



**DIGITAL** INSPECTION

All-One VersaCam Mac3 SmartCam-Ultra SmartCam-Ultra AF

# Scienscope International at a Glance

Eddy Lin founded Scienscope in 1995 to meet the growing need for reliable and affordable general-purpose optical and video inspection solutions for the electronics and PCB industries. Surface Mount Technology was a new concept. At that time, inspection=magnifier, and Eddy realized a demand for more magnification for inspection and rework. The name Scienscope consists of two words, Scientific and microscope.

"My educational background is in optical system design, leading microscope, and telescope. So I chose the Stereo zoom microscope as the suitable solution for SMT because this scope provides a 3D image through a range of magnifications, perfect for the new market demand."

The company began with basic stereo zoom microscopes used for SMT inspection and reworking circuit boards and electromechanical assemblies with a commitment to quality, value, and support. Over the past 26 years, Scienscope has become a complete inspection solution provider. Offering offline and inline X-Ray systems, Video coordinate measurement systems, Video inspection systems, and microscopes to meet various applications and manufacturing quality requirements.

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# **ALL-ONE DIGITAL CAMERA**

**CC-SMART-A1** 

The All-One Camera is an advanced all-in-one inspection solution—all you need to inspect or convert a microscope system into a powerful digital inspection tool. All-One(AO) includes internally controlled optics, integrated image processing and capture software, measuring tools with an onscreen magnification display, integrated LED lighting, and a mounting adapter.

Experience full HD image quality with no image delay-the perfect solution for those wishing to digitize and simplify their inspection process.

They are ergonomically designed, allowing for less operator fatigue and improved production efficiency—simple, fast, high-quality inspection. Ideal for repair, rework assembly, and quality control in any manufacturing industry.

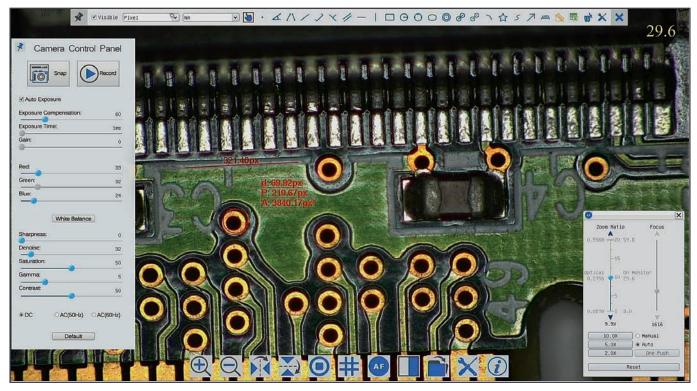
### **ALL-ONE CAMERA OVERVIEW & FEATURES**

- Optics include five groups of 16 elements with a 20X zoom ratio. Up to 50x optics magnification
- Motorized Zoom
- Auto and manual focus
- 195mm standard working distance with 156-196mm depth of field
- Field of view 200mm x 112.5mm at low magnification. Field of view 10mm x 5.6mm at high magnification.
- Removable/Integrated LED ring light
- 76mm diameter adapter bracket and ¼" 20 mounting thread for mounting
- Sony 1/2.8" 1080P CMOS with a high signal-to-noise ratio
- Output HDMI to monitor with 1080P@60FPS
- SD card storage for 1080P pictures and video
- Embedded mouse control panel, Measurement Toolbar, Comprehensive Control Toolbar, Auto-focus and zoom control panel
- Onscreen magnification display

### **ALL-ONE INTEGRATED SOFTWARE FEATURES**

- Live measurement tools
- Image and video capture to SD card or USB Flash drive
- Split-screen live image/captured image comparison
- Image and video gallery / Image and video review
- Export measurement data to SD card or USB Flash
- Wireless mouse control







# **Integrated Software with Convieniently Located Control Bar**

















# **ALL-ONE DIGITAL INSPECTION SYSTEMS**

#### MAC-PK1-A1



- Features NEW 1080p HDMI/USB All-One camera with inrgrated optics (50x Max)
- Integrated diffused LED ring light
- Mounting adapter
- Integrated measuring software
- SD or USB card capture
- Includes 23" HD LCD monitor

### MAC-PK3-A1



- Features NEW 1080p HDMI/USB All-One camera with integrated optics (50x Max)
- Integrated diffused LED ring light
- Mounting adapter
- Integrated measuring software
- SD or USB card capture
- Includes 23" HD LCD monitor
- Capture software
- Heavy duty articulating arm stand

