# SCIENSCOPE

**MAC3** Egro-Inspection

**MACRO** with Versa-Cam

**SmartCam2** Desktop Measurement

**MZ7A** Micro Inspection

## Overview

The new MAC3 Ergonomic Digital Inspection system is the next step in the evolution of our powerful line of digital/video inspection systems. The revolutionary MAC3 series from Scienscope merges the latest in HD video technology with the clearest macro video optics to provide an easy to use ergonomic inspection system for your most fatiguing and difficult to see quality processes.



## Features

- Integrated operating system
- Image and Video capture to SD or via USB
- Split-Screen live image/captured image comparison
- Image gallery and image/video preview and playback
- Vertical and horizontal line generators with 8 presets
- Onscreen mouse-controlled video settings
- Digital image sharpening and frame averaging
- Auto White balance
- Auto shutter and brightness
- 12" LCD monitor
- 2 USB 2.0 ports

**HD  CMOS  USB  SD**
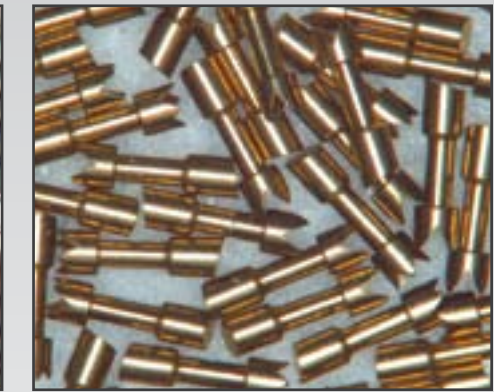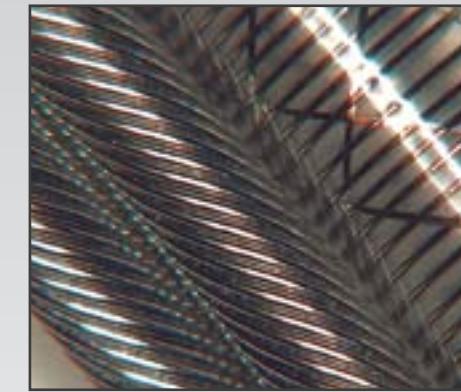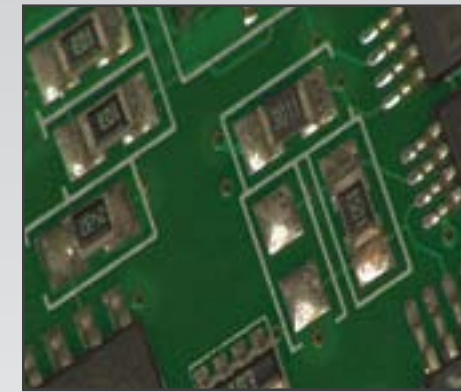


### Electronics
Capable of a remarkably large field of view or IPC spec magnification (Up to 60x) the MAC3 system makes electronics inspection a more comfortable and efficient process. If you need to document your work, images or video can be captured with one click of the mouse and stored to a removable SD card. You can also rework or repair in comfort with an ergonomically placed monitor (No eyepieces!) and easy to reach zoom and focus controls.



### Medical Devices
Whether you are inspecting catheters, stents, pacemakers or surgical implements, medical devices require 100% inspection with the utmost possible scrutiny. Inspect, document, and compare with ease and confidence. Use the integrated side-by-side capture to live image comparison feature to be certain that what you are seeing is a defect.



### Precision Machining
Precision machined parts are used in a wide range of industries, from aerospace and automotive applications, to watchmaking and traditional manufacturing. Clear and crisp live video with simplicity and ergonomics in mind makes the MAC3 system and camera an irreplaceable instrument to assist in any visual inspection task.

## MAC3 System Specifications and Optical Data

| Optics | Macro Zoom |
|---|---|
| Magnification | 7.75x to 60x (Variable depending on WD) |
| FOV | 33.75mm to 4.75mm (Variable depending on WD) |
| Working Distance | 4.5" to 12" |
| Resolution | 1080p HD @ 60fps |
| Sensor Type | ½.5" CMOS |
| Camera Mount | C-Mount |
| Focus control | Manual |
| Iris Control | Manual |

| Working Distance | | MAG | FOV |
|---|---|---|---|
| 4.5" WD | High | 60x | 4.75mm |
| 7.75" WD | High | 30x | 8.8mm |
| | Low | 10x | 25mm |
| 8" WD | High | 28x | 9mm |
| | Low | 9.75x | 25.5mm |
| 9" WD | High | 24.5x | 10.75mm |
| | Low | 8.75x | 30mm |
| 10" WD | High | 21.5x | 11.8mm |
| | Low | 7.75x | 33.75mm |



**MAC3 HD w/** Post Stand Option

**MAC3 HD w/** Articulating Arm

Select from a variety of stands and lighting for the system that best fits your needs. See preconfigured packages on **page 18.**

## Overview

The New MAC3 Camera (Part number: CC-CMC-12H) from Scienscope is an all-in-one camera with 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 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 monitor mounted directly to the camera limited work space is never a problem and your ergonomics will improve as well.
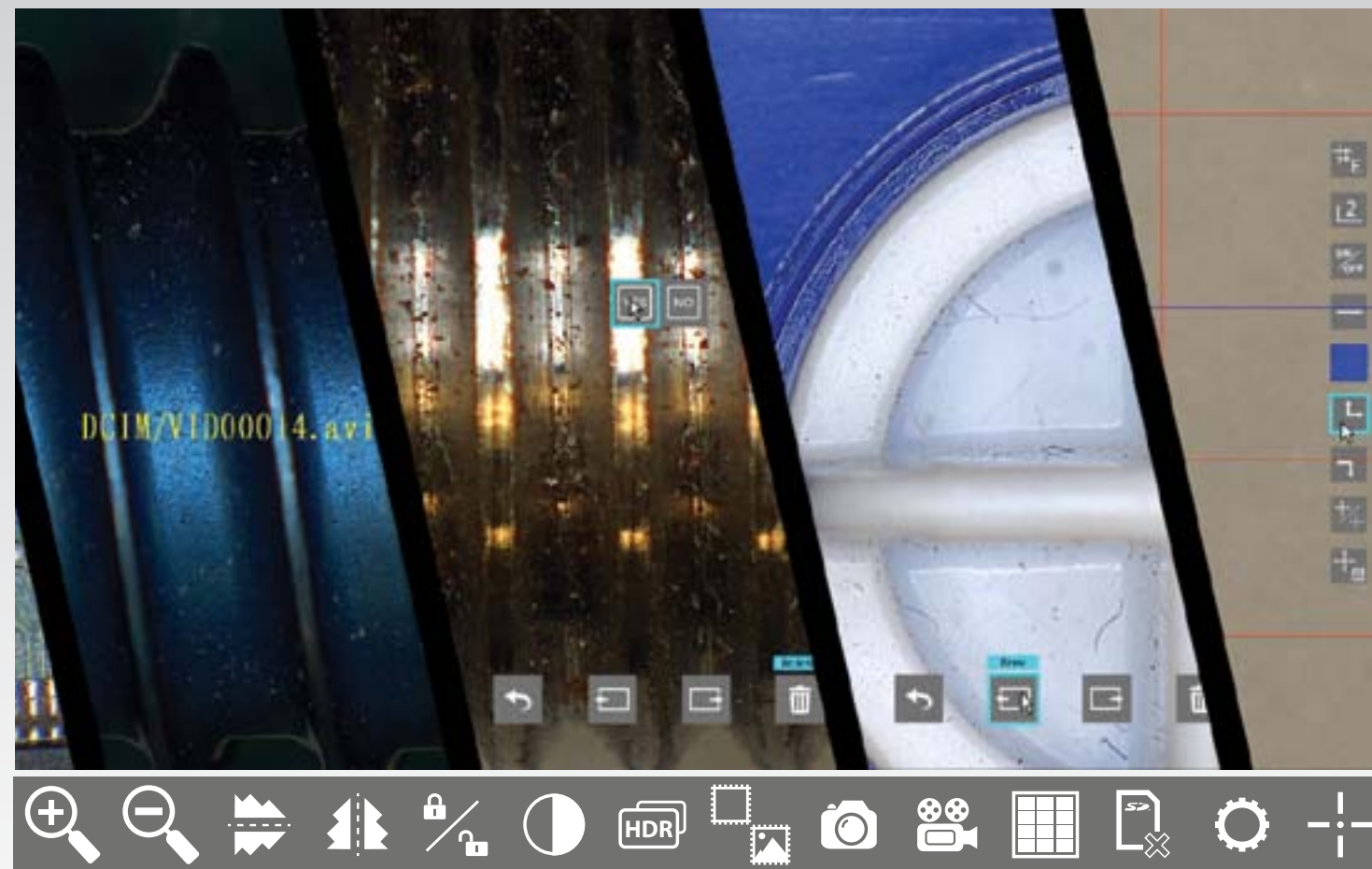
### HD / HDMI Mode Features

