



Full HD
1080



Inspection and measurement in full HD

Exceptional digital video inspection system designed for effortless image capture, documentation and measurement



FM 557119

Vision Engineering Ltd has been certified for the quality management system ISO 9001:2008.

- Inspect, magnify and measure, in full HD (1080p)
- Live video with no image lag
- Large field of view with 30:1 optical zoom
- Magnifications from 2x to 230x

A video inspection system in full HD...

Whether you want to simply magnify, capture images, annotate, or measure, Makrolite II simplifies imaging tasks in a powerful full HD digital video system.

It's so simple. Makrolite II provides an outstanding video image for any inspection application. With an exceptionally large field of view and a long working distance, just place your sample underneath the camera and zoom in, without changing focus. *Simple.*

...available in two versions

Makrolite II is available with **PC-based software**, utilising a full software suite of annotation, image capture and measurement tools, or as a **camera-only system** (no PC required), for applications where only high resolution imaging is required.

1 Visualisation in full HD with controller



Console version

For inspection applications only

Illustrated with dual arm boom stand

2 Visualisation in full HD with PC software



PC software version

For inspection, image capture, annotation and measurement applications

Illustrated with dual arm boom stand

5 reasons to choose Makrolite II

- 1 **Ideal for all day inspection**, providing a flicker-free image.
- 2 **Ergonomic and fatigue-free setup** with range of stand options for optimal configuration.
- 3 **2D measurements.** Perform a range of measurements functions on a captured image - PC version required.
- 4 **High resolution imaging of any part.** Makrolite II is perfect for so many uses. Quality control, manufacturing, precision inspection, dissection, incoming and outgoing checks, training, marketing... any task requiring high performance magnification.
- 5 **Large monitor image** allows one or more people to work at the same time - ideal for training, evaluation, development, or the laboratory.

1 Visualisation in full HD with controller

Full HD
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A powerful video inspection system to inspect in microscopic detail.

High definition imaging with effortless simplicity

Being used as a simple camera, Makrolite II's exceptionally large field of view allows you to view samples up to 240mm wide. View the full sample, then zoom in (up to 230x magnification) to view in microscopic detail.

The simple control console allows you to adjust the camera settings to optimise the high definition image with ease, so even difficult to see features can be inspected with absolute clarity and contrast.

- View live images without image lag, ideal for training purposes.
- Store and recall frequently used settings for easy operation

Full HD 1080p digital video camera, with motorised zoom (manual and autofocus), and 30:1 zoom ratio

- + Choice of stands to suit your requirements
- + Magnification range up to 230x
- + Control console incorporating camera controls
- + HD monitor with HDMI input
- + LED illumination
- + Optional USB image / video capture



With an exceptionally large field of view, Makrolite II can view whole samples. Then simply zoom in without changing focus for detailed inspection. Magnification from 10x to 100x with the DCR250 lens.

Control console

- 30:1 zoom ratio, with magnification options from 2x to 230x
- Autofocus or manual focus
- Store and recall settings and calibrations
- Iris diaphragm and white balance control
- Optional digital image and movie capture*