### MAC-PK5S-A1



- Features NEW 1080p HDMI/USB All-One camera with integrated optics (50x Max)
- Integrated diffused LED ring light
- Mounting adapter
- Integrated measuring software
- SD or USB card capture
- Includes 23" HD LCD monitor

#### MAC-PK5D-A1



- Features NEW 1080p HDMI/USB All-One camera with integrated optics (50x Max)
- · Integrated diffused LED ring light
- Mounting adapter
- Integrated measuring software
- SD or USB card capture
- Includes 23" HD LCD monitor
- Capture software
- Dual arm boom stand

# **ALL-ONE INSPECTION SYSTEM SPECIFICATIONS**

ALL-ONE OPTICAL SPECIFICATIONS				
Working Distance (mm) 156 - 196				
Zoom Range	0,028X to 0.56X			
MTF (lp/mm)	160			
Distortion	0.5%			
FOV@1.0X (mm)	200 X 112.5			
FOV@20X (mm)	10 x 5.6			

ALL-ONE LED LIGHT SPECIFICATIONS				
LED 8CREE XP-E2 @ 137 Lumen each				
Color White				
Power	3V/3A			
Inner Dia (mm)	50			
Out Dia (mm) 76				
FOV@20X (mm) 10 x 5.6				

ALL-ONE CAMERA SPECIFICATIONS				
Sensor & Size (mm) Sony IMS462LQR-C1/2.8" (5.57 X 3.13)				
Pixel (μm) 2.9 x 2.9				
G Sensitivity Dark Signal	921 mv with 1/30s and 0.15 mv with 1/30s			
FPS/Resolution	60FPS @ 1920x1080			
Binning	1x1			
Exposure	0.06ms ~ 918			



# **VERSA CAM**

#### CC-HDMI-CD2

Our industry-standard Macro video/digital inspection systems now feature the powerful Versa-Cam. The Versa-Cam can be used as a "live image" HD (1080p) camera connected to a monitor using an HDMI cable or as a USB 2.0 camera with a USB cable connected to any computer or Windows Tablet. Now the choice between live HD monitor inspection and high-resolution USB camera capture and annotation is made at the camera...not between cameras.

# **HD/ HDMI** MODE FEATURES

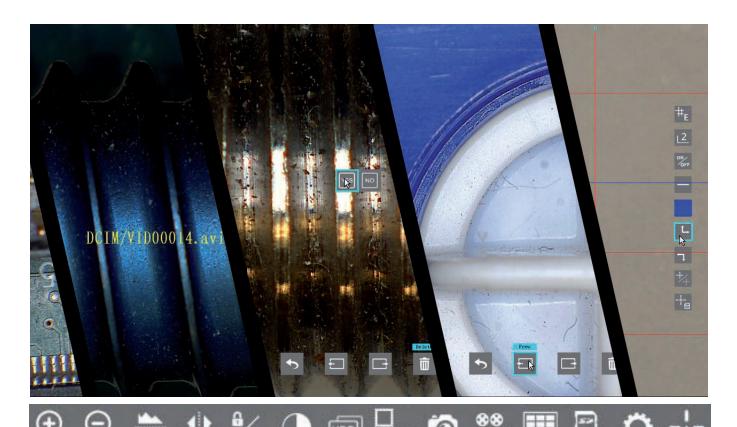
- 1080p (1920 x 1080) HD images @ 60fps
- Onscreen control bar and setting menu
- · Image and video capture to SD card
- Split-screen live image | Capture image comparison (picture-to-picture)
- Image and video gallery/ Image and video review
- Vertical and horizontal line generator
- Save line generator configurations
- Wireless mouse support and control

## **USB 2.0** MODE FEATURES

- 2 Mega-pixel resolution
- Image and Video capture w/Windows 10 camera app
- Email, Save, or Print software
- Image and video capture with the included software
- · Annotation and drawing tools on live or captured images
- Send images directly to the local file location or network
- Time and date stamp images
- Includes DirectShow drivers
- Upgrade software with FOV measurements tools

VERSA-CAM (CC-HDMI-CD2)   SPECIFICATIONS					
Image Sensor	1/2.86 Inch Panasonic FULL HD 2.0 Megapixel	Freeze Image	Yes		
Effective Pixels	1920 X 1080	HDR	Yes		
Frame Rate	60fps	Edge Enhancements/ Sharpening	Yes		
Definition	More than 1200 lines	SD card slot	Up to 32GB SD Card		
Housing	Aluminum/ Plastic	Crosshair	Multi-Color, small or large		
White Balance	Automatic/Manual/Continous	Horizontal/ Vertical lines	Multi-Color, two lines for each (Position can be adjusted)		
Brightness Control	Automatic/Manual/Continous	Noise Reduction	Support		
Color	R/G/B adjustable	HDMI	1080p		
Edge Enhancement	Yes	USB	USB 2.0		
OSD:	Yes, In HDMI mode				