- 1080p (1920 x 1080)HD image @60fps
- Onscreen control bar and setting menu
- Image and video capture to SD card
- Split-screen live image/
  Captured image comparison
  (Picture in 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 with Windows 8 or 10 camera app
- Email, Save, or Print from software
- Image and video capture with included software
- Annotation and drawing tools on live or captured images
- Send images directly to local file location or network
- Time and date stamp images
- Includes DirectShow drivers
- Upgrade software with FOV measurement tools

## MAC3 Camera (CC-CMC-12H) | Specifications

| | | | |
|---|---|---|---|
| Image sensor | 1/2.86 Inch Panasonic | Freeze image | Yes |
| | FULL HD 2.0 Megapixel | HDR | Yes |
| Effective pixels | 1920 x 1080 | Edge enhancements | Yes |
| Frame rate | 60fps | /Sharpening | |
| Definition | More than 1200lines (the highest level) | SD card slot | Support up to 32GB SD card |
| Housing | Aluminum/Plastic | Cross hair | Multi-color, small or large |
| White balance | Automatic/Manual/Continuous | Horizontal/Vertical Lines | Multi-color, two lines for each |
| Brightness control | Automatic/Manual/Continuous | | (Position can be adjusted) |
| Color | R/G/B adjustable | Noise Reduction | Support |
| Edge enhancement: | Yes | HDMI | 1080p |
| OSD: | Yes, in HDMI mode | USB | USB 2.0 |

**Intergrated Software With Convieniently Located Control Bar**

| | | | |
|---|---|---|---|
| | Digital Zoom / Increase Magnification | | Side-by-Side Live/Captured Image Comparison |
| | Digital Zoom / Decrease Magnification | | Still Image Capture |
| | Flip Image Horizontal | | Video Capture |
| | Mirror Image Vertical | | Gallery / Image Preview / SD Card Management |
| | Freeze Image / Unfreeze Image Toggle | | Clear SD Card and SD Format |
| | Color to Black and White Toggle | | Settings Menu |
| | High Dynamic Range Toggle | | Integrated Video Caliper and Cross-hair |

### USB Software

With the included software you can use your USB port to connect your camera directly to computer for large volumes of image capture. The software is the perfect solution for adding a simple and easy way to capture, annotate and draw on images. Once the software is installed you can also download field of view measurement tools for quick and easy measurement capability.

## Overview

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 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.**

## Features

- Integrated operating system
- Image and Video capture to SD or via USB
- Split-Screen live image/captured image comparison
- Image gallery and image/video preview and playback
- Vertical and horizontal line generators with 8 presets
- Onscreen mouse-controlled video settings
- Digital image sharpening and frame averaging
- Auto White balance
- Auto shutter and brightness
- 23" LCD monitor
- 1 USB 2.0 ports
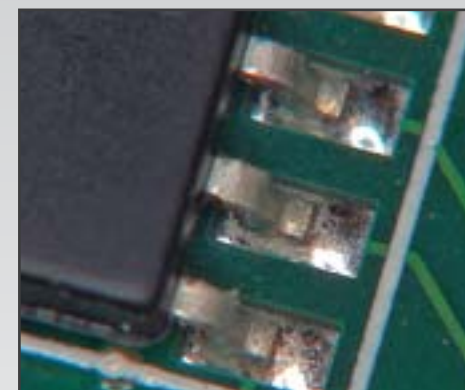


### Electronics

Capable of a remarkably large field of view or higher magnification (Up to 90x) the Macro Systems with Versa-CAM makes electronics inspection a more comfortable and efficient process. If you need to document your work, images or video can be captured with one click of the mouse and stored to a removable SD card. For high volumes of documentation use the USB port to capture images with your computer.

### Medical Devices

Whether you are inspecting catheters, stents, pacemakers or surgical implements, medical devices require 100% inspection with the utmost possible scrutiny. Inspect, document, and compare with ease and confidence. Use the integrated side-by-side capture to live image comparison feature to be certain that what you are seeing is a defect.

### Macro Documentation

Macro photography is extreme close-up photography, usually of very small subjects, in which the size of the subject in the photograph is greater than life size. The Macro Systems with Versa-CAM makes macro biological or industrial image capture and observation simple. With easy to control optics, lighting, and camera functions macro photography for education or industry is a snap.

## MAC3 System Specifications and Optical Data

| Optics | Macro Zoom |
| --- | --- |
| Magnification | 7.75x to 60x (Variable depending on WD) |
| FOV | 33.75mm to 4.75mm (Variable depending on WD) |
| Working Distance | 4.5" to 12" |
| Resolution | 1080p HD @ 60fps |
| Sensor Type | ½.5" CMOS |
| Camera Mount | C-Mount |
| Focus control | Manual |
| Iris Control | Manual |

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

**MAC3 HD** w/ Post Stand Option
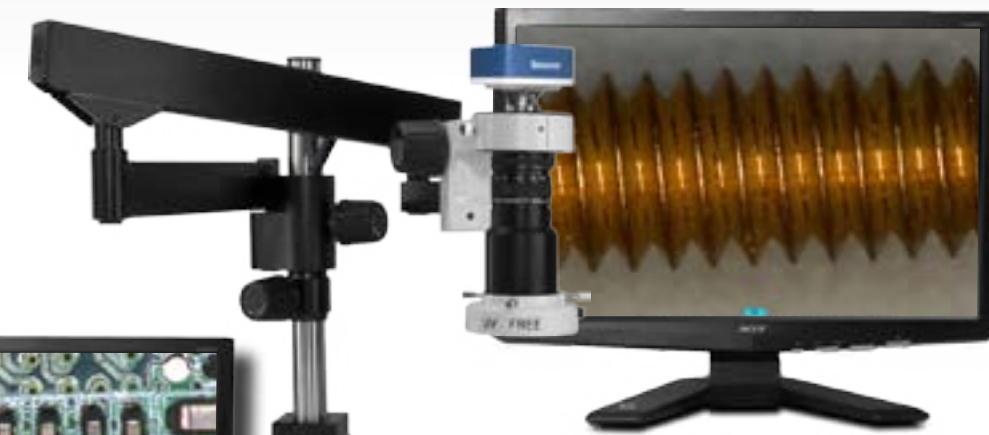
Select from a variety of stands and lighting for the system that best fits your needs. See preconfigured packages on **page 19.**