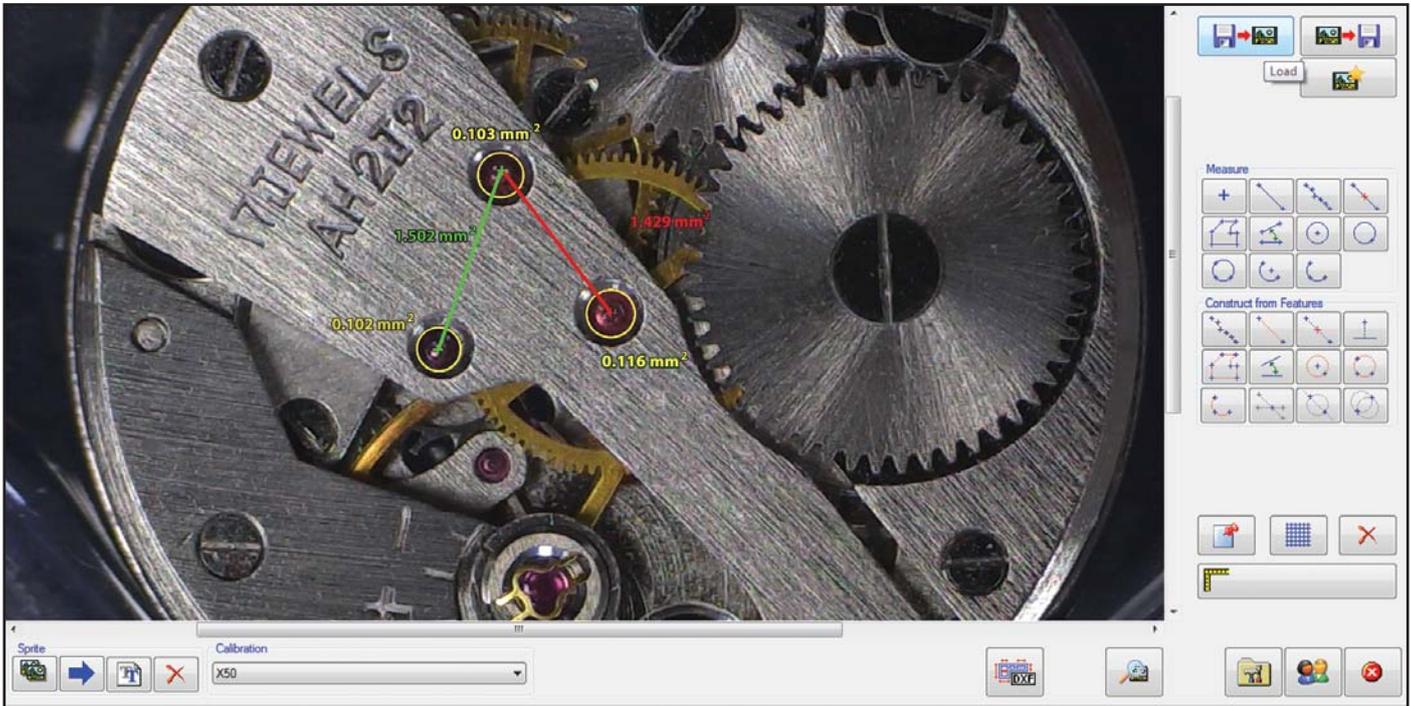
*supplied separately



2 Visualisation in full HD with PC software

**Full HD
1080**

Easy-to-use inspection, annotation and measurement software.



Main software functions

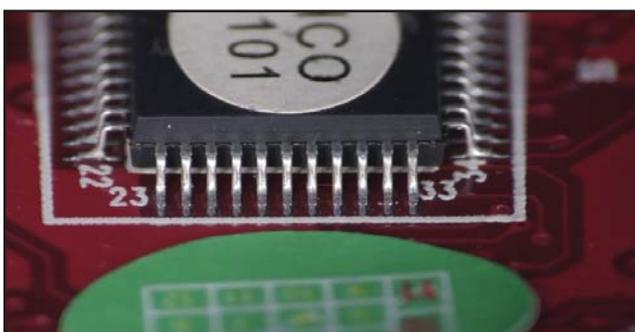
Combined with amazing image quality, the PC software offers a wide range of inspection, annotation and measurement tools, plus image capture capability.

- Parameters of the camera controlled by the software including white balance, gamma, hue & saturation, and contrast
- Image capformat in JPEG, BMP and TIFF formats
- Annotation tools, including markers and measurements
- CAD file importation which allows inspection with a CAD overlay
- Selection of measurement tools with recall of settings
- A number of special effects such as negative effect and mirror
- Report generation into Excel and other formats

*PC supplied separately

Full HD 1080p digital video camera, with motorised zoom (manual and autofocus), and 30:1 zoom ratio

- + Choice of stands to suit your requirements
- + Magnification range up to 230x
- + PC software for camera control, image capture, annotation, measurement, etc.



Inspect with optimum clarity and contrast...



...with the option to annotate, measure, & export data to Excel for reporting.

Technical Data

Optical data

Magnification with 24" monitor, 1080p

Lens (52mm)	Working Distance*	Field of View Min. Magnification	Field of View and Max. Magnification	
			Optical Zoom	Digital Zoom
DIOPTRE 4D	200mm	240mm at 2x	12mm at 45x	6mm at 90x
DIOPTRE 5D	190mm	220mm at 2.5x	9mm at 60x	4mm at 130x
DIOPTRE 5D + 4D	100mm	120mm at 4x	4mm at 130x	2mm at 230x
DCR250*	110mm	50mm at 10x	5mm at 100x	2.5mm at 210x

* Note - At magnifications lower than 10x vignetting may occur.

• Working distance at default focus.

There are a range of objective lenses to choose from. There is not a standard lens for the Makrolite II.

Camera

- Sensor: 1/2.8" 2.3 Mega pixel CMOS
- Image: full HD 1080p (1920x1080)
- Focus: Auto and manual
- **Camera output to console:** HD1080p/60fps
- **Camera output to PC:** HD1080p/60fps to PCIe Card

System requirements - PC version

- **Operating system:** Windows 7 or Windows 8 64 bit
- **Processor:** i5 or better
- **Graphics:** HD Graphics card
- **Memory:** 4GB of RAM or better
- **Expansion:** Spare PCIe slot

Boom stand



Ideal for larger specimens

- Stable platform base, or mounted directly to the user's work surface.
- Enhanced freedom of movement.

Double arm boom stand



For enhanced flexibility

- Designed specifically for applications requiring extended reach, without compromising stability.
- Easy adjustability allows precise positioning and alignment.

Bench stand



Compact and versatile

- Compact unit with low-profile.
- Built-in transformer with intensity adjustment for both surface and substage illumination.

Other stand options

Articulated arm

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



Laboratory stand

- Designed for laboratory work, requiring clear visual access through laminar flow cabinets
- Dark field illumination for cell inspection



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