- Digital Zoom / Decrease Magnification
- Flip Image Horizontal
- Mirror Image Vertical
- Freeze Image / Unfreeze Image Toggle
- Color to Black and White Toggle
- High Dynamic Range Toggle

- **Side-by-Side Live/Captured Image Comparison**
- Still Image Capture
- **Video Capture**
- Gallery / Image Preview / SD Card Management
- Clear SD Card and SD Format
- Settings Menu
- Integrated Video Caliper and Crosshair











# **VERSACAM MACRO DIGITAL INSPECTRION SYSTEMS**

#### MAC-PK1-R3



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Extended post stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor

#### MAC-PK1-E2D



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Extended post stand
- Diffused compact LED ring light (IL-LED-E2D)
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor
- Capture software

#### MAC-PK3-R3



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- HEAVY DUTY articulating arm with 15" vertical post
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor

#### MAC-PK3-E2D



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- HEAVY DUTY articulating arm with 15" vertical post
- Diffused compact LED ring light (IL-LED-E2D)
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor

# **VERSACAM MACRO DIGITAL INSPECTRION SYSTEMS**

#### MAC-PK5D-R3



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor

### **MAC-PK5D-E2D**



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand
- Diffused compact LED ring light (IL-LED-E2D)
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor
- Capture software.

# MAC-PK1-E1Q



- MACRO video zoom optics (up to 90x magnification with 8" working distance)
- Extended post stand
- Quadrant-controlled LED ring light
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor

## MAC-PK3-E1Q



- MACRO video zoom optics (up to 90x magnification with 8" working distance)
- HEAVY DUTY articulating arm with 15" vertical post
- Quadrant-controlled LED ring light
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor

### **MAC-PK5D-E1Q**



- MACRO video zoom optics (up to 90x magnification with 8" working distance)
- Dual arm boom stand
- Quadrant-controlled LED ring light
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor



# **MAC3 CAMERA & MONITOR**

CC-HDMI-12H

The New MAC3 Camera (Part number: CC-CMC-12H) from Scienscope is an all-in-one camera with an integrated monitor and software. The MAC3 Camera can be used as a "live image" HD (1080p) camera or as a USB 2.0 camera with a USB cable connected to any computer or Windows Tablet. The Camera can be connected to any microscope or optical system with a C mount so you can instantly upgrade your system. With a monitor mounted directly to the Camera, a limited workspace is never a problem, and your ergonomics will also improve.

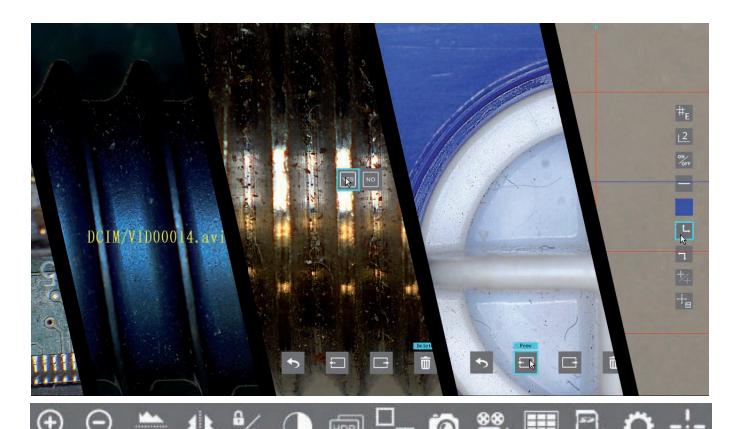
# **HD/ HDMI** MODE FEATURES

- 1080p (1920 x 1080) HD images @ 60fps
- · Onscreen control bar and setting menu
- Image and video capture to SD card
- Split-screen live image | Capture image comparison (picture-to-picture)
- Image and video gallery/ Image and video review
- Vertical and horizontal line generator
- Save line generator configurations
- Wireless mouse support and control

# **USB 2.0** MODE FEATURES

- 2 Mega-pixel resolution
- Image and Video capture w/Windows 10 camera app
- Email, Save, or Print software
- Image and video capture with the included software
- Annotation and drawing tools on live or captured images
- Send images directly to the local file location or network
- Time and date stamp images
- Includes DirectShow drivers
- Upgrade software with FOV measurements tools

