

# Leica Microsystems – the brand for outstanding products


Leica Microsystems' mission is to be the world's first-choice provider of innovative solutions to our customers' needs for vision, measurement, lithography and analysis of microstructures.

Leica, the leading brand for microscopes and scientific instruments, developed from five brand names, all with a long tradition: Wild, Leitz, Reichert, Jung and Cambridge Instruments. Yet Leica symbolizes innovation as well as tradition.

## Leica Microsystems – an international company with a strong network of customer services

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and representatives of Leica Microsystems  
in more than 100 countries.

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The companies of the Leica Microsystems Group operate internationally in four business segments, where we rank with the market leaders.

### ● Microscopy Systems

Our expertise in microscopy is the basis for all our solutions for visualization, measurement and analysis of microstructures in life sciences and industry. With confocal laser technology and image analysis systems, we provide three-dimensional viewing facilities and offer new solutions for cytogenetics, pathology and materials sciences.

### ● Specimen Preparation

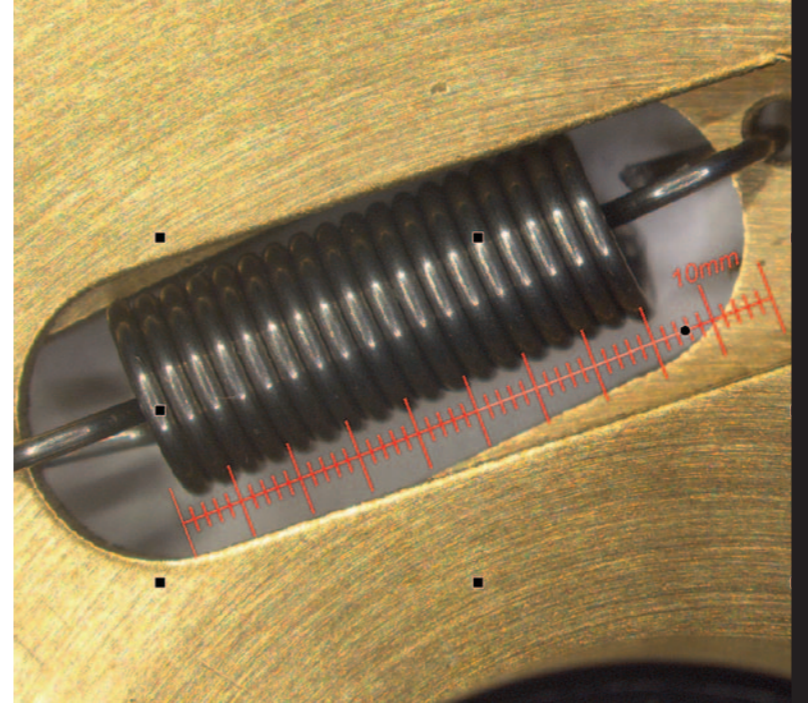
We provide comprehensive systems and services for clinical histo- and cytopathology applications, biomedical research and industrial quality assurance. Our product range includes instruments, systems and consumables for tissue infiltration and embedding, microtomes and cryostats as well as automated stainers and coverslippers.

### ● Medical Equipment

Innovative technologies in our surgical microscopes offer new therapeutic approaches in microsurgery.

### ● Semiconductor Equipment

Our automated, leading-edge measurement and inspection systems and our E-beam lithography systems make us the first choice supplier for semiconductor manufacturers all over the world.



### LAS Reticule

The Leica Application Suite Reticule module is primarily used to display customised reticules on live images. The electronic reticule is a replacement for the glass variants that have commonly been placed in the optical path of a microscope during routine manual inspection, and now offers greater versatility.

The Reticule module extends these capabilities by providing:

- A live image display on to which a reticule can be electronically overlaid to give visual feedback as to the approximate scale of the field of view.
- The ability to carry out object size comparisons or point counting measurements.
- Greater flexibility due to the unlimited range of electronic reticule styles which can be automatically adjusted to the magnification of the microscope.
- A more comfortable working environment with on screen visualisation.
- The capacity to move and rotate a reticule even when viewing a live image.
- Easy reticule design and creation so each system can be extended in its scope.

Due to a Policy of continued development we reserve the right to change specifications without notice.  
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# Leica Application Suite Reticule

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# Reticules Resolved!

# Graphic Definition

## Implementation

LAS Reticule is an optional application that is combined with a Leica microscope, digital imaging camera and computer. Traditional methods of inserting a graticule disk etched with a square grid for measurements (also known as an eyepiece micrometer) has many limitations which LAS Reticule strives to counteract. The electronic reticule is not only more cost-effective but also provides a more pleasurable working environment where the live microscope image is displayed on screen and an unlimited range of reticule styles can be overlaid. Additionally, reticules can be designed and applied quickly and easily, so the set can be extended as and when it's necessary.

## Application Features

Reticule information can be saved either by producing it in overlay format or by burning it into the image. When the reticule is merged into the image, it means that it is permanent. Additionally, the image can be re-opened using another application with the reticule information embedded.

The system also provides an option to save the reticule as an overlay, that can later be removed or altered. A copy of the reticule file will be made and stored with the image, so if the master reticule is subsequently altered the stored image and reticule remains unaltered. When the reticule is stored as an overlay, the image can be opened in another application, but the reticule information will not be present.

Other advantages include:

- Reticules can be fixed or scaleable for additional flexibility.
- Standard user and power user modes allow varying responsibilities.
- An unlimited number of different reticules can be used.
- Additional reticules can be applied on a stored image.

## Visualisation

Further application features are available to make the reticule user environment more intuitive:

- A Gallery of images is available from which individuals can be immediately selected.
- One of the available reticules may be selected and superimposed on the displayed stored image and scaled according to the calibration.
- Images and reticule definition can be saved to in a named folder so that they can be recalled with the attached reticule.
- Images can be exported for further documentation.

## Reticule Definition

A file in the graphic definition format 'SVG' is used to define reticules. These can be of a fixed size so that they can be compared with the underlying image in a relative manner. Scalable reticules, of an absolute size, can be positioned (moved) and rotated easily and used in Live or Offline mode. The definition file may contain lines, shapes, and text, with user-defined properties. Even colour Images can be displayed in the reticule for additional versatility.

LAS is based on Windows PCs and provides a cost-effective and uniform environment, compatible across the Leica range of microscopes and cameras. Furthermore, images may be exported for additional processing.