**MAC3 HD** w/ Articulating Arm

## Overview

The new **Versa-Cam** from Scienscope is the next step in the evolution of our powerful line of digital HD cameras for microscopy. 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 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.
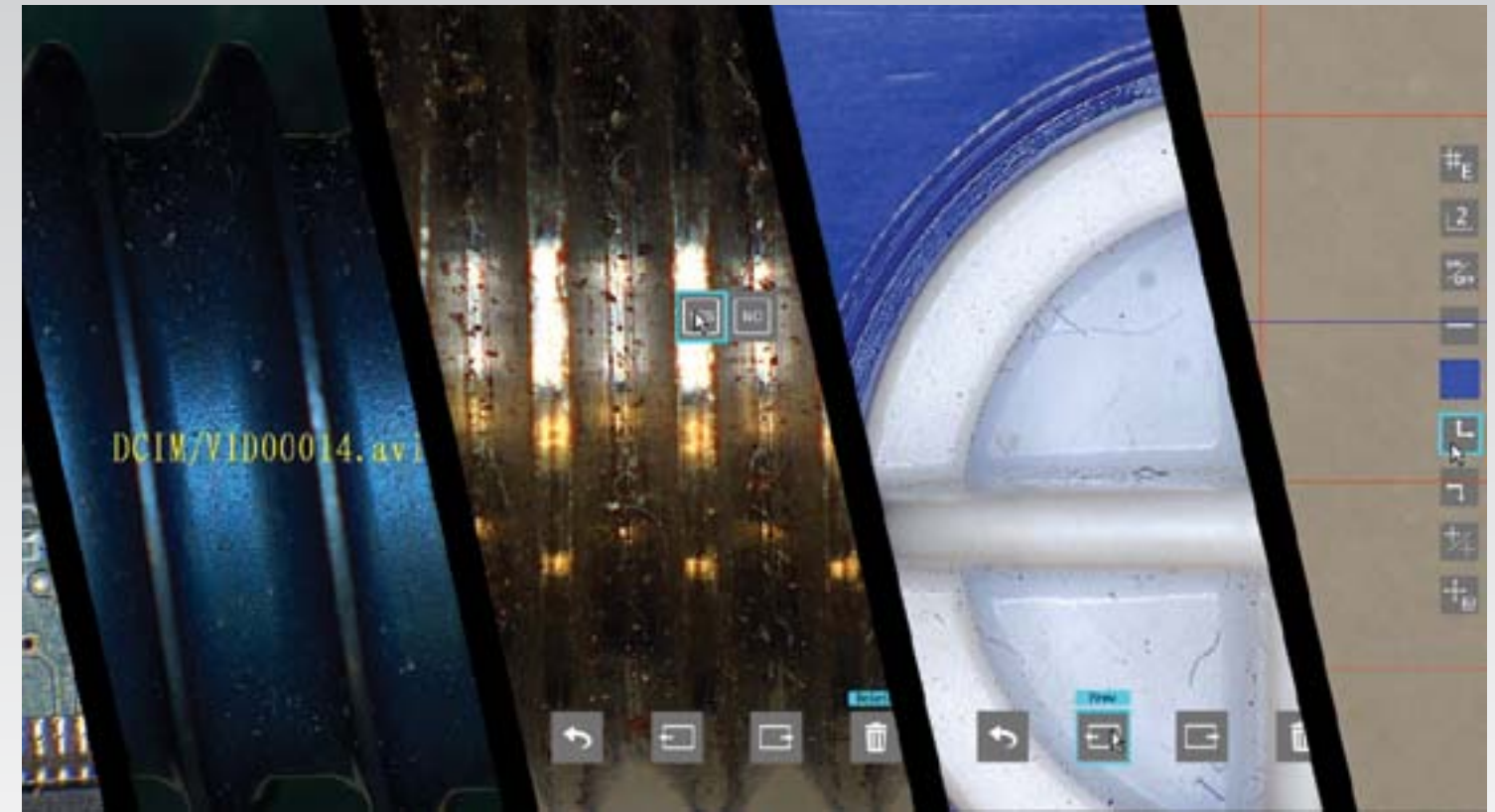


### HD / HDMI Mode Features

- 1080p (1920 x 1080)HD image @60fps
- Onscreen control bar and setting menu
- Image and video capture to SD card
- Split-screen live image/
  Captured image comparison
  (Picture in 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 with Windows 8 or 10 camera app
- Email, Save, or Print from software
- Image and video capture with included software
- Annotation and drawing tools on live or captured images
- Send images directly to local file location or network
- Time and date stamp images
- Includes DirectShow drivers
- Upgrade software with FOV measurement tools

## Versa-Cam (CC-HDMI-CD2) | Specifications

| Image sensor | 1/2.86 Inch Panasonic | Freeze image | Yes |
|---|---|---|---|
| | FULL HD 2.0 Megapixel | HDR | Yes |
| Effective pixels | 1920 x 1080 | Edge enhancements /Sharpening | Yes |
| Frame rate | 60fps | | |
| Definition | More than 1200lines (the highest level) | SD card slot | Support up to 32GB SD card |
| Housing | Aluminum/Plastic | Cross hair | Multi-color, small or large |
| White balance | Automatic/Manual/Continuous | Horizontal/Vertical Lines | Multi-color, two lines for each |
| Brightness control | Automatic/Manual/Continuous | | (Position can be adjusted) |
| Color | R/G/B adjustable | Noise Reduction | Support |
| Edge enhancement: | Yes | HDMI | 1080p |
| OSD: | Yes, in HDMI mode | USB | USB 2.0 |



### Intergrated Software With Convieniently Located Control Bar

| | | | |
|---|---|---|---|
| 🔍➕ | Digital Zoom / Increase Magnification | 🖼️ | Side-by-Side Live/Captured Image Comparison |
| 🔍➖ | Digital Zoom / Decrease Magnification | 📷 | Still Image Capture |
| | Flip Image Horizontal | 📹 | Video Capture |
| | Mirror Image Vertical | | Gallery / Image Preview / SD Card Management |
| 🔒 | Freeze Image / Unfreeze Image Toggle | | Clear SD Card and SD Format |
| ◑ | Color to Black and White Toggle | ⚙️ | Settings Menu |
| HDR | High Dynamic Range Toggle | | Integrated Video Caliper and Crosshair |

### USB Software

With the included software you can use your USB port to connect your camera directly to computer for large volumes of image capture. The software is the perfect solution for adding a simple and easy way to capture, annotate and draw on images. Once the software is installed you can also download field of view measurement tools for quick and easy measurement capability.
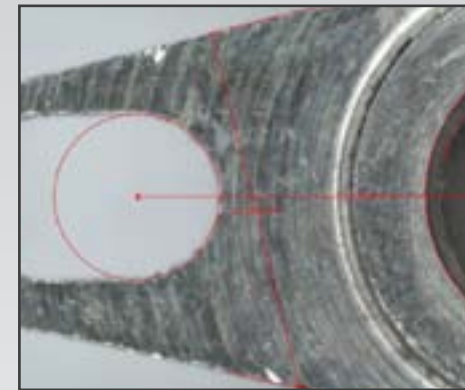
## Overview

