SCIENSCOPE
DIGITAL INSPECTION
CATALOG 2019

- Macro HD Inspection
- AutoFocus HD Inspection
- Image/Video capture and measurement

[Image of a computer monitor displaying a circuit board with a camera and stand beside it]
Scienscope's industry standard Macro video/digital inspection systems now feature the powerful and convenient Auto-Cam (CC-HDMI-AF2). The systems, built around our versatile macro lens, now even more easy to use thanks to fast auto focus technology, which allows you to speed up your inspection routine beyond your current capabilities. Contact us for an onsite demo today!

**Camera Overview**

- Full Toolbar w/ Camera Controls
- 1080p Resolution
- HDMI 60FPS and USB 30FPS
- 2.8µm / 2.8µm Pixel Size
- 1080P/SONY IMX236(C) Sensor Sized at 1/2.8"(5.38x3.02)
- DC 12V/2A Adaptor
- Compatible Displays: 19"+
- Weight of 0.47 kg (1.0lbs)
- Exposure of 0.1ms~999ms
- Dimensions of 78mm (3.07") x 70mm (2.76") x 92mm (3.62")
**System Overview**

**AutoFocus (cc-hdmi-af) | Camera Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1/2.86 inch Panasonic</td>
</tr>
<tr>
<td></td>
<td>FULL HD 2.0 Megapixel</td>
</tr>
<tr>
<td>Effective pixels</td>
<td>1920 x 1080</td>
</tr>
<tr>
<td>Frame rate</td>
<td>60fps</td>
</tr>
<tr>
<td>Definition</td>
<td>More than 1200 lines (the highest level)</td>
</tr>
<tr>
<td>Housing</td>
<td>Aluminum</td>
</tr>
<tr>
<td>White balance</td>
<td>Automatic/Manual/Continuous</td>
</tr>
<tr>
<td>Brightness control</td>
<td>Automatic/Manual/Continuous</td>
</tr>
<tr>
<td>Color</td>
<td>R/G/B adjustable</td>
</tr>
<tr>
<td>Edge enhancement</td>
<td>Yes</td>
</tr>
<tr>
<td>OIS</td>
<td>Yes, in HDMI mode</td>
</tr>
<tr>
<td>Edge enhancements/Sharpening</td>
<td>Yes</td>
</tr>
<tr>
<td>Freeze image</td>
<td>Yes</td>
</tr>
<tr>
<td>HDR</td>
<td>Yes</td>
</tr>
<tr>
<td>Cross hair</td>
<td>Multi-color, small or large</td>
</tr>
<tr>
<td>Horizontal/Vertical Lines</td>
<td>Multi-color, two lines for each</td>
</tr>
<tr>
<td>Noise Reduction</td>
<td>Support</td>
</tr>
<tr>
<td>SD card slot</td>
<td>Support up to 32GB SD card</td>
</tr>
<tr>
<td>HDMI</td>
<td>1080p</td>
</tr>
<tr>
<td>USB</td>
<td>USB 2.0</td>
</tr>
</tbody>
</table>

**Applications**

**Electronics**

Macro Systems with Auto-Focus makes electronics inspection an even more comfortable and efficient process. Now easily move and manipulate your circuit board and never lose focus! 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 WiFi to connect and capture images with your computer.

**Medical Devices**

Keep a sharp focus, no matter what the application! Whether you are inspecting catheters, stents, pacemakers, or surgical implements, medical devices require 100% inspection with the greatest possible scrutiny. Auto-Focus makes it even easier to inspect, document, and compare with confidence. Now you can hand-hold your parts while the camera focuses for you.

**Aerospace & Defense**

With perhaps the widest variety of applications, the aerospace and defense industries can benefit the most with autofocus technology. From fan blades to fasteners, electronics, and hydraulics, the auto-focus systems from Scienscope can make unusual surfaces and geometries an easy inspection process. Now you can place your focus on quality rather than set-up and procedure with the new Auto-Cam from Scienscope.
ALL SYSTEMS INCLUDE
THE SCIENSCOPE CC-97-LN1 MACRO ZOOM LENS

The Scienscope CC-97-LN Macro Zoom Lens with Close-up lens is perfect for a detailed inspection view. With crisp and clear imagery, his Lens is bound to meet your macro inspection needs. The Macro Zoom lens 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. The Macro Zoom lens has the most Depth of Field and Field of View available from a video lens with all adjustment at your fingertips such as zoom, focus, and iris control. Our Macro Zoom lens is designed for large filed of views, large range of working distance, and large depth of field applications. Range from 7” - 12” of working distance with a close-up/cover lensand from 11” to infinity without the close-up/cover lens. Up to 61.9X magnification.

