High definition digital microscope

Power your productivity

- Exceptional high resolution 1080p/60fps image quality
- Intuitive easy image capture and documentation
- Stand alone, wireless or PC connectivity
- High quality stands for precision and stability
- Unique 360° rotating viewer
Making image capture and documentation simpler, faster and more reliable - wherever ultra sharp images are required for inspection, fault analysis and much more.
EVO Cam II high definition digital microscope

EVO Cam II digital microscope delivers excellent image quality to help uncover hidden details. Optical magnification up to 300x and full autofocus ensures ultra-sharp images at all times.

EVO Cam II provides the ability to measure complex parts efficiently and quickly using overlays or point to point measurement.

Capture high resolution images at the touch of a button either direct to USB memory stick, via wireless or direct to a PC.

10 programmable presets allow camera settings be saved for quick and easy recall. Presets can be exported and imported allowing users to share settings between units and sites ensuring consistency of inspection. Calibration can also be saved in presets for quick recall.

Ease of use

Simplicity is at the heart of EVO Cam II. Easy to follow menu and simple operation minimises training and is an ideal solution for multiple users in high speed production environments.

An overview function allows you easily locate a point of interest on the object you are viewing.

The on-screen function menu for the EVO Cam II is also available in multiple languages.

In addition to the convenient operation of all main functions on the unit, a remote control console allows faster and more comfortable use.

Highlights

- Ultra-sharp image quality with full autofocus
- Optical magnification range 1.7x -300x
- Maximum magnification with digital zoom 3600x
- Fast 60 fps provides clear images without motion blur
- Full 360° inspection without the need to manipulate subjects under magnification
- Large field of view and long working distances
- Eliminate set-up time with up to 10 presets
- Custom overlays to aid inspection
- Wi-Fi and USB 3.0 for fast image transfer
- Efficient dimensioning with virtual caliper and scalable grids
Optics & Illumination

Precision objective lenses
Ultra-high resolution and contrast, optimised for precision magnification work with definition excellence.

Wide-field objective lenses
Wide field of view, suited for larger subjects. An extra long working distance provides maximum flexibility and large zoom range for flexible operations. Suitable for larger subjects.

Camera zoom
30x optical; 12x digital

Camera resolution
1080p, 1920x1080, 1/2.8" CMOS

Frame rate
50fps & 60fps (switchable)

Output
HDMI & USB 3.0 out

Saved file type
.png

A range of objective lens options ensure stunning results for any application, whether for high magnification, high precision detail inspections, or for manipulation, re-work and assembly tasks requiring an extra long working distance.

<table>
<thead>
<tr>
<th>Objective lens</th>
<th>Magnification zoom range</th>
<th>Working distance</th>
<th>Field of view at min. zoom</th>
<th>Field of view at max. zoom</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.45x</td>
<td>2.3x - 68x</td>
<td>160 mm (6.30&quot;)</td>
<td>241 mm x 134 mm (9.48&quot; x 5.27&quot;)</td>
<td>7.8 mm x 4.2 mm (0.31&quot; x 0.17&quot;)</td>
</tr>
<tr>
<td>0.62x</td>
<td>3.1x - 93.7x</td>
<td>106 mm (4.17&quot;)</td>
<td>173 mm x 96 mm (6.81&quot; x 3.78&quot;)</td>
<td>5.5 mm x 3.1 mm (0.22&quot; x 0.12&quot;)</td>
</tr>
<tr>
<td>1.0x</td>
<td>5x - 151.2x</td>
<td>85 mm (3.35&quot;)</td>
<td>88 mm x 57 mm (3.46&quot; x 2.24&quot;)</td>
<td>3.5 mm x 2 mm (0.14&quot; x 0.08&quot;)</td>
</tr>
<tr>
<td>1.5x</td>
<td>7.6x - 226.8x</td>
<td>43 mm (1.69&quot;)</td>
<td>45 mm x 36 mm (1.77&quot; x 1.41&quot;)</td>
<td>2.3 mm x 1.2 mm (0.09&quot; x 0.05&quot;)</td>
</tr>
<tr>
<td>2.0x</td>
<td>10x - 302.4x</td>
<td>29 mm (1.14&quot;)</td>
<td>37 mm x 27 mm (1.45&quot; x 1.06&quot;)</td>
<td>1.5 mm x 1.0 mm (0.06&quot; x 0.04&quot;)</td>
</tr>
</tbody>
</table>

*with 24" monitor

Wide-field objective lenses

| 4 dioptre      | 1.71x - 51.4x           | 245 mm (9.65") | 293 mm x 171 mm (11.53" x 6.73") | 10 mm x 5.5 mm (0.39" x 0.22") |
| 5 dioptre      | 2.12x - 65.5x           | 197 mm (7.76") | 232 mm x 135 mm (9.13" x 5.31") | 8 mm x 4.5 mm (0.31" x 0.18") |

LED ring light
Integral 8-point LED ring light ensures optimum shadow-free illumination for all applications. Colour temperature 5500K.