The SmartCam 2 is a camera with an integrated computer running a lite version of Linux with a field of view measurement suite built-in! Now you can inspect and measure right on your desktop without the use of a computer. All of your measurements and image capture take place within the camera itself with the ability to capture and export your measurement data directly to the included SD card. **The systems also include the new horizontal zoom control Micro-Zoom lens with calibration feedback to the camera so changing between preset calibrations is just the twist of a knob.**
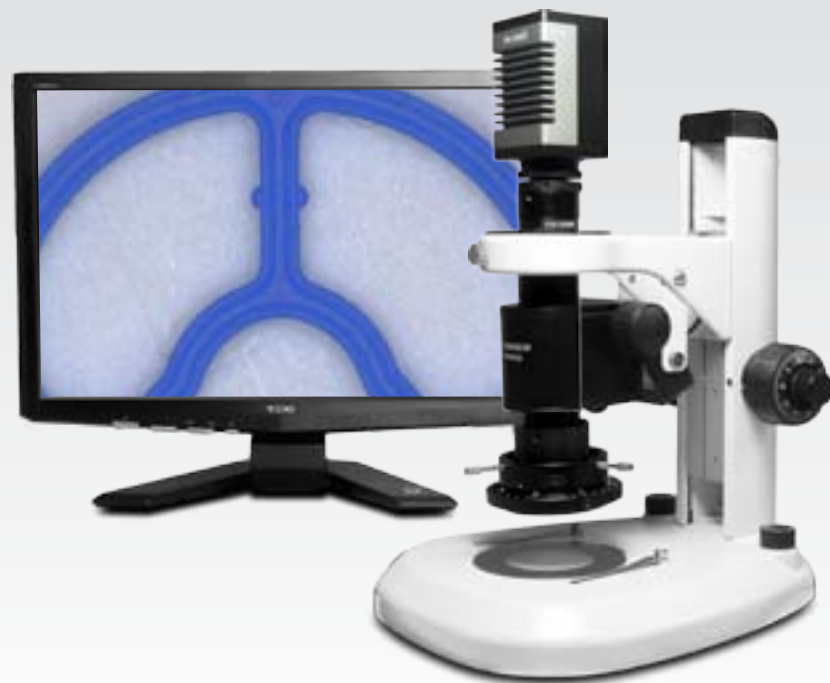
### Features

- The SmartCam 2 is an all-in-one HD camera, Computer, and Field of View Software Suite.
- Includes 9 FOV Measurement tools, Diameter, Radius, Circumference, Length, Angles, Area, Center to Center, Arc, and Average
- System measurement resolution at 140x up to +/- 0.005"
- Capture images and Record HD Video to included SD card
- Export measurement data to included SD card
- Video enhancement and control tools
- Integrated digital gaging calipers
- Easy-to-use, intuitive software that is mouse and keyboard controlled
- Your choice of dual arm boom stand or lab style track stand with built-in transmitted and reflected LED light
- Choice of diffused LED ring light or polarized LED ring light

**HD** · **CMOS** · **USB** · **SD**

### SmartCam 2 System Specifications

| Optics | Micro or Macro Zoom |
|---|---|
| Magnification | 32x to 203x |
| System measurement Resolution | @ 140x up to +/- 0.005" |
| Working Distance | 3.8" |
| Resolution | 1080p HD @ 60fps |
| Storage | 8GB SD |
| Camera Mount | C-Mount |
| Calibration Method | 6 Detented presets |
| Ports | 2 USB 2.0, SD, and HDMI out |

**All Systems Include**

- HD SmartCam 2 with integrated software
- Micro lens and 0.5x coupler or Macro Zoom lens
- Adjustable LED ring light
- 23" Color HD LCD monitor
- Glass calibration master (1mm and 0.1mm targets)
- 8GB SD card, Mouse, and HDMI cable
- Choice of dual illuminated track stand or dual arm boom stand.

### Measure

Measure your critical parts with ease and without a computer using the systems integrated field of view measurement software. With nine powerful and simple tools built in to the camera itself you will be able to quickly verify that your manufacturing process can move along without the delays of more complicated systems. The SmartCam 2 makes It simple…set up, calibrate, and measure.

### Inspection and Documentation

SmartCam 2 systems include powerful Micro or Macro zoom optics. Inspection and image/video capture of tiny parts and features using the standard Micro optics (Up to 1200x with optional accessories) produces stunning 1080p images with impressive detail. Never miss a microscopic defect and capture small issues before they become big problems.
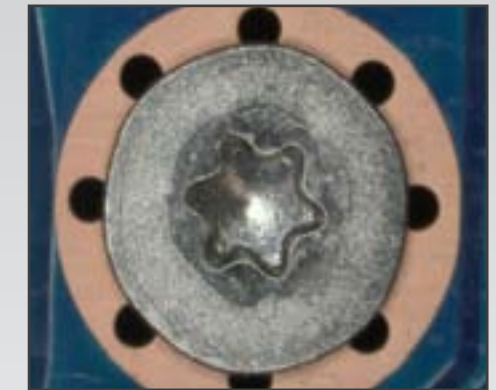
### Endless Applications

**SmartCam 2 systems are used in**

- Medical devices
- Automotive
- Defense
- Electronics and contract
- Semiconductor
- Machining and micro machining
- Materials analysis
- Plastics
- Aerospace
- Micro-stamping

Select from a variety of stands and lighting for the system that best fits your needs. See preconfigured packages on **pages 20 and 21.**

## Overview

The SmartCam 2 is the next generation of all-in-one Smart Camera technology. Now with a more user friendly graphical interface performing manual field of view measurements is made even more simple…and all without the use of a computer. The camera features a lite version of Linux that runs an inspection and capture interface and a simple calibration and measurement interface. Preconfigured systems are available (See pages 20 and 21) **or you can connect the camera to any C or CS mount optical system and transform it into a powerful measurement tool.**
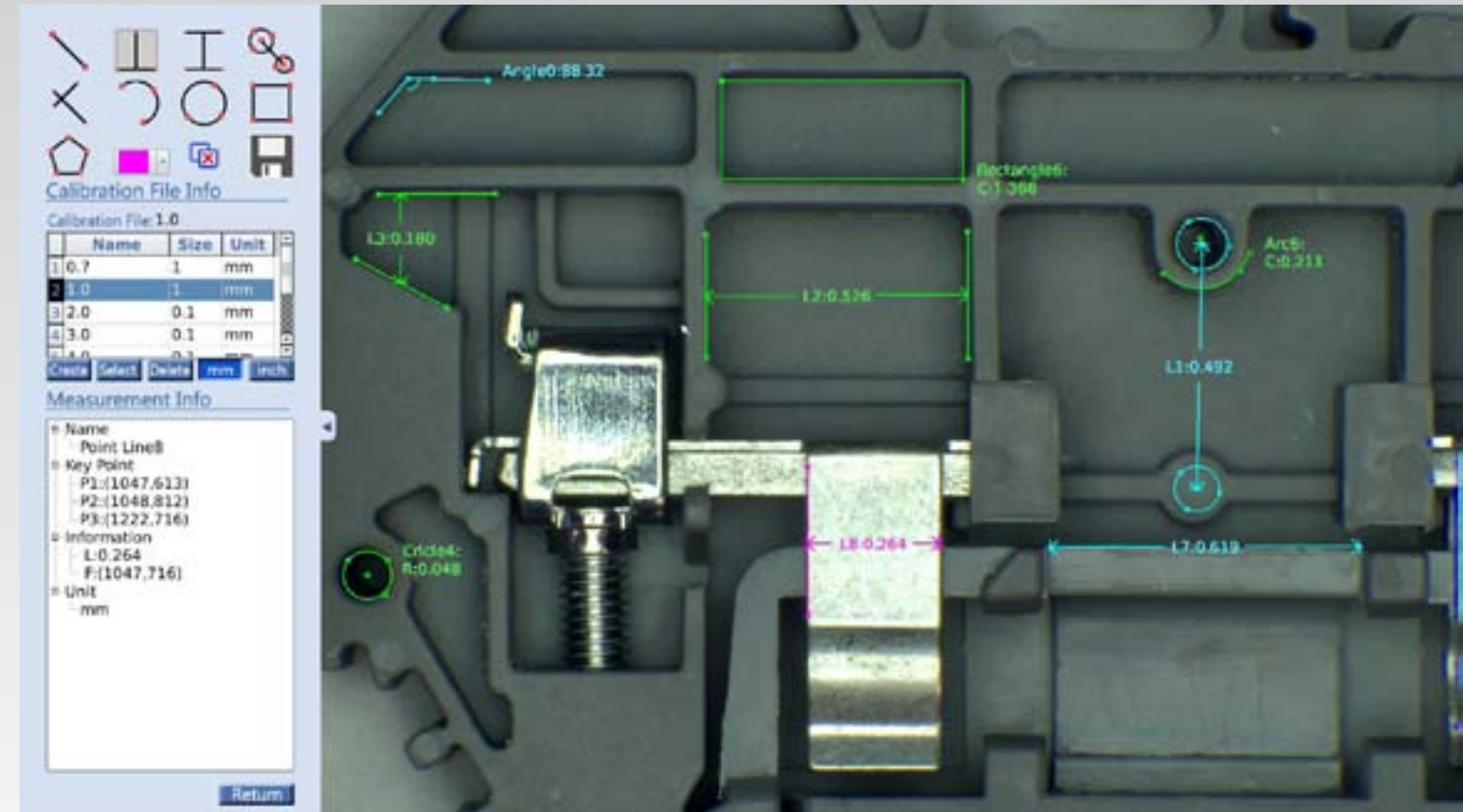
### Features

