Innovative Products and Solutions

2007/2008

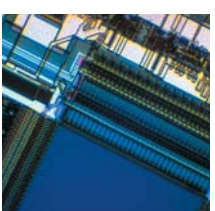
Leica

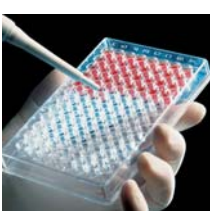
MICROSYSTEMS

A Powerful Vision!

That's Leica Microsystems

Leica Microsystems is a leading global designer and producer of innovative, high-tech, precision optical systems for the analysis of microstructures. It is one of the market leaders in each of its business areas: Microscopy, Confocal Laser Scanning Microscopy with corresponding Imaging Systems, Specimen Preparation, and Medical Equipment. The company manufactures a broad range of products for numerous applications requiring microscopic imaging, measurement, and analysis. It also offers system solutions for life science including biotechnology and medicine, research and development of raw materials, and industrial quality assurance. The company is represented in over 100 countries with 7 manufacturing facilities in 5 countries, sales and service organizations in 20 countries and an international network of dealers.





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Light Microscopes

www.leica-microsystems.com/Light_Microscopes

Leica BM E

Compound microscope for education

Range of use:

➜ Education

The expectations even for starter microscopes are growing all the time. With our 150 years of experience and competence in microscopy, we play a major role in shaping developments in this area. That's why we designed the Leica BM E. Thanks to its compact build, easy access controls, 45° viewing angle and 360° rotatable observation tubes, users of all shapes and sizes will be able to work at this microscope with ease and convenience. The Leica BM E has an extremely small footprint, is easy to carry and stays cool in spite of its powerful illumination. A blue filter is integrated to prevent loss. And the low position of the x/y stage minimizes wrist movement.

Leica CM E

Compound microscope for education

The Leica CM E has been specially designed not only to satisfy the growing demands for performance in a first level university microscope but also to set new standards. It is unique in its design, user-friendliness and performance. The compact size of the Leica CM E keeps key controls within easy reach for long spells of fatigue-free microscopy and takes up less table and storage space. Besides being easy to carry, it has 360° rotatable viewing bodies for comfortable sharing. You can count on the wide range of accessories and affordable price that you have come to expect from Leica Microsystems.

Range of use:

→ Education

Leica DM E

Compound microscope for education

Range of use:

➜ Education

The Leica DM E compound microscope is designed for general biology and specific life science applications in university education and routine laboratory applications. Its highly efficient illumination system with a more powerful halogen lamp than any other microscope in this class provides consistent color and intensity throughout the whole lamp life (over 2000 hours). The Leica DM E will enhance the quality of your microscopy work. Equipped with the technology of a research microscope, e.g. optional Koehler illumination and phase contrast, polarization or darkfield illumination, it opens up new horizons not only for one microscopist, but, using the multiviewing facility, up to ten at a time.

Leica DM EP

Polarization microscope for earth, material and forensic science

The Leica DM EP combines strain-free optics and precision-engineered polarizing mechanisms into an ergonomically advanced design that delivers accurate, high-contrast image quality for use in both university and laboratory settings. Leica incorporated a range of exclusive features into the DM EP, including a highly efficient Koehler illumination system that features a 35 W halogen bulb, a voltage sensing power supply that delivers optimized light intensity regardless of voltage fluctuations, an Analyzer/Bertrand Lens module with swing-in/out controls, a rotating swing-in/out polarizer and a centerable condenser. The microscope can easily be enhanced with a wide range of accessories that allow enhanced polarized microscopy applications and educational and analytical photomicrography.

Range of use:

- Education
- Industrials & Materials

Leica DM IL

Inverted contrasting microscope for living cell applications

The Leica DM IL is the inverted contrasting microscope of choice for microbiology and cell culture laboratories. Offering virtually unlimited application potential in live cell microscopy, it is ideal for routine examinations of cell and tissue cultures, for liquids and sediments and for special applications such as micromanipulation and microinjection. Users will be impressed by its brilliant incident light fluorescence, optimized phase contrast, and a new, extremely efficient contrasting technique:
For the first time, Leica's unique IMC (Integrated Modulation Contrast) enables high quality Hoffman modulation contrast without having to use special objectives.