FEATURING
• Maximum Of 70x With 23” Monitor
• Maximum Of 80mm FOV At 10” WD
• High Depth Of Field
• Manual Iris
• Built To Last

LENS SPECIFICATIONS

<table>
<thead>
<tr>
<th>Working Distance</th>
<th>MAG</th>
<th>FOV (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5” WD</td>
<td>High</td>
<td>70x 7mm</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>13x 38mm</td>
</tr>
<tr>
<td>7” WD</td>
<td>High</td>
<td>45x 11mm</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>9x 57mm</td>
</tr>
<tr>
<td>8” WD</td>
<td>High</td>
<td>38x 12mm</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>7x 69mm</td>
</tr>
<tr>
<td>9” WD</td>
<td>High</td>
<td>32x 14mm</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>6x 78mm</td>
</tr>
<tr>
<td>10” WD</td>
<td>High</td>
<td>30x 17mm</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>5.5x 80mm</td>
</tr>
</tbody>
</table>

• Back Focal Length: 24.28
• EFL (mm): 18-108
• Exit Pupil Position: 238.60
• Field Angle: 1/2 (HxV) Wide 19° 58’ x 15° 06’ / Tele 3° 23’ x 2° 55’
• Filter Diameter: Ø52 P=0.75
• Focus Control: Manual
• Focusing range from front of lens (m): 0.13 - inf.
• Format: 2/3”
• F Stop: 2.5-Close
• Iris Control: Manual
• Mount: C
• Object Area (mm): at M.O.D. (HxV) 1/2” Wide 183 x 142 / Tele 31 x 24
• Weight: (g) 595
• Zoom Control: Manual
Software Overview

SCIENSICCOPE

The Auto-Cam includes a full suite of integrated software tools to make your inspection and documentation process simple. Including image and video capture, split-screen viewing, camera controls and auto-focus menu.

Auto Focus Tools
Use the region of interest tool to make inspection easy. Click around the screen to automatically focus on any unfocused area of interest to bring it into sharp view. Includes controllable auto focus menu.

Image Management And Display Gallery
Quickly scan through previously saved image and video captures. The image gallery allows for quick image pull-up and the ability to sort and delete images no longer needed.

Split Screen Image View Display Option
Quickly and easily compare a previously captured images to a live image. Excellent when used a pass/fail tool or for training. Use the system to capture images of defects that you want your operators to avoid and compare.

Easy To Use Comparative Measurement Grid Tools
Use the built-in video caliper to perform comparative measurements or use them as a quick and easy gauging tool.

Image Processing And Enhancements Tools
The HDR or High Dynamic Range feature will help you find that tricky defect by quickly toggling to a high contrast data mode or back to a bright, clean, high gain mode.

Software Tools

Simple 1 Click Software Tool Bar

- Snap
- Record
- Zoom In
- Zoom Out
- Mirror (Hor.)
- Mirror (Vert.)
- Pause
- Hashtag
- WDR
- Auto Focus
- Save to File
- Settings
- Info
# ALL DIGITAL AUTO FOCUS SYSTEMS

<table>
<thead>
<tr>
<th>PACKAGE #</th>
<th>SB-BM2-DO</th>
<th>SB-BM2-RO</th>
<th>SB-C12-FX</th>
<th>SB-76-18</th>
<th>IL-LED-R3</th>
<th>IL-LED-R2D</th>
<th>IL-LED-E2D</th>
<th>IL-LED-E1Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC-PK1-R3-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK1-DM-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK1-E2D-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK3-R3-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK3-DM-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK3-E2D-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5-R3-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5-DM-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5-E2D-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-R3-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-DM-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-E2D-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-E1Q-AF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## MOUNTING & STANDS