- Includes 9 FOV Measurement tools, Diameter, Radius, Circumference, Length, Angles, Area, Center to Center, Arc, Average and Width.
- System measurement resolution at 140x up to +/- 0.005"
- Easy calibration procedure
- English and metric units
- Export measurement data to included SD card
- Capture images with embedded measurement data and tools
- Up to 20 calibration files

- Integrated digital gaging calipers
- Adjustable crosshairs with edge detection and skew
- 1080p (1920 x 1080) HD @ 60fps
- Digital image enhancement
- Capture HD images and Record HD Video to included SD card or USB stick
- Video enhancement and control tools
- Easy-to-use, intuitive software that is mouse and keyboard controlled
- Image and video preview gallery
- Onscreen memory card eject button
- Connects to any C or CS mount coupler

## Versa-Cam (CC-HDMI-CD2) | Specifications

| | | | |
|---|---|---|---|
| Image sensor | 1/2.86 Inch Panasonic | Freeze image | Yes |
| | FULL HD 2.0 Megapixel | HDR | Yes |
| Effective pixels | 1920 x 1080 | Edge enhancements | Yes |
| Frame rate | 60fps | /Sharpening | |
| Definition | More than 1200lines (the highest level) | SD card slot | Support up to 32GB SD card |
| Housing | Aluminum/Plastic | Cross hair | Multi-color, small or large |
| White balance | Automatic/Manual/Continuous | Horizontal/Vertical Lines | Multi-color, two lines for each |
| Brightness control | Automatic/Manual/Continuous | | (Position can be adjusted) |
| Color | R/G/B adjustable | Noise Reduction | Support |
| Edge enhancement: | Yes | HDMI | 1080p |
| OSD: | Yes, in HDMI mode | USB | USB 2.0 |

## Inspection Controls

Use the newly upgraded operating system and digital image acquisition screen to capture HD images and video with the click of a mouse. The user can also control all aspects of the image in one conveniently located menu. The ability to set your exposure, saturation, image enhancement, and auto white balance can be changed to meet your application. Use the image gallery to review and delete images saved to your SD card.

## Measurement Tools

The SmartCam 2 features all of the FOV measurement tools that stand-alone or add-on PC field of view measurement software includes. Now you can measure with ease and without some of the issues that a computer requirement can come with. Measure diameters, radius, circumference, distance, angles, arcs, widths, areas, and polygons within your camera and without a computer.

| | | |
|---|---|---|
| **Angle.** | Find and measure an angle with four clicks. |
| **Arc.** | Find and measure an arc with three clicks. |
| **Area.** | Measure the X, Y, Diagonal and area with two clicks. |
| **Polygon.** | Find the area of a polygon with infinite clicks. |
| **Circle.** | Find the Diameter, circumference, and radius of a circle with three clicks. |
| **Average Width.** | Find the average width of two non-parallel or parallel lines with four clicks. |
| **Perpendicular With Distance.** | Find and measure the perpendicular distance from a point to a line. |
| **Point to Point, Line.** | Measure a distance or line with two clicks. |
| **Center to Center.** | Measure from the center of one circle to the center of another. |

## Overview

Our industry standard Micro 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 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.
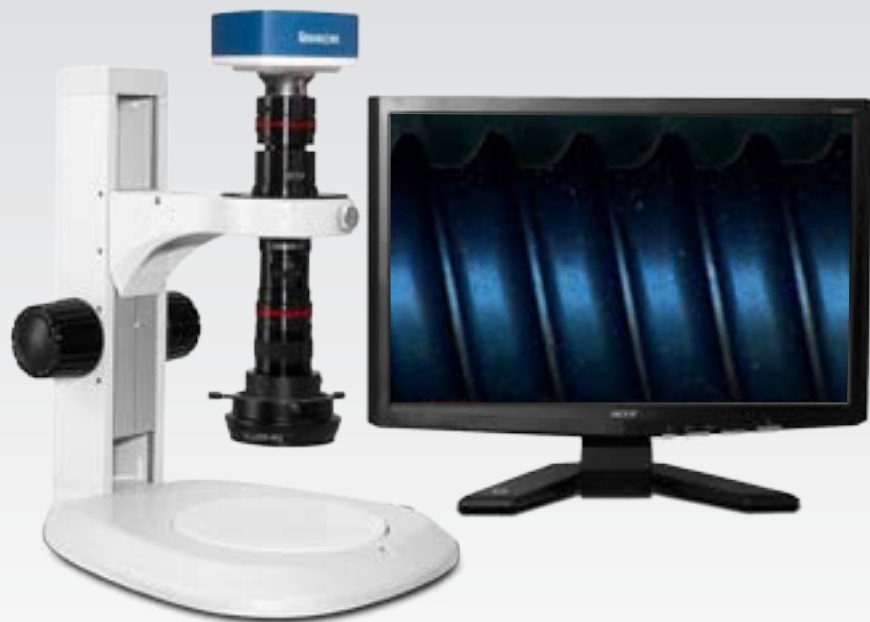
### Features

- System Mag. up to 1200x
- Integrated operating system
- Image and Video capture to SD or via USB
- Split-Screen live image/captured image comparison
- Image gallery and image/video preview and playback
- Vertical and horizontal line generators with 8 presets
- Onscreen mouse-controlled video settings
- Digital image sharpening and frame averaging
- Auto White balance
- Auto shutter and brightness
- 23" LCD monitor
- 1 USB 2.0 ports
- 
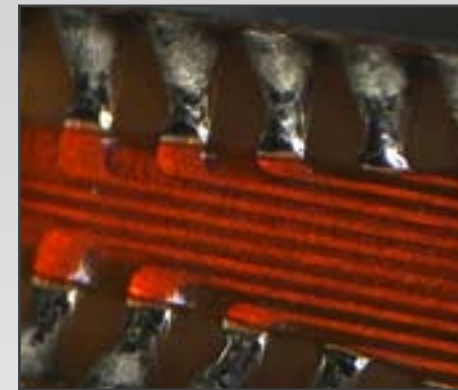
### High Magnification

Capable of up to **1200x** the Micro-Zoom Systems with Versa-CAM makes detailed inspection a more comfortable and efficient process. If you need to document your work, images or video can be captured with one click of the mouse and stored to a removable SD card. For high volumes of documentation use the USB port to capture images with your computer.
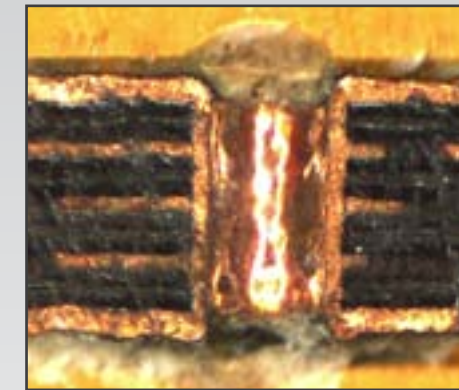
### Optical Accessories

The included Micro-Zoom lens offers a wide variety of optical accessories to suit your changing inspection requirements. All systems feature a detent zoom lens for repeatable magnification settings. Modular design allows you to interchange couplers and objective lenses to vary magnification, FOV, and working distance.