Range of use:

- ➜ Clinical
- ➜ Life Science Research

Leica DM1000 & DM2000

System microscope for universities, medical practices and routine applications

All variants of the DM1000–3000 series are specially designed for use in clinical laboratories, although they are equally suitable for any other biomedical application from routine to research. Thanks to the ergonomic design, users can work at the microscope for long periods without suffering from neck, shoulder and back muscle tension. The HI PLAN SL (synchronized light) objectives encourage hours of fatigue-free viewing. All variants feature unique height-adjustable focus controls and can be quickly changed from right- to left-hand operation. They satisfy all requirements of optical brilliance, and are particularly suitable for cytology, pathology, and haematology. As system microscopes Leica DM1000 and DM2000 are also convenient for basic research microscopy applications including fluorescence.

Range of use:

- Education
- Clinical
- Life Science Research

Leica DM1000 LED

System microscope with LED illumination for universities, medical practices and routine applications

The Leica DM1000 LED is equipped with long-life LED illumination, which features the following advantages: akin to daylight and bright illumination, less heat emission, as well as no need for lamp changes. Leica also offers a portable, solar-powered option for field use. Battery operation is also possible and allows flexible utilization at different places of work. Users of the Leica DM1000 LED benefit from the same ergonomic, performance-enhancing advantages as the Leica DM1000. It is ideal for all clinical laboratory applications, especially for cytology, pathology, and haematology.

Range of use:

- ➜ Education
- ➜ Clinical
- ➜ Life Science Research

Leica DM2500

System microscope for universities, medical practices and routine applications

Leica DM2500 with its powerful 100 W illumination and its optimized optical performance is especially suited for more complex tasks in pathology or biomedical research that require interference contrast or high performance fluorescence. Thanks to its application-oriented design it can be configured to fit demanding challenges and it gives the customer a research stand with a 100 watt light source. This bright illumination is helpful particularly for Differential Interference Contrast work. The Leica DM2500 can be configured to fit physical requirements of the customer using a variety of observation tubes, ergonomic modules, and integrated adjustable controls.

Range of use:

- Education
- Clinical
- Life Science Research

Leica DM3000

System microscope for universities, medical practices and routine applications

With its intelligent and speedy automation, such as unique toggle mode, motorized nosepiece, condenser, automated light intensity adjustment, and optional foot pedal, the Leica DM3000 supports greater efficiency and enhanced user comfort. As with the other variants of the DM1000–3000 series, replacement of the halogen lamp is easy and convenient due to the special drawer. The automated objective turret changes objectives in only half a second and objectives can be individually selected using the control buttons ergonomically positioned behind the focus knobs. This intuitive microscope improves the workflow in cytology and pathology laboratories as well as in all other biomedical routine and research environments.

Range of use:

- ➜ Education
- ➜ Clinical
- ➜ Life Science Research

Leica DMD108

Digital microimaging device for clinical diagnostics labs

Excellent Imaging with a New Degree of Freedom!

Leica Microsystems has designed a true innovation: a new network imaging solution that addresses the growing workload in today's busy pathology laboratory with fast, easy digital microscopy. The Leica DMD108 Digital Microimaging Device reduces physical discomfort and can speed pathologists' daily workflow with a modern digital microscope network solution for sharing data.
For the first time ever: You can see high-resolution images that differentiate between the slightest nuances of color directly on a monitor without having to look through microscope eyepieces.

Range of use:
→ Clinical

Leica DMI3000 B

Inverted microscope for biomedical research

The Leica DMI3000 B with manual stand was specially designed for customers who work without fluorescence. Offering all transmitted light contrast techniques incl. POL, DIC, and the unique Integrated Modulation Contrast (IMC) the inverted microscope is suitable for life science research and routine examinations such as scanning of cell and tissue cultures. The Leica DMI3000 B outperforms not only the latest technical standards but also all ergonomic expectations – and you can combine it with any of the solutions from Leica's product range.