*FOCUS MOUNTS

- **SB-AB-SZ** MICROSCOPE FOCUS MOUNT
- **SB-BM2-RO** GLIDING BOOM STAND
- **SB-BM2-DD** DUAL BOOM STAND
- **SP-76-18** EXTENDED POST STAND
- **SB-C12-FX** HEAVY DUTY ARTICULATING STAND

## LIGHTING

- **IL-LED-R3** POLARIZED LED RING LIGHT
- **IL-LED-R2D** DIFFUSED LED DOME LIGHT
- **IL-LED-E2D** DIFFUSED COMPACT LED RING LIGHT
- **IL-LED-E1Q** QUADRANT CONTROLLED LED RING LIGHT
**FEATURED SYSTEMS**

**MAC-PK1-R3-AF**
MACRO video zoom optics on an extended post stand with NEW high intensity LED ring light with polarizer (IL-LED-R3). New 1080p Auto-focus camera (Includes SD Card, HDMI cable, and mouse) with 23" HD LCD monitor and capture software.

**MAC-PK3-DM-AF**
MACRO video zoom optics on HEAVY DUTY articulating arm with 15° vertical post with NEW diffused LED dome light (IL-LED-R2D). New 1080p Auto-focus camera (Includes SD Card, HDMI cable, and mouse) with 23" HD LCD monitor and capture software.

**MAC-PK5-E2D-AF**
MACRO video zoom optics on gliding arm boom stand with diffused compact LED ring light (IL-LED-E2D) New 1080p Auto-focus camera (Includes SD Card, HDMI cable, and mouse) with 23" HD LCD monitor and capture software.

**MAC-PK5D-E1Q-AF**
MACRO video zoom optics on dual arm boom stand with quadrant controlled LED ring light. New 1080p Auto-focus camera (Includes SD Card, HDMI cable, and mouse) with 23" HD LCD monitor and capture software.
**VERSACAM**

1080P HD MACRO DIGITAL INSPECTION SYSTEMS

---

**VERSACAM (CC-HDMI-CD2)**

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.

**Camera Overview**

- Full Toolbar w/ Camera Controls
- 1080p Resolution
- HDMI 60FPS and USB 30FPS
- 2.8μm / 2.8μm Pixel Size
- 1080P/Sony IMX236(C) Sensor Sized at 1/2.8"(5.38x3.02)
- DC 12V/2A Adaptor
- Compatible Displays: 19"+
- Weight of 0.47 kg (1.0lbs)
- Exposure of 0.1ms~999ms
- Dimensions of 78mm (3.07") x 70mm (2.76") x 92mm (3.62")

---

![Image of Versa-Cam system]
System Overview

VersaCam (CC-HDMI-CD2) | Camera Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1/2.86 inch Panasonic FULL HD 2.0 Megapixel</td>
</tr>
<tr>
<td>Effective pixels</td>
<td>1920 x 1080</td>
</tr>
<tr>
<td>Frame rate</td>
<td>60fps</td>
</tr>
<tr>
<td>Definition</td>
<td>More than 1200 lines (the highest level)</td>
</tr>
<tr>
<td>Housing</td>
<td>Aluminum</td>
</tr>
<tr>
<td>White balance</td>
<td>Automatic/Manual/Continuous</td>
</tr>
<tr>
<td>Brightness control</td>
<td>Automatic/Manual/Continuous</td>
</tr>
<tr>
<td>Color</td>
<td>RGB adjustable</td>
</tr>
<tr>
<td>Edge enhancement</td>
<td>Yes</td>
</tr>
<tr>
<td>OSD</td>
<td>Yes, in HDMI mode</td>
</tr>
<tr>
<td>Edge enhancements /Sharpening</td>
<td>Yes</td>
</tr>
<tr>
<td>Freeze image</td>
<td>Yes</td>
</tr>
<tr>
<td>HDR</td>
<td>Yes</td>
</tr>
<tr>
<td>Cross hair</td>
<td>Multi-color, small or large</td>
</tr>
<tr>
<td>Horizontal/Vertical Lines</td>
<td>Multi-color, two lines for each</td>
</tr>
<tr>
<td>Noise Reduction</td>
<td>Support</td>
</tr>
<tr>
<td>SD card slot</td>
<td>Support up to 2GB SD card</td>
</tr>
<tr>
<td>HDMI</td>
<td>1080p</td>
</tr>
<tr>
<td>USB</td>
<td>USB 2.0</td>
</tr>
</tbody>
</table>

