

EVO Cam II
High definition
digital microscope



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EVO Cam II is an easy-to-use high definition digital microscope. Flexible configuration options deliver excellent image quality and optical magnification up to 760x optimised for the user's working environment and subjects.

User requirements

Reducing cost, increasing productivity and maintaining or increasing quality are all common drivers enabling businesses to gain a competitive advantage. Tools which drive this change are an investment for the future.

Built on the foundation of superior image quality, EVO Cam II is designed to meet the changing needs of businesses, saving time and money while increasing the quality of inspections.

The EVO Cam II advantage

Designed and built by Vision Engineering, EVO Cam II is designed with image quality in mind, to ensure essential details are seen quickly and clearly. Consistent quality inspections across multiple units and multiple sites are easily achievable through a range of tools and by saving and sharing of settings between units. EVO Cam II's flexible operation enables users to easily switch

between roles at the push of a button. EVO Cam II's features ensure efficient workflows, aid business and maximise productivity whilst maintaining quality.

POWER YOUR PRODUCTIVITY

Excellent optical performance makes EVO Cam II a supremely powerful imaging solution with a range of options to ensure stunning results for any application. Intuitive design minimises training requirements, making EVO Cam II a powerful and flexible tool, ideal for multiple users and production environments.



EVO Cam II ergonomics

EVO Cam II offers significant ergonomic benefits over conventional binocular microscopes. The proven link between good ergonomics and improved performance means both users and businesses benefit. Reduced fatigue leads to improved productivity, greater yield and improved product quality. To find out more about ergonomic microscopes visit our website at: www.visioneng.com





How does EVO Cam II benefit the user?

Exceptional picture quality through stunning full HD 1080p /60 frames per second video means the user sees every detail easily and with excellent clarity. Powerful image control via a large 30:1 optical zoom range, delivers optical magnification up to 760x. Over 9,000x maximum magnification is available when combined with digital zoom.

EVO Cam II's wide range of precision objectives and wide-field lenses gives users the flexibility to customise their own, application specific, solution. View larger parts clearly and completely in focus through the EVO Cam II's focus stacking capability.

Designed with ease of use for operators via a suite of features specifically aimed at improving performance, including large field of view and long working distance, auto and manual focus, stand-alone (no PC) operation, plus up to 10 presets to eliminate setup time - simply set up and go! Multi-language, simple on-screen menus mean that no specialist operator training is required. The Overview function enables quick and convenient sample orientation, while overlays and the Image Comparison feature enable easy comparison with reference marks or sample images. Supervisor settings lock key features to standardise operations and results.

Capture high resolution images at the touch of a button either direct to USB memory stick, via wireless or direct to a PC. Presets can be exported and imported allowing settings to be shared between different users and systems.

EVO Cam II measures complex parts efficiently and quickly using overlays, or point-to-point measurement. Calibration can also be saved in presets for quick recall. Calibrations can be tracked through the zoom range speeding measurement of different size details and removing the need to recalibrate.

KEY FEATURES

Image quality – See the detail

- Full HD resolution
- Custom objectives
- Noise reduction
- Selectable file format
- Focus stacking

Consistency – Across time and location

- Image comparison
- User customisable overlays
- Customizable zoom range
- Calibration tracking with zoom
- Supervisor settings lock
- Import/export settings
- Save meta data with image
- Time stamp

Efficient workflow

- 10 User programmable 'Presets'
- Easy calibration
- Image playback
- On-board multi-language help
- WiFi image transfer

Flexible operation

- 30x Optical zoom
- 12x Digital zoom
- On-board measurement
- Stand-alone or PC control
- Integrated ring-light
- Wide range of accessories
- Suite of optional software packages to expand functionality

ACCESSORIES + OPTIONS

EVO Cam II has a full range of accessories that can be fully adapted to a business' needs. Users can select optimal configurations for stand, objective lens, illumination and additional accessories.



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).



Filters

There are a range of objective and ring-light filters available, to enhance details not easily seen by the human eye.



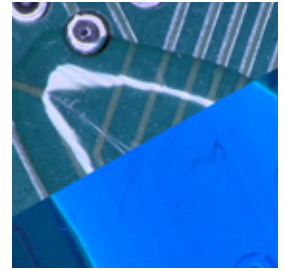
Remote control console

The remote control console helps to improve user comfort and enables rapid access to preset system settings.



Substage illumination

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



UV ring-light

UV illumination is required for many applications ranging from electronics, aerospace and forensics.

Multi-axis stand

- Integrated gas strut making operation quick and effortless.
- Available with platform base, or mounted directly to the work surface.



Ergo stand

- Exceptional stability for high magnification use.
- Transmitted substage illumination option.
- Floating stage option.
- Coarse and fine focus control for high magnification subjects.



Double-arm boom stand

- Extended reach, without compromising stability.
- Easy adjustability allows precise positioning and alignment.
- Available with platform base, or with clamp.



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.
- For use with 1.0x objective.