Range of use:

- Clinical
- Life Science Research

Leica DM4000 B, DM5000 B & DM5500 B

Research microscope system for life science

The upright Leica DM DigitalMicroscope series offers an intelligent automation concept for demanding applications in routine and research. Contrasting techniques can be switched at the press of a button – microscopy has never been so easy. An Illumination Manager ensures optimal light intensity and diaphragm settings for all contrasting methods. All settings can naturally be matched to your specific requirements. Besides being easy to use, the microscopes feature brilliant optics, an ergonomic design, and an impressive range of accessories. Leica DM4000 B, DM5000 B, and DM5500 B – a unique combination of operational convenience and state of-the-art technology.

Range of use:

- Clinical
- Life Science Research

Leica DMI4000 B

Automated inverted microscope for biomedical research

The inverted Leica DMI4000 B was designed for applications in life science. Outperforming not only the latest technical standards but also all the ergonomic demands of a modern microscope, the automated research microscope is also suitable for scanning cell and tissue cultures.
With its completely new fluorescence axis it guarantees ultra-brilliant fluorescence. The internal filter wheel with motorized ExMan and FIM enables excitation of fluorochromes in less than 20 milliseconds. The Leica DMI4000 B can be combined with any of the solutions from Leica's product range.

Range of use:

- Clinical
- Life Science Research

Leica DM6000 B

Research microscope system for life science

Be inspired by the fully motorized microscopy system with intelligent automation concept. As digital microscope platform the upright Leica DM6000 B allocates all transmitted light contrasting methods including the world's first fully automated differential interference contrast (DIC). With absolute reproducible shearing and bias values. Motorized z drive and nosepiece provide unrivalled ease of use and convenience. Dedicated software solutions in combination with the motorized fluorescence axis make the Leica DM6000 B a powerful research microscope for applications like immunofluorescence with deconvolution option, and live cell imaging.

Range of use:

- Clinical
- Life Science Research

Leica DMI6000 B

Fully automated inverted research microscope for biomedical research

Range of use:

- Clinical
- Life Science Research

Visibly more – more visibility: new differential interference contrast (DIC) for relief imaging of specimens with varying indices of refraction. Contrast and illumination manager. Motorized Z focus and parfocality function. Automatic brightness and diaphragm adjustment. Automated fluorescence axis with fluorescence intensity manager, excitation manager, internal fast filterwheel and two integrated shutters with remote control support. Synchronous multiple color visualization of cell compartments. Separation of GFP variants and fluorescence stains in less than 0.05 sec. Motorized fluorescence balancing of specimens with multiple stains. Leica light trap for brilliant fluorescence.
And as always with Leica, intuitive operation.

Leica AF6000

Advanced fluorescence imaging system

The Leica AF6000 is a fully integrated system for advanced fluorescence imaging, providing solutions that evolve with your changing research requirements. From overlaying multi-channel images to acquiring three dimensional and time lapse data, a wealth of solutions are included as standard for image documentation, quantification, enhancement and analysis. Designed to completely harmonize microscope, camera and application, the modular AF6000 system is available for both upright and inverted microscopes. Additional application modules can be added to extend the functionality for deconvolution and 3D visualization.

Range of use:

- Life Science Research
- Fluorescence Workstation
- Fluorescence Imaging

Leica AF6000 LX

Advanced fluorescence imaging and live cell analysis system

The Leica AF6000 LX is an integrated system for advanced widefield life cell imaging and analysis. This ultra-fast system offers the ultimate in hardware and software integration to study the processes of life. Imaging fast cell dynamics or 4D experiments over several days can easily be performed. Carefully selected components ensure the necessary stability for long term experiments, keeping the cells in optimal condition.

Range of use:

➜ Life Science Research

Leica AM6000

System for production of transgenic animals

The first application solution to combine the functions of a fully automated inverted research microscope with those of electronic micromanipulators.
Both systems can be operated via the Leica AM6000 from a clearly designed joint control box. We have integrated all the main controls of the two basic instruments (microscope and micromanipulator) into one central unit and matched the functions to each other. The result: improved operating safety, reduced vibrations within the system and a considerable time saving, both for work routines and for staff training.
With the Leica AM6000 there's no need to keep switching between controls in future. You have everything in one hand. Movements of the micromanipulators are correlated to the magnification of the microscope, electronically.