FEATURES

- Macro Zoom Technology
- 1080p HD 60fps
- Embedded camera control software
- Capture images and video to SD card
- Fast auto and manual exposure
- Full 1080p 60 fps frame rates
- Connect, view, and control via WiFi
- ROI white balance
- Real-time color adjustments
- Digital zoom
- Image Comparison
- Choice of stands and lighting

APPLICATIONS

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

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 you are seeing 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 MAC 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.
**Lens Overview**

**ALL SYSTEMS INCLUDE**

**THE SCIENSESCOPE CC-97-LN1 MACRO ZOOM LENS**

The Scienscope CC-97-LN Macro Zoom Lens with Close-up lens is perfect for a detailed inspection view. With crisp and clear imagery, his Lens is bound to meet your macro inspection needs. The Macro Zoom lens 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. The Macro Zoom lens has the most Depth of Field and Field of View available from a video lens with all adjustment at your fingertips such as zoom, focus, and iris control. Our Macro Zoom lens is designed for large filed of views, large range of working distance, and large depth of field applications. Range from 7” - 12” of working distance with a close-up/cover lensand from 11” to infinity without the close-up/cover lens. Up to 61.9X magnification.

**FEATURING**

- Maximum Of 98x With 23” Monitor
- Maximum Of 71mm FOV At 10” WD
- High Depth Of Field
- Manual Iris
- Built To Last

---

**LENSES SPECIFICATIONS**

**SPECS BASED ON 23” MONITOR**

<table>
<thead>
<tr>
<th>Working Distance</th>
<th>MAG</th>
<th>FOV (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5” WD High</td>
<td>98x</td>
<td>5.5mm</td>
</tr>
<tr>
<td>5” WD Low</td>
<td>17x</td>
<td>30mm</td>
</tr>
<tr>
<td>7” WD High</td>
<td>60x</td>
<td>8mm</td>
</tr>
<tr>
<td>7” WD Low</td>
<td>11x</td>
<td>47mm</td>
</tr>
<tr>
<td>8” WD High</td>
<td>52x</td>
<td>10mm</td>
</tr>
<tr>
<td>8” WD Low</td>
<td>9x</td>
<td>55mm</td>
</tr>
<tr>
<td>9” WD High</td>
<td>45x</td>
<td>11mm</td>
</tr>
<tr>
<td>9” WD Low</td>
<td>8x</td>
<td>63mm</td>
</tr>
<tr>
<td>10” WD High</td>
<td>40x</td>
<td>12mm</td>
</tr>
<tr>
<td>10” WD Low</td>
<td>8x</td>
<td>71mm</td>
</tr>
</tbody>
</table>

- Back Focal Length: 24.28
- EFL (mm): 18-108
- Exit Pupil Position: 238.60
- Field Angle: 1/2 (HxV) Wide 19° 58’ x 15° 06’ / Tele 3° 23’ x 2° 55’
- Filter Diameter: Ø52 P=0.75
- Focus Control: Manual
- Focusing range from front of lens (m): 0.13 - inf.
- Format: 2/3"
- F Stop: 2.5-Close
- Iris Control: Manual
- Mount: C
- Object Area (mm): at M.O.D. (HxV) 1/2"Wide 183 x 142 / Tele 31 x 24
- Weight: (g) 595
- Zoom Control: Manual
Software Overview

The versa-cam comes loaded with a full suite of simple and powerful image enhancement, capture, comparison, and memory management tools. Anyone can learn to use the camera to its full capability within minutes!

Image Management And Display Gallery

Split Screen Image View Display Option

Quickly scan through previously saved image and video captures. The image gallery allows for quick image pull-up and the ability to sort and delete images no longer needed.

Image Processing And Enhancements Tools

The HDR or high Dynamic Range feature will help you find that tricky defect by quickly toggling to a high contrast data mode or back to a bright, clean, high gain mode.