MAC3 CAMERA (CC-HDMI-12H)   SPECIFICATIONS					
Image Sensor	1/2.86 Inch Panasonic FULL HD 2.0 Megapixel	Freeze Image	Yes		
Effective Pixels	1920 X 1080	HDR	Yes		
Frame Rate	60fps	Edge Enhancements/ Sharpening	Yes		
Definition	More than 1200 lines	SD card slot	Up to 32GB SD Card		
Housing	Aluminum/ Plastic	Crosshair	Multi-Color, small or large		
White Balance	Automatic/Manual/Continous	Horizontal/ Vertical lines	Multi-Color, two lines for each (Position can be adjusted)		
Brightness Control	Automatic/Manual/Continous	Noise Reduction	Support		
Color	R/G/B adjustable	HDMI	1080p		
Edge Enhancement	Yes	USB	USB 2.0		
OSD:	Yes, In HDMI mode				



# **Integrated Software with Convieniently Located Control Bar**





- Flip Image Horizontal
- Mirror Image Vertical
- Freeze Image / Unfreeze Image Toggle
- Color to Black and White Toggle
- High Dynamic Range Toggle



Side-by-Side Live/Captured Image Comparison

- Still Image Capture
- **Video Capture**
- Gallery / Image Preview / SD Card Management
- Clear SD Card and SD Format
- Settings Menu
- Integrated Video Caliper and Crosshair











# **MAC3 ERGONOMIC INSPECTION SYSTEMS**

#### MAC3-PK1-R3



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Extended post stand
- 1080p HD camera and 12" LCD monitor combination
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and Image capture software

#### MAC3-PK1-E2D



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Extended post stand
- 1080p HD camera and 12" LCD monitor combination
- Diffused compact LED ring light. (IL-LED-E2D)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and Image capture software

### MAC3-PK3-R3



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Heavy duty articulating arm with vertical post and clamp
- 1080p HD camera and 12" LCD monitor
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and Image capture software

#### MAC3-PK3-E2D



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Heavy duty articulating arm with vertical post and clamp
- 1080p HD camera and 12" LCD monitor combination
- Diffused compact LED ring light. (IL-LED-E2D)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and Image capture software

#### MAC3-PK5D-R3



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Dual arm boom stand
- 1080p HD camera and 12" LCD monitor
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and Image capture software

# **MAC3 ERGONOMIC INSPECTION SYSTEMS**

#### MAC3-PK5S-R3



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Single arm boom stand
- 1080p HD camera and 12" LCD monitor combination
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and Image capture software

### MAC3-PK5D-E2D



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Dual arm boom stand
- 1080p HD camera and 12" LCD monitor combination
- Diffused compact LED ring light (IL-LED-E2D)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and image capture software

## MAC3-PK5S-E2D



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Single arm boom stand
- 1080p HD camera and 12" LCD monitor combination
- Diffused compact LED ring light (IL-LED-E2D)
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and image capture software

### **MAC3-PK3-E10**



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Heavy duty articulating arm with vertical post and clamp
- 1080p HD camera and 12" LCD monitor combination
- Quadrant-controlled LED ring light
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and image capture software

### MAC3-PK5D-E1Q



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 1080p HDMI/USB camera (Includes SD card, HDMI cable, USB cable, and mouse)
- 23" HD LCD monitor
- Capture software

## MAC3-PK5S-E1Q



- MACRO video zoom optics (up to 40x magnification with 8" working distance)
- Single arm boom stand
- 1080p HD camera and 12" LCD monitor combination
- Quadrant-controlled LED ring light
- All systems include a camera/monitor combo with an 8GB SD card, wireless mouse, USB cable, power supply, and image capture software



# **SMARTCAM ULTRA**

CC-SMART-4K-AF

The SmartCam-Ultra AF from Scienscope is our most advanced 4k resolution camera. It features a vivid 4K image to a live monitor (HDMI) or 8.2 Megapixel image via USB 3.0 and WiFi to a computer. Includes a host of onboard image processing and measurement tools accessible using a mouse connected to the camera via its onboard software. Capture images to SD card, USB Flash drive, USB 3.0, and WiFi.

Measure anything using the onboard field of view measuring tools, DXF overlay, or multi-line generator. Export your measurement data and images with measured objects!