Range of use:

- Life Science Research
- Micromanipulation
- Telepathology

Leica AM TIRF MC

TIRF (Total Internal Reflection Fluorescence) microscope system with multi laserbox

The new MultiColor TIRF (Total Internal Reflection Fluorescence) from Leica Microsystems is an all-in-one system offering four integrated solid state lasers for excitation of fluorophores in all important wavelengths. The extremely short switching times, the automatically constant TIRF penetration depth when switching from one wavelength to another and the extremely high and synchronized image recording rate open up completely new horizons for researching dynamic processes in living cells.

Range of use:

- Life Science Research
- Total Internal Reflection Fluorescence
- Fluorescence Workstation
- Fluorescence Imaging

Leica LMD6000

Laser microdissection system

Contamination-free, fully automated laser microdissection system for targeted cell isolation simply using gravity and a UV diode laser.
Single cells or groups of cells can be microdissected from tissue sections, biopsies, smears, cytospins, and cell cultures. The laser can be also applied for intracellular and cellular ablation. Nucleic acids and proteins specifically isolated from the dissected specimens can be directed to molecular analyses such as: sequencing, genotyping, PCR, real-time PCR, 2D gel electrophoresis or MALDI.
The laser microdissection system is based on the fully automated upright research microscope Leica DM6000 B, the ideal combination for laser microdissection.

Range of use:

→ Laser Microdissection

Leica SD6000

Spinning Disk Confocal option for Leica AF6000 LX

With its ultrahigh frame rate and gentle handling of samples, Leica's SD6000 Spinning Disk Confocal Unit is ideal for live cell experiments. Used together with the Leica AF6000 LX Live Cell Station, the advantages of high-resolution confocal microscopy are combined with those of widefield fluorescence in one single system. One simple keystroke switches between confocal image recording, widefield fluorescence, a transmitted light method or even the optional TIRF technique. One and the same highly sensitive fluorescence camera serves as the detector for all these methods.

Range of use:

- Life Science Research
- Fluorescence Workstation
- Fluorescence Imaging

Leica DM ILM

Inverted routine microscope for material testing

The Leica DM ILM inverted microscope was specially designed for all inspection and measurement tasks in metallography and industrial materials testing. High-performance Leica HCS optics (Harmonic Component System) guarantee optimal conditions: maximum image resolution and perfect image contrast in incident light brightfield, polarization contrast plus fluorescence. The Leica DM ILM scores ergonomy-wise, too: all inspection and measurement tasks can be performed quickly and efficiently.

Range of use:

→ Industrials & Materials

Leica DM2500 M

System microscope for material testing

Range of use:

➜ Industrials & Materials

The Leica DM2500 M allows you to improve your workflow and concentrate entirely on the task at hand. Microscope operation becomes secondary to your investigations. Viewing your material examinations in the best light is our top priority. Equally important is our commitment to always offer you the best quality optics and most efficient microscope systems in the business. You need a materials microscope system designed for rapid, accurate results. Leica microscope systems are designed to decrease your bench time and provide optimized results. The Leica DM2500 M will show you how simple and reliable microscopy can be.

Leica DM2500 P

Polarization microscope for transmitted and reflected light

The Leica DM2500 P is designed for all routine polarizing examinations in: petrography, mineralogy, structure characterization, examination of liquid crystals and fibers. With versatile instrument options, the Leica DM2500 P polarizing microscope is also an ideal match for industrial analysis and quality control, such as analyzing glass, plastics, textiles and fibers or testing displays in the semiconductor industry.

Range of use:

→ Industrials & Materials

Leica DM4000 M

Research microscope system for material and geo science

Range of use:

➜ Industrials & Materials

The Leica DM4000 M is equipped with an incident-light axis and can be used with all common incident-light methods (all of them automated upon request). The axis features a 4x reflector disc with 2 fixed mounted and 2 changeover positions for instrumentation with reflectors or fluorescence filter cubes. A transmitted-light axis works with all known transmitted-light methods (bright-field, darkfield, phase contrast, polarization contrast, interference contrast – all automated). As expected from a routine microscope, the Leica DM4000 M operates with a mechanical Z-drive; and the stage is also operated mechanically. The 6x objective turret with M32 thread is absolute coded so that the objective used is immediately detected. All current setting values can be called up at a glance using the clearly designed status display.