Software Tools

Simple 1 Click Software Tool Bar

- Take a Photo
- HDR
- Flip Horiz.
- Flip Vert.
- Freeze Image
- Video Caliper
- Gallery
- Record Video
- Settings
- Dual View
- Black & White
- Zoom In
- Zoom Out
- Format SD
# ALL DIGITAL VERSA CAM SYSTEMS

## STANDS & LIGHTING

<table>
<thead>
<tr>
<th>PACKAGE #</th>
<th>SB-BM2-DO</th>
<th>SB-BM2-RO</th>
<th>SB-CL2-FX</th>
<th>SB-76-18</th>
<th>IL-LED-R3</th>
<th>IL-LED-R2D</th>
<th>IL-LED-E2D</th>
<th>IL-LED-EIQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC-PK1-R3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK1-DM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK1-E2D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK3-R3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK3-DM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK3-E2D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5-R3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5-DM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5-E2D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-R3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-DM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-E2D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC-PK5D-EIQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## MOUNTING & STANDS

*FOCUS MOUNTS
REQUIRED ON ALL BOOM ARM AND ARTICULATING ARM STANDS

- **SB-AB-SZ** MICROSCOPE FOCUS MOUNT
- **SB-BM2-RO** GLIDING BOOM STAND
- **SB-BM2-DO** DUAL BOOM STAND
- **SB-CL2-FX** HEAVY DUTY ARTICULATING STAND
- **SP-76-18** EXTENDED POST STAND

## LIGHTING

- **IL-LED-R3** POLARIZED LED LIGHT
- **IL-LED-R2D** DIFFUSED LED DOME LIGHT
- **IL-LED-E2D** DIFFUSED COMPACT LED RING LIGHT
- **IL-LED-EIQ** QUADRANT CONTROLLED LED RING LIGHT
MAC-PK1-R3
MACRO video zoom optics on an extended post stand with 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) with 23” HD LCD monitor and capture software.

MAC-PK3-DM
MACRO video zoom optics on HEAVY DUTY articulating arm with 15” vertical post with NEW diffused LED dome light (IL-LED-R2D). Features NEW 1080p HDMI/USB camera (includes SD card, HDMI cable, USB cable and mouse) with 23” HD LCD monitor and capture software.

MAC-PK5-E2D
MACRO video zoom optics on gliding arm boom stand with diffused compact LED ring light (IL-LED-E2D). Features NEW 1080p HDMI/USB camera (includes SD card, HDMI cable, USB cable and mouse) with 23” HD LCD monitor and capture software.

MAC-PK5D-E1Q
MACRO video zoom optics on dual arm boom stand with quadrant controlled LED ring light. Features NEW 1080p HDMI/USB camera (includes SD card, HDMI cable, USB cable and mouse) with 23” HD LCD monitor and capture software.
MAC3 HD LCD (CC-CMC-12H)

Scienscope’s industry standard Macro video/digital inspection systems now feature the powerful and stunning clarity of the MAC3 LCD Camera. The systems, built around our versatile macro lens, now have even more crystal-clear imaging thanks to Macro HD Technology! Seeing is believing so contact us for an onsite demo today! Now the choice between live HD monitor inspection and high resolution USB camera capture and annotation is made at the camera…not between cameras.

**Camera Overview**

- 1080p HD Resolution
- Frame Rate: 60FPS
- Sensor: CMOS; 1/2.5"
- Magnification: 7.75X-60X (based on WD)
- Field of View (FOV): 33.75mm - 4.75mm (based on WD)
- Working Distance (WD) 4.5" - 12"
- Camera Mount: C-Mount
- Focus Control: Manual
- Iris Control: Manual
- User Friendly Image/Video Capturing Software
## System Overview

**FEATURING**
- Macro Video Lens and HD Camera
- Onscreen Camera Control Menu
- 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 2 USB 2.0 ports
- Auto White balance
- Auto shutter and brightness
- Image Comparison
- 12” LCD monitor
- 2 USB 2.0 ports