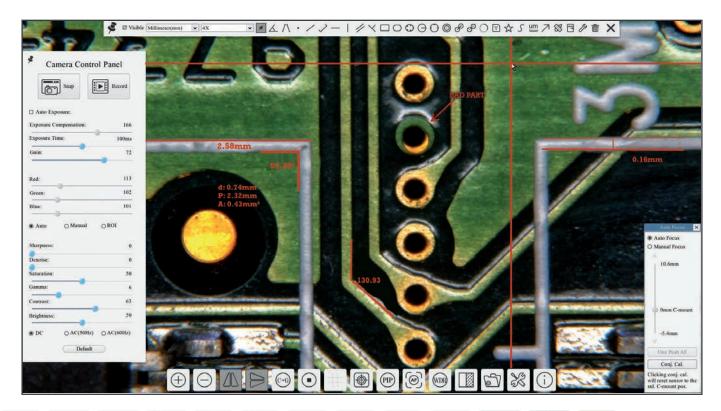
# **HD/ HDMI** MODE FEATURES

- Live measurement and annotation tools
- Image and video capture to SD card or USB Flash drive
- Split-screen live image/captured image comparison
- · Image and video gallery / Image and video review
- Export measurement data to SD card or USB Flash
- Wireless mouse control

# **USB 3.0/WIFI** MODE FEATURES

- Image and video capture using Windows 10 camera app
- Measure and annotate using included WiFi and USB
   3.0 software
- Image and video capture using the included software
- Directly email or print images
- · Export measurement data

SMARTCAM-ULTRA AF (CC-SMART-4K-AF)   SPECIFICATIONS						
Image Sensor	1/2.86 Inch Panasonic FULL HD 2.0 Megapixel	Freeze Image	Yes			
Effective Pixels	1920 X 1080	HDR	Yes			
Frame Rate	60fps	Edge Enhancements/ Sharpening	Yes			
Definition	More than 1200 lines	SD card slot	Up to 32GB SD Card			
Housing	Aluminum/ Plastic	Crosshair	Multi-Color, small or large			
White Balance	Automatic/Manual/Continous	Horizontal/ Vertical lines	Multi-Color, two lines for each (Position can be adjusted)			
Brightness Control	Automatic/Manual/Continous	Noise Reduction	Support			
Color	R/G/B adjustable	HDMI	1080p			
Edge Enhancement	Yes	USB	USB 2.0			
OSD:	Yes, In HDMI mode					



































# **Integrated Software with Convieniently Located Control Bar**

**Digital Zoom / Increase Magnification** 

**Digital Zoom / Decrease Magnification** 

Flip Image Horizontal

Mirror Image Vertical

**Color to Black and White Toggle** 

Freeze Image / Unfreeze Image Toggle

**Digital Line Generator** 

Side-by-Side Live/Captured Image Comparison

PIP Still Image Capture

(AF) **Auto Focus / Optical Zoom** 

(WDR) Gallery / Image Preview / SD Card Management

Side-by-Side Live/Captured Image Comparison

File Explorer

Settings

**Software Info** 











# SMARTCAM-ULTRA AUTOFOCUS MACRO INPSECTION SYSTEMS

### MAC-PK1-4KSC-R3-AF



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Extended post stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 4K HDMI SMARTCAM w/ Autofocus (Includes SD card and mouse)
- 26" 4k/UHD LED monitor

#### MAC-PK1-4KSC-E2D-AF



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Extended post stand
- Diffused compact LED ring light (IL-LED-E2D)
- Features NEW 4K HDMI SMARTCAM (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

## MAC-PK5D-4KSC-R3-AF



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 4K HDMI SMARTCAM w/ Autofocus (Includes SD card and mouse)
- 26" 4k/UHD LED monitor

#### MAC-PK5D-4KSC-E2D-AF



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand with diffused compact LED ring light (IL-LED-E2D)
- Features NEW 4K HDMI SMARTCAM w/ Autofocus (Includes SD card and mouse)
- 26" 4k/UHD LED monitor

# SMARTCAM-ULTRA AUTOFOCUS MICRO INPSECTION SYSTEMS

### MZ7A-PK2-4KSC-AF



- MZ7A Micro-Zoom video zoom optics (0.5x video coupler, zoom body)
- Dual illuminated LED track stand with course and fine focus
- Features NEW 4K HDMI SMARTCAM w/ Autofocus (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

#### MZ7A-PK5D-4KSC-R3-AF



- MZ7A Micro-Zoom video zoom optics (0.5x video coupler, zoom body)
- Dual arm boom stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 4K HDMI SMARTCAM w/ Autofocus (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

# MZ7A-PK5D-4KSC-E2D-AF



- MZ7A Micro-Zoom video zoom optics (0.5x video coupler, zoom body)
- Dual arm boom stand
- Diffused compact LED ring light (IL-LED-E2D)
- Features NEW 4K HDMI SMARTCAM w/ Autofocus (Includes SD card and mouse)
- 26" 4k/UHD LED monitor



# **SMARTCAM 4K**

#### CC-SMART-4K

The SmartCam-4K from Scienscope is our most advanced 4k resolution camera. It features a vivid 4K image to a live monitor (HDMI) or 8.2 Megapixel image via USB 3.0 to a computer. Includes a host of onboard image processing and measurement tools accessible using a mouse connected to the camera via its onboard software. Capture images to SD card, USB Flash drive, and USB 3.0.