### Applications for Micro-Zoom

- Medical devices
- Research and Development
- Surface analysis
- Forensics
- Semiconductor
- Micro machining
- Materials analysis
- Quality Control
- Aerospace

## Micro-Zoom Optical Specifications

| Auxiliary Lens | | Video Couplers | | | |
|---|---|---|---|---|---|
| | | 0.5X | 0.67X | 1X | 2X |
| 0.25X | **Mag:** | 6.1X - 39.3X | 8.2X - 52.6X | 12.2X - 78.6X | 24.4X - 157.2X |
| | FOV (mm): | 91.4 - 14.2 | 68.2-10.6 | 45.7-7.1 | 22.9-3.6 |
| | WD (mm): | 302 | 302 | 302 | 302 |
| 0.5X | **Mag:** | 12.2X - 78.6X | 16.4X - 105.3X | 24.4X - 157.2X | 48.9X - 314.3X |
| | FOV (mm): | 45.7-7.1 | 34.1-5.3 | 22.8-3.6 | 11.4-1.7 |
| | WD (mm): | 176 | 176 | 176 | 176 |
| 0.75X | **Mag:** | 18.3X - 117.9X | 24.6X - 157.9X | 36.7X - 235.7X | 73.3X - 471.5X |
| | FOV (mm): | 30.5-4.5 | 22.7-3.5 | 15.2-2.4 | 7.6-1.2 |
| | WD (mm): | 117 | 117 | 117 | 117 |
| 1X | **Mag:** | 24.4X - 157.2X | 32.8X - 210.6X | 48.9X - 314.3X | 97.8X - 628.7X |
| | FOV (mm): | 22.8-3.6 | 17.1-2.7 | 11.4-1.8 | 57.-0.9 |
| | WD (mm): | 96 | 96 | 96 | 96 |
| 2X | **Mag:** | 48.9X - 314.3X | 65.5X - 421.2X | 97.8X - 628.7X | 195.6X - 1257.3X |
| | FOV (mm): | 11.4-1.8 | 8.5-1.3 | 5.7-0.9 | 2.8-0.4 |
| | WD (mm): | 35 | 35 | 35 | 35 |

*Optical specifications based on 23" monitor.

Contact us for special configurations.

## Overview

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

## Overview

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

### Features

- Up to 90x with 23" monitor
- Up to 54mm FOV at 10" WD
- High depth of field
- Manual iris

## Clarity and High Magnification

Detented zoom for repeatable magnification settings and built-in internal focus module are perfect for FOV measurement applications as well as general inspection. Modular design allows you to interchange couplers and objective lenses to vary magnification, field of view, and working distance.

Coaxial Light Module    Flexible Configuration    Perfect for SmartCam2

## Clarity and Wide Field of View

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.

Largest Field of View    Double Magnification    Perfect for Versa-Cam

MZ7A Micro Zoom Video Specifications Based On 23" Monitor

| Auxiliary Lens | | Video Couplers | | | |
|---|---|---|---|---|---|
| | | 0.5X | 0.67X | 1X | 2X |
| 0.25X | Mag: | 6.1X - 39.3X | 8.2X - 52.6X | 12.2X - 78.6X | 24.4X - 157.2X |
| | FOV (mm): | 91.4 - 14.2 | 68.2-10.6 | 45.7-7.1 | 22.9-3.6 |
| | WD (mm): | 302 | 302 | 302 | 302 |
| 0.5X | Mag: | 12.2X - 78.6X | 16.4X - 105.3X | 24.4X - 157.2X | 48.9X - 314.3X |
| | FOV (mm): | 45.7-7.1 | 34.1-5.3 | 22.8-3.6 | 11.4-1.7 |
| | WD (mm): | 176 | 176 | 176 | 176 |
| 0.75X | Mag: | 18.3X - 117.9X | 24.6X - 157.9X | 36.7X - 235.7X | 73.3X - 471.5X |
| | FOV (mm): | 30.5-4.5 | 22.7-3.5 | 15.2-2.4 | 7.6-1.2 |
| | WD (mm): | 117 | 117 | 117 | 117 |
| 1X | Mag: | 24.4X - 157.2X | 32.8X - 210.6X | 48.9X - 314.3X | 97.8X - 628.7X |
| | FOV (mm): | 22.8-3.6 | 17.1-2.7 | 11.4-1.8 | 57.-0.9 |
| | WD (mm): | 96 | 96 | 96 | 96 |
| 2X | Mag: | 48.9X - 314.3X | 65.5X - 421.2X | 97.8X - 628.7X | 195.6X - 1257.3X |
| | FOV (mm): | 11.4-1.8 | 8.5-1.3 | 5.7-0.9 | 2.8-0.4 |
| | WD (mm): | 35 | 35 | 35 | 35 |

Macro Zoom Specifications **Based On 12" Monitor**

| Working Distance | | MAG | FOV |
|---|---|---|---|
| 4.5" WD | High | 60x | 4.75mm |
| 7.75" WD | High | 30x | 8.8mm |
| | Low | 10x | 25mm |
| 8" WD | High | 28x | 9mm |
| | Low | 9.75x | 25.5mm |
| 9" WD | High | 24.5x | 10.75mm |
| | Low | 8.75x | 30mm |
| 10" WD | High | 21.5x | 11.8mm |
| | Low | 7.75x | 33.75mm |

Macro Zoom Specifications **Based On 23" Monitor**

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

## MAC3 System Packages (page 18)

**PK 5S** | **DM** | **E2D** | **R3**
Illumination Options
**MAC3-PK5S-E2D Shown**

**PK 3** | **DM** | **E2D** | **R3**
Illumination Options
**MAC3-PK3-R3 Shown**

**PK 5D** | **DM** | **E2D** | **R3**
Illumination Options
**MAC3-PK5D-R3 Shown**

**PK 5** | **DM** | **E2D** | **R3**
Illumination Options
**MAC3-PK5-E2D Shown**

**PK 1** | **DM** | **E2D** | **R3**
Illumination Options
**MAC3-PK1-DM Shown**

### Optics
**MAC3**  **MAC3 Macro Zoom**
**Video Packages**

All Systems include Macro-Zoom 7000 optics, The MAC3 camera/monitor combination, wireless mouse, USB 2.0 cable, USB software, and power supply. All systems include your choice of stand and LED lighting. See the icons to the right to choose the combination that best suits your needs..

- **Your package number should look like this MAC3-PK5-E2D.**

### Stands
**PK 1**  Ergo Post Stand | 76mm Focus Rack

**PK 3**  Articulating Arm | 76mm Focus Rack

**PK 5**  Gliding Arm Boom Stand | 76mm e-Arm

**PK 5D**  Dual Arm Boom Stand | 76mm e-Arm

**PK 5S**  Single arm boom stand / 76mm Focus E-arm

### Lighting
**DM**  Diffused LED Dome Light

**E2D**  Diffused LED Ring Light

**R3**  High Intensity LED Ring Light
w/ Polarizer

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## MAC System Packages (page 19)

**PK 5D** | **DM** | **E2D** | **R3**
Illumination Options
**MAC-PK5D-E2D Shown**

**PK 1** | **DM** | **E2D** | **R3**
Illumination Options
**MAC-PK1-DM Shown**

**PK 3** | **DM** | **E2D** | **R3**
Illumination Options
**MAC-PK3-R3 Shown**

**PK 5** | **DM** | **E2D** | **R3**
Illumination Options
**MAC-PK5-E2D Shown**

### Optics
**MAC**  **MAC Macro Zoom**
**Video Packages**

All Systems include Macro-Zoom 7000 optics, The Versa-Cam and 23" monitor, wireless mouse, USB 2.0 cable, USB software, and power supply. All systems include your choice of stand and LED lighting. See the icons to the right to choose the combination that best suits your needs.