**INCLUDES USB CAMERA SOFTWARE**

---

### Mac3 LCD (CC-CMC-12H) Camera Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image sensor</td>
<td>1/2.86” Inch Panasonic FULL HD 2.0 Megapixel</td>
</tr>
<tr>
<td>Effective pixels</td>
<td>1920 x 1080</td>
</tr>
<tr>
<td>Frame rate</td>
<td>60fps</td>
</tr>
<tr>
<td>Definition</td>
<td>More than 1200 lines (the highest level)</td>
</tr>
<tr>
<td>Housing</td>
<td>Aluminum</td>
</tr>
<tr>
<td>White balance</td>
<td>Automatic/Manual/Continuous</td>
</tr>
<tr>
<td>Brightness control</td>
<td>Automatic/Manual/Continuous</td>
</tr>
<tr>
<td>Color</td>
<td>R/G/B adjustable</td>
</tr>
<tr>
<td>Edge enhancement</td>
<td>Yes</td>
</tr>
<tr>
<td>OSD</td>
<td>Yes, in HDMI mode</td>
</tr>
<tr>
<td>Edge enhancements</td>
<td>/Sharpening</td>
</tr>
<tr>
<td>Freeze image</td>
<td>Yes</td>
</tr>
<tr>
<td>HDR</td>
<td>Yes</td>
</tr>
<tr>
<td>Cross hair</td>
<td>Multi-color, small or large</td>
</tr>
<tr>
<td>Horizontal/vertical Lines</td>
<td>Multi-color, two lines for each</td>
</tr>
<tr>
<td>Noise Reduction</td>
<td>Support</td>
</tr>
<tr>
<td>SD card slot</td>
<td>Support up to 32GB SD card</td>
</tr>
<tr>
<td>HDMI</td>
<td>1080p</td>
</tr>
<tr>
<td>UHD</td>
<td>USB 2.0</td>
</tr>
</tbody>
</table>

---

### APPLICATIONS

**Electronics**

Macro Systems with the Scienoscope Mac3 LCD Camera makes electronics inspection an even more comfortable and efficient process. 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 WiFi to connect and capture images with your computer.

**Medical Devices**

Keep a sharp focus, no matter what the application! Whether you are inspecting catheters, stents, pacemakers, or surgical implements, medical devices require 100% inspection with the greatest possible scrutiny. The quality of the Scienoscope Mac3 LCD makes it even easier to inspect, document, and compare with confidence.

**Aerospace & Defense**

With perhaps the widest variety of applications, the aerospace and defense industries, can benefit the most with autofocus technology. From fan blades to fasteners, electronics, and hydraulics, the Mac3 LCD systems from Scienoscope can make unusual surfaces and geometries an easy inspection process. Now you can place your focus on quality rather than set-up and procedure with the HD 1080p Scienoscope Mac3 LCD.
ALL SYSTEMS INCLUDE
THE SCIENSCOPE CC-97-LN1 MACRO ZOOM LENS

The Scienscope CC-97-LN Macro Zoom Lens with Close-up lens is perfect for a detailed inspection view. With crisp and clear imagery, his Lens is bound to meet your macro inspection needs. The Macro Zoom lens 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. The Macro Zoom lens has the most Depth of Field and Field of View available from a video lens with all adjustment at your fingertips such as zoom, focus, and iris control. Our Macro Zoom lens is designed for large filed of views, large range of working distance, and large depth of field applications. Range from 7” – 12” of working distance with a close-up/cover lens and from 11” to infinity without the close-up/cover lens. Up to 61.9X magnification.

FEATURING
• Maximum Of 34x With 12” Monitor
• Maximum Of 31mm FOV At 10” WD
• High Depth Of Field
• Manual Iris
• Built To Last

LENS SPECIFICATIONS

SPECS BASED ON 5 MEGA PIXEL IMAGE ON 12” MONITOR

<table>
<thead>
<tr>
<th>Working Distance</th>
<th>MAG</th>
<th>FOV (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7”WD</td>
<td>High</td>
<td>34x</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>13x</td>
</tr>
<tr>
<td>8”WD</td>
<td>High</td>
<td>28x</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>10x</td>
</tr>
<tr>
<td>9”WD</td>
<td>High</td>
<td>25x</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>9.5x</td>
</tr>
<tr>
<td>10”WD</td>
<td>High</td>
<td>22x</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>8x</td>
</tr>
</tbody>
</table>

