-Zoom® EPZ

ERGONOMIC POSITION ZOOM

## Excellence in Ergonomics

With so much attention being put into the study of ergonomics in the workplace, and the true cost of inefficient processes, companies would be remiss to overlook their inspection processes. Our Ergo-Zoom® EPZ provides an amazing eyepiece adjustment range from 0 – 30°. No matter your process, or operator height, the eyepieces feature a special adjustable design so any operator can find the angle that best suits their comfort. **Neck fatigue and eye strain are a thing of the past.** A comfortable operator is a productive one!

### Repeatable Performance

Does your process call for a specific magnification? Are you sure you are at 10x? All Ergo-Zoom® microscopes feature detented zoom knobs. This feature is not found standard in any other competitive microscope, it's an **O.C. White exclusive!** Each full magnification step (1x, 2x, 3x, etc) feature a positive detented stop, so you can reliably say "YES", you are meeting spec.

### Multiple Magnification Choices

With Ergo-Zoom®, the choice is yours. We are proud to offer (2) standard microscope zoom ranges. Our most popular model features .8–5x zooming, with the next level option having .8–8x zoom. This allows you to not have to sacrifice working distance for magnification, as both models use the same auxiliary lenses (up to 186mm).



TKEPZ-850-LV2

- ▶ ESD Safe
- ▶ All Packages Include Super-Wide 28mm 10x Eyepieces
- ▶ .5x Auxiliary Lens Also Included (186mm)
- ▶ Adjustable 0–30° Eyepiece Angle for Operator Comfort
- ▶ Modular Designed System for Expandable Performance
- ▶ 5 Year Mechanical Warranty



TKEPZ-850







TKEPZ-850-A



TKEPZ-850-D



TKEPZ-850-F



## PROZOOM® EPZ-850 TECHNICAL DATA:

Eyepiece		0.5x EPZ-OB-050	0.7x EPZ-OB-070	1x EPZ-OB-100	1.5x EPZ-OB-150
10x	Total Mag.	4x~25x	5.6x~35x	8x~50x	12x~75x
	FOV: (mm)	Φ55~Φ8.8	Φ39.3~Φ6.3	Φ27.5~Φ4.4	Φ18.33~Φ2.93
15x	Total Mag.	6x~37.5x	8.4x~52.5x	12x~75x	18x~112.5x
	FOV: (mm)	Φ42.5~Φ6.8	Φ30.36~Φ4.86	Φ21.25~Φ3.4	Φ14.17~Φ2.27
20x	Total Mag.	8x~50x	11.2x~70x	16x~100x	24x~150x
	FOV: (mm)	Φ35~Φ5.6	Φ25~Φ4	Φ17.5~Φ2.8	Φ11.67~Φ1.87
30x	Total Mag.	12x~75x	16.8x~105x	24x~150x	36x~225x
	FOV: (mm)	Φ22.5~Φ3.6	Φ16.1~Φ2.57	Φ11.25~Φ1.8	Φ7.5~Φ1.2
Working Distance (mm)		186	135	91	40

## PROZOOM® EPZ-880 TECHNICAL DATA:

Eyepiece		0.5X EPZ-OB-050	0.7X EPZ-OB-070	1X EPZ-OB-100	1.5X EPZ-OB-150
10x	Total Mag.	4x~40x	5.6x~56x	8x~80x	12x~120x
	FOV: (mm)	Φ55~Φ5.5	Φ39.3~Φ3.93	Φ27.5~Φ2.75	Φ18.33~Φ1.83
15x	Total Mag.	6x~60x	8.4x~84x	12x~120x	18x~180x
	FOV: (mm)	Φ42.5~Φ4.25	Φ30.36~Φ3.04	Φ21.25~Φ2.13	Φ14.17~Φ1.42
20x	Total Mag.	8x~80x	11.2x~112x	16x~160x	24x~240x
	FOV: (mm)	Φ35~Φ3.5	Φ25~Φ2.5	Φ17.5~Φ1.75	Φ11.67~Φ1.17
30x	Total Mag.	12x~120x	16.8x~168x	24x~240x	36x~360x
	FOV: (mm)	Φ22.5~Φ2.25	Φ16.1~Φ1.61	Φ11.25~Φ1.13	Φ7.5~Φ0.75
Working Distance (mm)		186	135	91	40