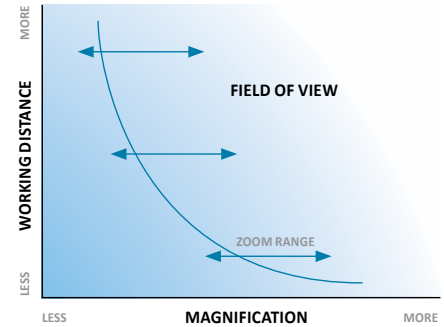


TECHNICAL INFORMATION

There are several factors that are inseparable when selecting working magnification. As magnification increases, field of view and working distance decrease.



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



Precision objective lenses

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

Wide-field objective lenses

Wide field of view, provides maximum flexibility and large zoom range. Suitable for large area subjects.

Micro objective lenses

High optical magnification of very small subject areas and details.

Objective lens	Magnification zoom range*	Working distance	Field of view at min.zoom	Field of view at max.zoom
Precision objective lenses				
0.45x	2.3x - 68x	160 mm	241 mm x 134 mm	7.8 mm x 4.2 mm
0.62x	3.1x - 93.7x	106 mm	173 mm x 96 mm	5.5 mm x 3.1 mm
1.0x	5x - 151.2x	85 mm	88 mm x 57 mm	3.5 mm x 2 mm
1.5x	7.6x - 226.8x	43 mm	45 mm x 36 mm	2.3 mm x 1.2 mm
2.0x	10x - 302.4x	29 mm	37 mm x 27 mm	1.5 mm x 1.0 mm
Wide-field objective lenses				
2 dioptre	0.8x - 24x	440 mm	660 mm x 370 mm	21.5 mm x 12.0 mm
3 dioptre	1.15x - 32.6x	300 mm	370 mm x 210 mm	14.7 mm x 8.4 mm
4 dioptre	1.71x - 51.41x	245 mm	293 mm x 171 mm	10 mm x 5.5 mm
5 dioptre	2.12x - 65.5x	197 mm	232 mm x 135 mm	8 mm x 4.5 mm
Micro objective lenses				
5x	250x - 362x	2.0 mm	2.2 mm x 1.2 mm	1.4 mm x 0.8 mm
10x	500x - 725x	2.1 mm	1.1 mm x 0.6 mm	0.7 mm x 0.4 mm

*Using a 24 inch screen

360° Rotating viewer

Adding an extra dimension to standard 2D imaging, the 360° rotating viewer provides both direct and rotating oblique views of the subject and utilises the power of motion to enhance a users three dimensional understanding of the subject. Rotating around the centre of the image, the 34° degree oblique view allows views around the inside of holes or around the sides of raised components and solder joints.





MAIN SPECIFICATION	
Camera	Full HD
Surface illumination	8-point ring light. Colour temperature 5,500K (adjustable with filter options)
Sub-stage illumination	Optional
Front panel control	On/Off, zoom in, zoom out, overview, surface illumination level, sub-stage illumination level, image capture, menu
Remote control	Optional
Interfaces	HDMI, USB3 (PC connection), USB2 (stand alone image capture), WiFi (optional)
CAMERA SPECIFICATION	
Camera zoom	30:1
Digital zoom	12:1
Camera resolution	1920x1080
Sensor	1/2.8" CMOS back-illuminated
Frame rate	50fps & 60fps (switchable)
Saved file type	PNG, JPEG+,JPEG,JPEG-
FEATURES	
Premium licence	Focus stacking (max.depth 110mm)
Inspection features	Image comparison, overlay, supervisor settings lock, customisable zoom range, save/import/export settings
Reporting features	Image capture, time stamp
Measurement features	Virtual caliper (x-axis separation, y-axis separation, diagonal - point-to-point), scaleable grid, overlays, calibration tracking
General features	Image capture, image playback, noise reduction, light control
Exposure control	Auto, aperture priority, manual
Focus control	Auto, manual
Keypad shortcuts	Presets, white balance, front panel lock, AE/ME switching, AF/MF switching
Features retained in supervisor mode	Image capture, zoom, lighting control, overlay on/off, caliper on/off, grid on/off, recall presets 1-10, image comparison on/off, image playback, focus stacking (all other settings locked)
Features retained in front panel lock mode	Image capture
User programmable presets	10 (Save, import/export)
Image capture	USB memory stick or via PC connection
Languages	English, French, German, Spanish, Italian, Portuguese, Russian, Chinese, Japanese, Korean
Image mode	Auto white balance, black and white, wide dynamic range, noise reduction, infrared mode, capture button action

VISION ENGINEERING + OUR DIFFERENCE

Vision Engineering Ltd. has been designing and manufacturing high quality ergonomic microscopes, digital instruments, inspection and non-contact measuring systems for over 60 years.

Innovation

With a philosophy of design innovation, Vision Engineering holds world patents for a number of optical/digital techniques, significantly improving viewing ergonomics and enabling customer quality and productivity improvements.

Quality

Vision Engineering prides itself on quality products, electronics, mechanics and optics and is certified for the quality management system ISO 9001:2015. Quality is as important to us as it is to our customers. Our systems have proved themselves many times over and are chosen by the world's leading companies.

Global

Vision Engineering has manufacturing and design facilities in the UK and USA, plus sales and support offices throughout Europe, the Americas, the Far East, and Asia. We support our customers with close technical and service support anywhere in the world.



Contact your Vision Engineering branch, local authorised distributor, or visit our website: visioneng.com

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Vision Engineering Ltd. has been certified for the quality management system ISO 9001:2015.