• Back Focal Length: 24.28
• EFL (mm): 18-108
• Exit Pupil Position: 238.60
• Field Angle: 1/2 (HxV) Wide 19° 58’ x 15° 06’ / Tele 3° 23’ x 2° 55’
• Filter Diameter:Ø52 P=0.75
• Focus Control: Manual
• Focusing range from front of lens (m): 0.13 - inf.
• Format: 2/3”
• F Stop: 2.5-Close
• Iris Control: Manual
• Mount: C
• Object Area (mm): at M.O.D. (HxV) 1/2”Wide 183 x 142 / Tele 31 x 24
• Weight: (g) 595
• Zoom Control: Manual
Software Overview

The versa-cam comes loaded with a full suite of simple and powerful image enhancement, capture, comparison, and memory management tools. Anyone can learn to use the camera to its full capability within minutes!

Image Management And Display Gallery
Quickly scan through previously saved image and video captures. The image gallery allows for quick image pull-up and the ability to sort and delete images no longer needed.

Split Screen Image View Display Option
Quickly and easily compare a previously captured images to a live image. Excellent when used a pass/fail tool or for training. Use the system to capture images of defects that you want your operators to avoid and compare.

Image Processing And Enhancements Tools
The HDR or high Dynamic Range feature will help you find that tricky defect by quickly toggling to a high contrast data mode or back to a bright, clean, high gain mode.

Software Tools

Simple 1 Click Software Tool Bar

- Take A Photo
- HDR
- Flip Hor.
- Flip Vert
- Freeze Image
- Video Caliper
- Gallery
- Record Video
- Settings
- Dual View
- Black & White
- Zoom In
- Zoom Out
- Format SD

Video Control Panel
Use the region of interest tool to make inspection easy. Click around the screen to automatically focus on any unfocused area of interest to bring it into sharp view. Includes controllable auto focus menu.

Easy To Use Comparative Measurement Grid Tools
Use the built in video caliper to perform comparative measurements or use them as a quick and easy gauging tool.
### All Digital MAC3 Systems

<table>
<thead>
<tr>
<th>Package #</th>
<th>STANDS</th>
<th>LIGHTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB-ABM2-DO</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>SB-BM2-RO</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>SB-CL2-FX</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>SP-76-18</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IL-LED-R3</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IL-LED-R2D</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IL-LED-E2D</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IL-LED-E1Q</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

### Mounting & Stands

- **Focus Mounts**: Required on all boom arm and articulating arm stands
- **Boom Arm Stands**: SB-ABM2-DO, SB-BM2-RO
- **Lab Stands**: SP-76-18
- **Articulating Arm Stands**: SB-CL2-FX

### Lighting

- **IL-LED-R3**: Polarized LED Light
- **IL-LED-R2D**: Diffused LED Dome Light
- **IL-LED-E2D**: Diffused Compact LED Ring Light
- **IL-LED-E1Q**: Quadrant Controlled LED Ring Light
**MAC3-PK1-R3**
MACRO video zoom optics extended post stand, 1080p HD camera and 12" LCD monitor combination with NEW high intensity LED ring light with polarizer (IL-LED-R3). All systems include camera/monitor combo with 8GB SD card, wireless mouse, USB cable, power supply, and image capture software.

**MAC3-PK3-DM**
MACRO video zoom optics on heavy duty articulating arm with vertical post and clamp, 1080p HD camera and 12" LCD monitor combination with diffused LED dome light (IL-LED-R2D). All systems include camera/monitor combo with 8GB SD card, wireless mouse, USB cable, power supply, and image capture software.

**MAC3-PK5-E2D**
MACRO video zoom optics on gliding arm boom stand, 1080p HD camera and 12" LCD monitor combination with diffused compact LED ring light, (IL-LED-E2D). All systems include camera/monitor combo with 8GB SD card, wireless mouse, USB cable, power supply, and image capture software.

**MAC3-PK5D-E1Q**
MACRO video zoom optics on dual arm boom stand, 1080p HD camera and 12" LCD monitor combination with quadrant controlled LED ring light. All systems include camera/monitor combo with 8GB SD card, wireless mouse, USB cable, power supply, and image capture software.