UV ring light
The UV ring light is an excellent optional EVO Cam II accessory. It is suitable for many applications ranging from electronics, aerospace and forensics.

Substage illumination
The substage illumination lights a subject from beneath. It is suitable for inspection of translucent materials.

Camera
Auto exposure and aperture priority allow control of target brightness with difficult subjects and enables easy control of depth of field. Selectable gain, iris and exposure time enables full control of image parameters where manual control is desired.
**Measurement**

EVO Cam II includes easy on-screen measurement capability, with selectable overlays, grid and cursors.

Cursor mode displays two movable horizontal and vertical lines, allowing measurement of X and Y values with results displayed on screen. Also point to point diagonal measurement allows measurement of non-aligned items.

Grids can be displayed, scaled and positioned as required.

Customisable overlays are easily created and imported into the camera allowing easy comparison against drawings, samples or reticules.

---

**Image Transfer**

Images can easily be captured and saved from the EVO Cam II directly to a USB stick at the touch of a button.

Alternatively they can be transferred securely to a computer via cable (HDMI or USB 3.0) or wireless using a Wi-Fi dongle.

Using the Wi-Fi dongle option allows a user to quickly view and download images and videos, and is ideal when access for multiple users is required.

**Software**

EVO Cam II works with a range of highly simplified image capture and on-screen image measurement software where all of the necessary content has been refined for ultimate ease of use.

---

**Remote control console**

The remote control console helps to improve user comfort and is a convenient tool to help a user quickly access their presets.

**Filters**

There are a range of filters available, to enhance details within subjects not easily seen by the human eye.

**Floating stage**

A floating stage provides smooth and precise control. It is ideal for checking uniformity of components, or inspecting sensitive samples (Ergo/Bench stands only).
360° rotating viewer

This unique feature offers a full 360° rotating view without the need to move the subject under magnification, making inspection easier and quicker.

The 34° angle allows detail to be seen at the base of any vertical component or feature.

Operators can simply switch between rotating oblique view and a direct view for ultimate flexibility.

- Includes integrated 8-point LED ring light and objective lens

### 360° rotating view

<table>
<thead>
<tr>
<th>Zoom ratio</th>
<th>Zoom range</th>
<th>Working distance</th>
<th>Field of view at min. zoom</th>
<th>Field of view at max. zoom</th>
<th>Viewing angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3:1</td>
<td>19x – 105x</td>
<td>35.5mm</td>
<td>25.7mm x 22.1mm</td>
<td>2.8mm x 2.2mm</td>
<td>34° from vertical</td>
</tr>
</tbody>
</table>

### Direct view

<table>
<thead>
<tr>
<th>Zoom ratio</th>
<th>Zoom range</th>
<th>Working distance</th>
<th>Field of view at min. zoom</th>
<th>Field of view at max. zoom</th>
<th>Viewing angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3:1</td>
<td>28x – 151x</td>
<td>56.5mm</td>
<td>19.7mm x 11.2mm</td>
<td>1.6mm x 0.9mm</td>
<td>-</td>
</tr>
</tbody>
</table>

**Direct view:**

The subject is seen from a birds-eye view.

**Rotating oblique view:**

The subject can be viewed from a number of angles.

Find out more at: [www.visioneng.com/evocam2](http://www.visioneng.com/evocam2)
Stand options

**Multi-axis stand**
- Precise and robust, ideal for industrial applications where maximum work space is desired.
- Integrated gas strut provides counter balanced adjustability, making operation quick and effortless. Switch between tall components and flat samples with ease.
- Available with platform base, or mounted directly to the work surface.

**Double-arm boom stand**
- Designed specifically for applications requiring extended reach, without compromising stability.
- Easy adjustability allows precise positioning and alignment.
- Available with platform base, or with clamp for mounting directly to the work surface.

**Single-arm boom stand**
- High stability boom stand, ideal for larger specimens.
- Robust stand option, complete with heavy duty platform base and focus module.

**Articulated arm stand**
- Designed for applications requiring extended reach, with ultimate flexibility.
- Multi-point adjustability allows precise positioning and alignment.

**Bench stand**
- Compact unit with low-profile base and integral transmitted substage illumination.
- Floating stage option provides sensitive control for accurate inspection of samples.
- For use with 1.0x objective.

**Ergo stand**
- Small footprint providing exceptional stability for high magnification use.
- Transmitted substage illumination option permits viewing of a wider range of sample types.
- Floating stage option provides sensitive control for accurate inspection of samples; ideal for inspecting fragile samples, or for avoiding contamination by handling.
- Coarse and fine focus counter for high magnification subjects

**Multi-axis stand dimensions:**
- A = 455mm (184mm***)
- B = 682mm - 830mm
- C = 691mm max.
- D = 279mm max.
- E = 439mm max.

**Ergo stand dimensions:**
- A = 280mm
- B = 420mm
- C = 515mm
- D = 192mm max.
- E = 200mm

**View full technical details at:** www.visioneng.com/evocam2 »
Vision Engineering is a global manufacturer of ergonomic stereo microscopes, digital inspection systems and optical and video measuring systems.