Measure anything using the onboard field of view measuring tools, DXF overlay, or multi-line generator. Export your measurement data and images with measured objects!

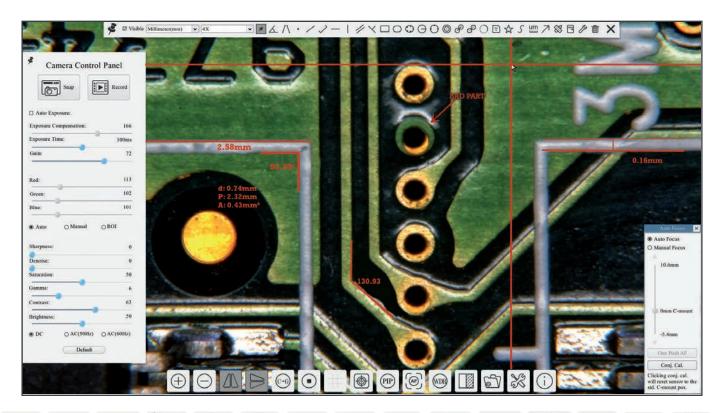
# **HDMI** MODE FEATURES

- Live measurement and annotation tools
- Image and video capture to SD card or USB Flash drive
- Split-screen live image/captured image comparison
- Image and video gallery / Image and video review
- Export measurement data to SD card or USB Flash
- Wireless mouse control

## **USB 3.0** MODE FEATURES

- Image and video capture using Windows 10 camera app
- Measure and annotate using included WiFi and USB
   3.0. software
- Image and video capture using the included software
- Directly email or print images
- Export measurement data

SMARTCAM-ULTRA (CC-SMART-4K)   SPECIFICATIONS						
Image Sensor	1/2.86 Inch Panasonic FULL HD 2.0 Megapixel	Freeze Image	Yes			
Effective Pixels	1920 X 1080	HDR	Yes			
Frame Rate	60fps	Edge Enhancements/ Sharpening	Yes			
Definition	More than 1200 lines	SD card slot	Up to 32GB SD Card			
Housing	Aluminum/ Plastic	Crosshair	Multi-Color, small or large			
White Balance	Automatic/Manual/Continous	Horizontal/ Vertical lines	Multi-Color, two lines for each (Position can be adjusted)			
Brightness Control	Automatic/Manual/Continous	Noise Reduction	Support			
Color	R/G/B adjustable	HDMI	1080p			
Edge Enhancement	Yes	USB	USB 2.0			
OSD:	Yes, In HDMI mode					





























Side-by-Side Live/Captured Image Comparison







# **Integrated Software with Convieniently Located Control Bar**

- **Digital Zoom / Increase Magnification** 
  - **Digital Zoom / Decrease Magnification**
- Flip Image Horizontal
- **Mirror Image Vertical**
- **Color to Black and White Toggle**
- Freeze Image / Unfreeze Image Toggle
- **Digital Line Generator**

- PIP Still Image Capture
- (AF) **Auto Focus/ Optical Zoom Menu**
- (WDR) Gallery / Image Preview / SD Card Management
- Side-by-Side Live/ Captured Image Comparison
- File Explorer
- **Settings**
- (i) **Software Info**











# **SMARTCAM 4K MACRO INSPECTTION SYSTEMS**

#### MAC-PK1-4KSC-R3



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Extended post stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 4K HDMI SMARTCAM (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

#### MAC-PK1-4KSC-E2D



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Extended post stand
- Diffused compact LED ring light (IL-LED-E2D)
- Features NEW 4K HDMI SMARTCAM (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

## MAC-PK5D-4KSC-R3



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features NEW 4K HDMI SMARTCAM (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

#### MAC-PK5D-4KSC-E2D



- MACRO video zoom optics (up to 65x magnification with 8" working distance)
- Dual arm boom stand with diffused compact LED ring light (IL-LED-E2D)
- Features NEW 4K HDMI SMARTCAM (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

# **SMARTCAM 4K MICRO INSPECTION SYSTEMS**

#### MZ7A-PK2-4KSC



- MZ7A Micro-Zoom video zoom optics (0.5x video coupler, zoom body)
- Dual illuminated LED track stand with the course and fine focus
- Features 4K SmartCam (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included.