- **Your package number should look like this MAC-PK1-DM**

### Stands
**PK 1**  Ergo Post Stand | 76mm Focus Rack

**PK 3**  Articulating Arm | 76mm Focus Rack

**PK 5**  Gliding Arm Boom Stand | 76mm e-Arm

**PK 5D**  Dual Arm Boom Stand | 76mm e-Arm

**PK 5S**  Single arm boom stand / 76mm Focus E-arm

### Lighting
**DM**  Diffused LED Dome Light

**E2D**  Diffused LED Ring Light

**R3**  High Intensity LED Ring Light
w/ Polarizer

### MZ7A-PK2-SC2-E2D

**System includes:** MZ7A Horizontal Micro-Zoom video zoom optics with feedback (0.5x video coupler, zoom body) on dual illuminated LED track stand with coarse and fine focus with NEW diffused LED ring light. Features NEW 1080p HDMI SMARTCAM2 with lens feedback (Includes SD card and mouse) with 23" HD LCD monitor. Calibration target included.



### MZ7A-PK5D-SC2-E2D

**System includes:** MZ7A Horizontal Micro-Zoom video zoom optics with feedback (0.5x video coupler, zoom body) on dual arm boom stand with diffused compact LED ring light. Features NEW 1080p HDMI SMARTCAM2 with lens feedback (Includes SD card and mouse) with 23" HD LCD monitor. Calibration target included.



### MAC-PK5D-SC2-E2D

**System includes:** MACRO video zoom optics (up to 65x magnification with 8" working distance) on dual arm boom stand with diffused compact LED ring light. Features NEW 1080p HDMI SMARTCAM2 (Includes SD card and mouse) with 23" HD LCD monitor. Calibration target included.



### MAC-PK1-SC2-E2D

**System includes:** MACRO video zoom optics (up to 65x magnification with 8" working distance) on extended post stand with diffused compact LED ring light. Features NEW 1080p HDMI SMARTCAM2 (Includes SD card and mouse) with 23"" HD LCD monitor. Calibration target included.



### MZ7A-PK5D-SC2-R3

**System includes:** MZ7A Horizontal Micro-Zoom video zoom optics with feedback (0.5x video coupler, zoom body)) on dual arm boom stand with NEW high intensity LED ring light with polarizer. Features NEW 1080p HDMI SMARTCAM2 with lens feedback (Includes SD card and mouse) with 23" HD LCD monitor. Calibration target included.



### MZ7A-PK2-SC2-R3

**Systems include:** MZ7A Horizontal Micro-Zoom video zoom optics with feedback (0.5x video coupler, zoom body) on dual illuminated LED track stand with coarse and fine focus with NEW high intensity LED ring light with polarizer. Features NEW 1080p HDMI SMARTCAM2 with lens feedback (Includes SD card and mouse) with 23" HD LCD monitor. Calibration target included.



### MAC-PK1-SC2-R3

**System includes:** MACRO video zoom optics (up to 65x magnification with 8" working distance) on extended post stand with NEW high intensity LED ring light with polarizer. Features NEW 1080p HDMI SMARTCAM2 (Includes SD card and mouse) with 23"" HD LCD monitor. Calibration target included.



### MAC-PK5D-SC2-R3

**System includes:** MACRO video zoom optics (up to 65x magnification with 8" working distance) on dual arm boom stand with NEW high intensity LED ring light with polarizer. Features NEW 1080p HDMI SMARTCAM2 (Includes SD card and mouse) with 23"" HD LCD monitor. Calibration target included.

## Micro/Macro Zoom Video Lens

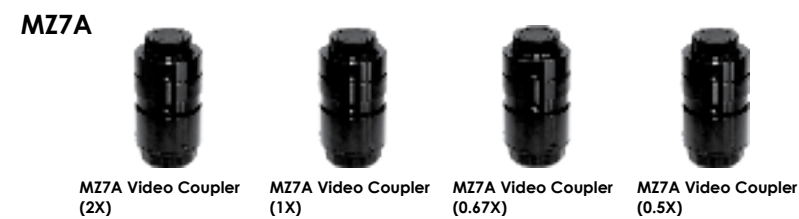**5 Years** All zoom lens come with a 5 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| MZ7A Micro Zoom Lens | MZ7A-ZOOM |
| MAC Macro Zoom Lens | CC-97-LN1 |
| MZ7A Micro Zoom Lens with Coaxial Module | MZ7A-ZOOM-C |

MZ7 Micro Zoom Lens

MAC Macro Zoom Lens

MZ7 Micro Zoom Lens with Coaxial Module

## Video Couplers

**5 Years** All video couplers come with a 5 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| MZ7A Video Coupler (2X) | MZ7A-CP-20 |
| MZ7A Video Coupler (1X) | MZ7A-CP-10 |
| MZ7A Video Coupler (0.67X) | MZ7A-CP-07 |
| MZ7A Video Coupler (0.5X) | MZ7A-CP-05 |

**MZ7A**

MZ7A Video Coupler (2X)  MZ7A Video Coupler (1X)  MZ7A Video Coupler (0.67X)  MZ7A Video Coupler (0.5X)

## Objective Lens

**5 Years** All objective lens come with a 5 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| MZ7 Objective Lens (2X) | MZ7-LA-20 |
| MZ7 Objective Lens (0.75X) | MZ7-LA-07 |
| MZ7 Objective Lens (0.5X) | MZ7-LA-05 |
| MZ7 Objective Lens (0.25X) | MZ7-LA-02 |

**MZ7**

2X  0.75X  0.5X  0.25X

## Doubler Lens for Macro Lens

**5 Years** All objective lens come with a 5 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| 2X doubler | CC-97-LN1-2X |

**2X**

## Digital Cameras

**1 Year** All cameras come with 1 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| 1080p HD Camera and 12" Monitor Combination | CC-CMC-12H |
| 1080p HD Versa-Cam HDMI/USB Camera | CC-HDMI-C02 |
| 1080p HD SmartCam2 Measurement Camera | CC-SMART2 |