### MZ7A-PK5D-4KSC-R3



- MZ7A Micro-Zoom video zoom optics (0.5x video coupler, zoom body)
- Dual arm boom stand
- NEW high-intensity LED ring light with polarizer (IL-LED-R3)
- Features 4K SmartCam (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

#### MZ7A-PK5D-4KSC-E2D



- MZ7A Micro-Zoom video zoom optics (0.5x video coupler, zoom body)
- Dual arm boom stand
- Diffused compact LED ring light (IL-LED-E2D)
- Features 4K SmartCam (Includes SD card and mouse)
- 26" 4k/UHD LED monitor
- Calibration target included

# **MZ7A MICRO ZOOM OPTICS**

Scienscope's MZ7A Micro-Zoom lens is a modular zoom lens system that can be configured to fit nearly any application. Choose from a diverse assortment of video couplers, accessory optics, and a coaxial lighting option.

A magnification range of 6x-1200x offers incredible versatility, high contrast images, and vivid colors.

## **FEATURES**

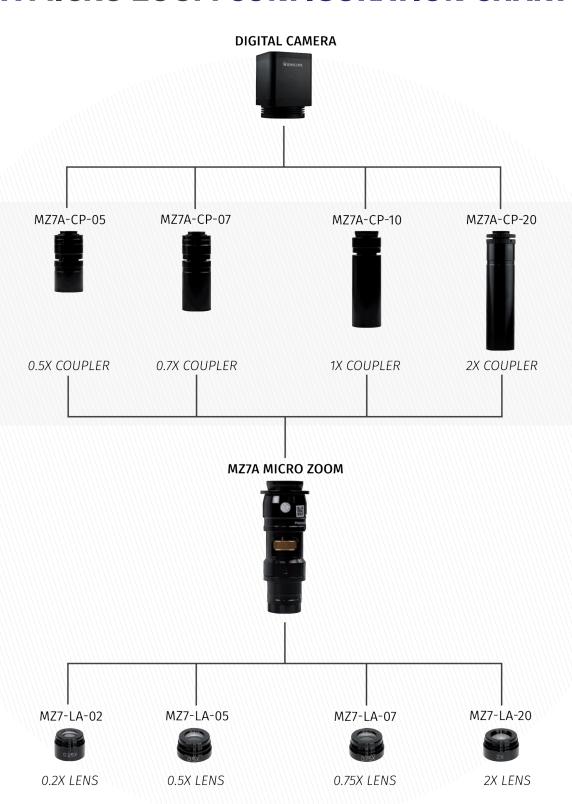
- Zoom Range 6X to 1200X
- Variable Working Distance
- High Numerical Aperture
- Coaxial Lighting Available



### **MZ7A MICRO ZOOM VIDEO SPECIFICATIONS BASED ON 23" MONITOR**

		Video Coupler				
Auxiliary Lense		0.5X	0.67X	1X	2X	
	MAG	6.1X -39.3X	8.2X - 52.6X	12.2X - 78.6X	24.4X - 157.2X	
0.25X	FOV (mm):	91.4 - 14.2	68.2 - 10.6	45.7 - 7.1	22.9 - 3.6	
	WD (mm):	302	302	302	302	
	MAG	12.2X - 78.6X	16.4X - 105.3X	24.4X - 157.2X	48.9X - 314.3X	
0.5X	FOV (mm):	45.7- 7.1	34.1 - 5.3	22.8 - 3.6	11.4 - 1.7	
	WD (mm):	176	176	176	176	
	MAG	18.3 - 117.9X	24.6X - 157.9X	36.7X - 253.7X	73.3X - 471.5X	
0.75X	FOV (mm):	30.5 - 4.5	22.7 - 3.5	15.2 - 2.4	7.6 - 1.2	
	WD (mm):	117	117	117	117	
	MAG	24.4X - 157.2X	32.8X - 210.6X	48.9X - 314.3X	97.8X - 628.7X	
1X	FOV (mm):	22.8 - 3.6	17.1 - 2.7	11.4 - 1.8	57 0.9	
	WD (mm):	96	96	96	96	
	MAG	48.9X - 314.3X	65.5X - 421.2X	97.8X - 628.7X	195.6X - 1257.3X	
2X	FOV (mm):	11.4 -1.8	8.5 - 1.3	5.7 - 0.9	2.8 - 0.4	
	WD (mm):	35	35	35	35	

# **MZ7A MICRO ZOOM CONFIGURATION CHART**



# **NAVITAR ZOOM 7000 MACRO LENS**

The Zoom 7000 offers unsurpassed clarity and parfocal zoom capabilities with a versatile close-focusing macro video lens that is specifically designed to be used in applications where objects are over 1" in diameter. It offers unsurpassed clarity and parfocal zoom capabilities. It is compatible with cameras 2/3" or smaller.