1080p HD camera and 12" monitor combination

1080p HD Versa-Cam HDMI/USB camera

1080p HD SmartCam2 measurement camera

## Light Sources

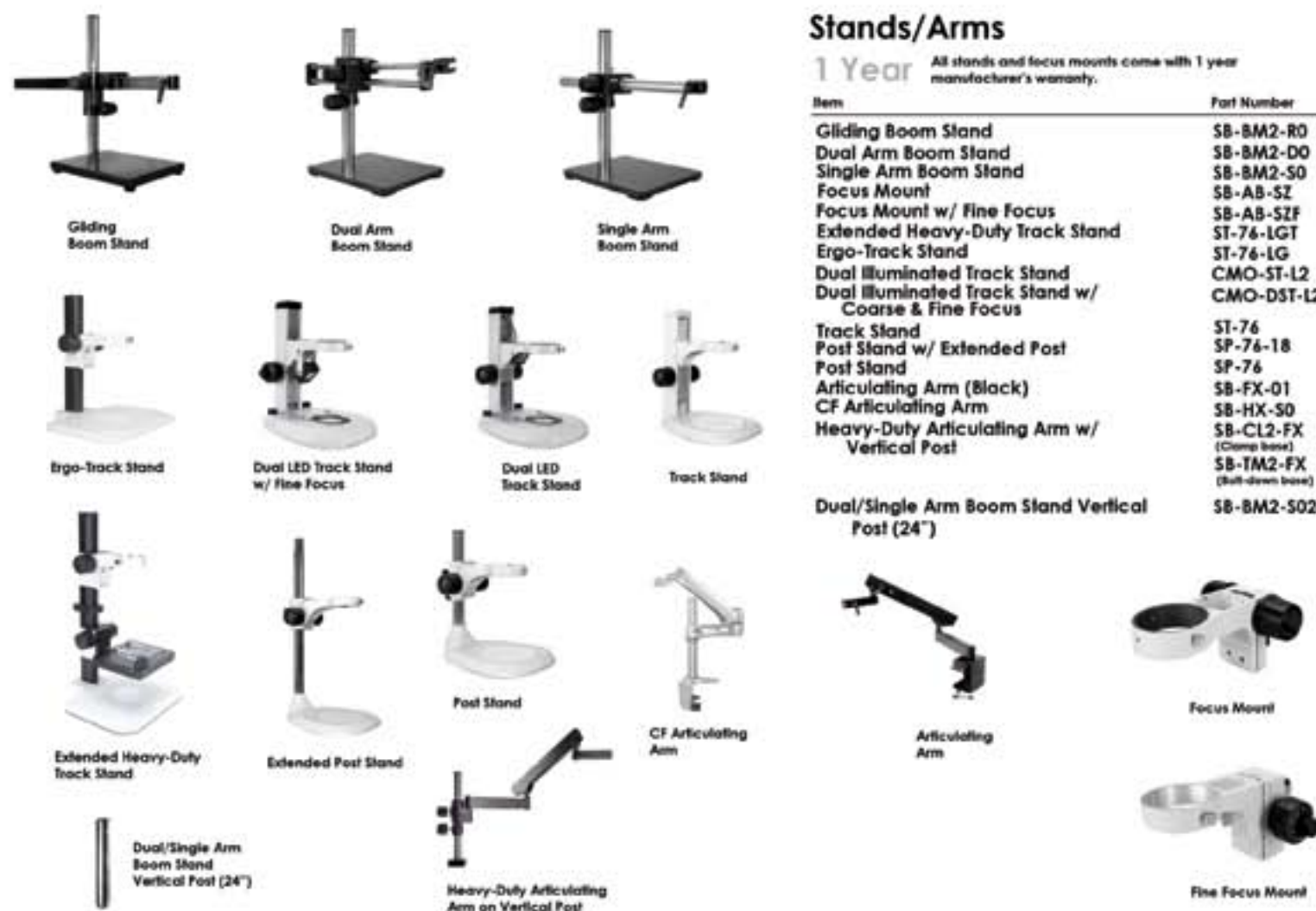**1 Year** All light sources come with 1 year manufacturer's warranty. LED light is 3 years.

| Item | Part Number |
|---|---|
| Compact LED ring light | IL-LED-E1 |
| Diffused Compact LED ring light | IL-LED-E2D |
| Quadrant Compact LED ring light | IL-LED-E1Q |
| 8-Point LED ring light with control unit | IL-LED-R2E |
| Diffused LED dome with control unit | IL-LED-R2D |
| High intensity LED ring with polarizer | IL-LED-R3 |
| LED fiber optic illuminator | IL-FOI-L24A |
| Fiber optic annular ring light guide | FC-A2-36 |
| Fiber optic dual pipe light guide | FC-DP-18 |

Compact LED Ring Light  Diffused Compact LED ring light  Quadrant Compact LED ring light  8-Point LED ring light with control unit  Diffused LED dome with control unit

High intensity LED ring with polarizer  LED fiber optic illuminator  Fiber optic annular ring light guide  Fiber optic dual pipe light guide

## Stands/Arms

**1 Year** All stands and focus mounts come with 1 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| Gliding Boom Stand | SB-BM2-R0 |
| Dual Arm Boom Stand | SB-BM2-D0 |
| Single Arm Boom Stand | SB-BM2-S0 |
| Focus Mount | SB-AB-SZ |
| Focus Mount w/ Fine Focus | SB-AB-SZF |
| Extended Heavy-Duty Track Stand | ST-76-LGT |
| Ergo-Track Stand | ST-76-LG |
| Dual Illuminated Track Stand | CMO-ST-L2 |
| Dual Illuminated Track Stand w/ Coarse & Fine Focus | CMO-DST-L2 |
| Track Stand | ST-76 |
| Post Stand w/ Extended Post | SP-76-18 |
| Post Stand | SP-76 |
| Articulating Arm (Black) | SB-FX-01 |
| CF Articulating Arm | SB-HX-S0 |
| Heavy-Duty Articulating Arm w/ Vertical Post | SB-CL2-FX (Clamp base) |
|  | SB-TM2-FX (Bolt-down base) |
| Dual/Single Arm Boom Stand Vertical Post (24") | SB-BM2-S024 |

Gliding Boom Stand  Dual Arm Boom Stand  Single Arm Boom Stand

Ergo-Track Stand  Dual LED Track Stand w/ Fine Focus  Dual LED Track Stand  Track Stand

Extended Heavy-Duty Track Stand  Extended Post Stand  Post Stand  CF Articulating Arm  Articulating Arm  Focus Mount

Dual/Single Arm Boom Stand Vertical Post (24")  Heavy-Duty Articulating Arm on Vertical Post  Fine Focus Mount

## Adapters

**1 Year** All items come with 1 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| Ring Light Adapter for Micro Zoom Lens | MZ7-10-70 |
| Focus mount adatper for Macro Zoom lens | SB-76-47 |
| Focus mount adatper for Micro Zoom lens | SB-76-39 |

Ring Light Adapter for MZ7 Series  Focus Mount Adapter for Micro Zoom lens  Focus Mount Adapter for Macro Zoom lens

## Monitors & Mounts

**1 Year** All monitors and monitor arm mounts come with 1 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| 10" Color LCD Monitor | CC-LCD-10 |
| 23" Color Widescreen LCD Monitor | CC-LCD-22W |
| Desk Mount Arm for LCD Monitor | CC-MM-20 |
| LCD Monitor Mount for Boom Stand | CC-MM-20B |

23" LCD Monitor  Desktop LCD Mount  LCD Mount for Single/Dual Arm Boom Stands

## Filters

**1 Year** All filters come with 1 year manufacturer's warranty.

| Item | Part Number |
|---|---|
| Polarizer for IL-LED-R2E | |
| Polarizer for IL-LED-R1E | |
| Polarizer for FC-A2-36 | |
| Fiber Optic Illuminator Color Filter Kit | |

Polarizer for Fiber Optic Annular Ring Light (FC-A2-36)  Polarizer for 8-Point LED Ring Light (IL-LED-R2E)  Polarizer for 4-Point LED Ring Light (IL-LED-R1E)  Color Filter Kit for LED Fiber Optic Illuminator (IL-FOI-L24)

# SCIENSCOPE

## COMPANY PROFILE

Scienscope is an industrial (NDT) solution provider committed to the best price to performance ratio we can offer. In business since 1994, Scienscope serves all areas of manufacturing in North America through a network of technical sales representatives and distributors. It is our mission to provide the most innovative and cost effective solutions for our customers' inspection problems. We are continuously developing new products and software to meet your needs.

The Scienscope inspection division is the core of our business. Our product line extends from benchtop magnifiers, stereo zoom microscopes, video inspection systems, video recognition systems to video measurement systems, and measurement software. As well, Scienscope manufactures industrial cabinet style micro focus X-Ray machines. Most of our products can be demonstrated on-site or online, please contact your local representatives or Scienscope directly for details. Please visit our website www.scienscope.com for more product information and contacts. We appreciate the opportunity to do business with your company, let us know how we can help.

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SCIENSCOPE OFFERS A 5-YEAR WARRANTY ON ALL ITS OPTICAL PRODUCTS; INCLUDING MICROSCOPES, AUXILIARY LENSES, VIDEO COUPLERS, VIDEO LENSES, DIGITAL CAMERA ADAPTERS. ALL OTHER SCIENSCOPE PRODUCTS ARE WARRANTED FOR A 1-YEAR PERIOD, INCLUDING STANDS, FOCUS MOUNTS, LIGHT SOURCES, LIGHT GUIDES, CAMERAS AND MONITORS; BULBS ARE NOT WARRANTED.

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All specifications subject to change without notification.

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