The Navitar® Zoom 7000 is ideal for quality assurance, biomedical imaging, or assembly applications where an easy-to-view, sharp, and true-to-life magnified image of your product can mean the difference between a shippable, top-quality end product and a costly manufacturing failure.

## **FEATURES**

- Up to 90X with 23" Monitor
- Up to 54mm FOV at 10" WD
- · High Depth of Field
- Manual Iris



#### MACRO ZOOM (CC-97-LN1) SPECS BASED ON 12" MONITOR

Working Distance		MAG	FOV
4.5" WD	High	60x	4.75mm
7.75" WD	High	30x	8.8mm
7.75 WD	Low	10x	25mm
8" WD	High	28x	9mm
o wo	Low	9.75x	25.5mm
9" WD	High	24.5x	10.75mm
9 <b>W</b> D	Low	8.75x	30mm
10" WD	High	21.5x	11.8mm
10 WD	Low	7.75x	33.75mm

#### MACRO ZOOM (CC-97-LN1) SPECS BASED ON 23" MONITOR

Working Distance		MAG	FOV
5.5" WD	High	90x	5mm
3.5 VVD	Low	20x	23mm
7" WD	High	64x	8mm
/ WD	Low	13x	34mm
8" WD	High	55x	9.5mm
o wu	Low	11.5x	43mm
9" WD	High	47x	10.5mm
9 WD	Low	10x	48mm
10" WD	High	42x	12mm
10 WD	Low	9x	54mm

# **COMPUTAR MACRO ZOOM**

Computar Manual Zoom Lenses provide manual adjustment of focal length, iris, and focus. For use where a variable angle of view is required. Primary applications for this lens include inspection, machine vision, and robotics.

1/2" 13-130mm 10X Close-up Manual Zoom, Manual Iris (C-Mount)

## **FEATURES**

- Up to 60x magnification with a ½" sensor camera
- Up to 4" of FOV at 12" of working distance
- Iris, objective control (zoom), and focus built-in
- All optical adjustments lockable with set screws



#### **COMPUTAR MACRO ZOOM (CC-97-LN1C) SPECS**

Model No.	Model No. MLH-10X		Effective Lense	Front	Ø30mm		
Max. Magnification 0.084mm - 0.84r		- 0.84mm	Aperture	Rear	Ø6.6mm		
Max. Aperture	Ratio	1:5.6		Back Focal Length	า	23.29	
Max. Image Fo	rmat	6.4mm X 4	1.8mm (Ø8mm)	Flange Back Leng	th		
Operation	Iris	F5.6 - F32	С	Mount		C-Mount	
	Focus	0.15m - 0.	45m	Filter Size		M46 P = 0.75n	nm
Range				Dimensions		Ø48mm x 98.5	5mm
	Iris Manual		Weight		260g		
Control	Focus	Manual					
	Zoom	Manual					
Object Size (1/	Object Size (1/2 type Working 152.4mm (6")		92.2mm - 9.6mm (D) 74.6mm - 7.8mm (H) 56.4mm - 5.9mm(V)				
CCD)		Distance	457.2mm (18")	349.4mm - 34.6mm(D) 279.2mhm - 28.0mm(H) 208.8mm - 21.2mm(V)			
Object Size (1/	3 type	Working	152.4mm (6")	70.1mm - 7.3mm (D) 56.4mm - 5.9mm(H) 42.4mm - 4.4mm(V)			
CCD)		Distance	457.2mm (18")	261.6mm - 26.4m(D) 208.8mm - 21.2mm(H) 156.2mm - 16.0mm(V)			2mm - 16.0mm(V)
Object Size (1/	4 type	Working	152.4mm (6")	53.0mm - 5.6mm(D) 42.4mm - 4.4mm(H) 31.8mm - 3.4mm(V)			
		Distance	457.2mm (18")	208.8mm - 21.2m	m(D) 156.2mm	· 16.0mm(H) 11	7.0mm - 12.0mm(V)
Angle of	D		21.6° - 4.5°		17.0° - 3.3°	1/4 type 1	13.0° - 2.5°
	Н	1/2 Type	18.0° - 3.6°	1/3 type	13.8° - 2.7°		10.6° - 2.0°
View	V		13.8° - 2.7°		10.6° - 2.0°		8.0° - 1.5°
Operating Tem	perature	-20°C +50	°C				