Leica DM4500 P

Polarization research microscope system for material, geo and life science

Leica DM4500 P for research and development is designed for all polarization examinations in: petrography, mineralogy, structure characterization, examination of liquid crystals and fibers.
With versatile instrument options, the Leica DM4500 P polarizing microscope is also an ideal match for industrial analysis and quality control, such as analyzing glass, plastics, textiles and fibers or testing displays in the semiconductor industry.

Range of use:

→ Industrials & Materials

Leica DMI5000 M

Inverted research microscope for material testing

Range of use:

➜ Industrials & Materials

Our mission is to visualize your materials research in the very best light. Our optical & design engineers focused their entire expertise on this goal. The result is the Leica DMI5000 M, the successor of the famous Leica MeF4. However, it is not only the best possible image quality that drives us. The intelligent operation of the Leica DMI5000 M will let you experience the pleasure of professional microscopy without the work.

Using a microscope has never been this simple; the DMI5000 M can always be configured to suit your application requirements. It is the optimum solution for your tasks in R&D, quality assurance and testing.

Leica DM6000 M

Research microscope system for material and geo science

The current state of the art of our DM Digital Microscope family. As a high-end automated research microscope, the Leica DM6000 M leaves nothing to be desired, and leaves no question unanswered. The automation of this microscope, every module of which is motorized, is brilliant.
Together with our new digital cameras, which have been specially tuned to match the DM Digital Microscope series, as well as software products for image analysis and image archiving, you will receive a system that is custom-tailored for your work.

Range of use:

→ Industrials & Materials

Leica FS C

Comparison macroscope for forensic examinations

Range of use:

→ Forensic

The new Leica FS C motorized Comparison Macroscope is a modular system for all comparison applications in the forensic laboratory, whether for comparing marks on fired ammunition parts, toolmarks or documents.

It combines an innovative, intelligent automation concept with outstanding ergonomic features. Its completely new optics comprise five apochromatically corrected macro objectives with a high numerical aperture and adjustable iris diaphragms for top optical performance.

The enhanced reproducibility and accuracy offered by this state-of-the-art platform will improve the efficiency of forensic examinations. Different imaging modes (split image, superimposed image and combined image) can be set at the press of a button.

Leica FS CB

Comparison microscope system for hair & fiber analysis in the forensic lab

The Leica FS CB features two brand new lab-class microscopes, the Leica DM2500, under the motorized comparison bridge. This ergonomic work scenario is ideally suited for all microscopic applications that require a direct side by side comparison.
The Leica FS CB enables high precision comparison of two objects at magnifications up to 1500x, supplying reliable evidence of the tiniest differences in their microstructure, texture and colour. All the usual contrasting techniques such as brightfield, fluorescence and polarization are provided and can be easily applied. The Leica FS CB features a motorized comparison bridge with built-in ergonomic observation tube for maximum viewing comfort. Various imaging modes (split image, superimposed image and combined image) can be set at the press of a button.

Range of use:

→ Forensic

Leica FS4000

Comparison microscope system for trace evidence

Range of use:

→ Forensic

The Leica FS4000 combines the latest optomechanical knowledge in the field of light microscopy with unequalled user friendliness and ergonomy in an integrated solution, allowing the user to concentrate totally on his work and achieve highly precise and efficient results.

The Leica FS4000 enables high precision comparison of two objects at magnifications up to 1500x, supplying reliable evidence of the tiniest differences in their microstructure, texture and color. All the usual contrasting techniques such as brightfield, fluorescence and polarization are provided and can be selected in a fraction of a second. Various imaging modes (split image, superimposed image and combined image) can be set at the press of a button.

Confocal Microscopes

Confocal Microscopes

www.leica-microsystems.com/Confocal_Microscopes

Leica TCS SP5

High speed and high resolution spectral confocal

Range of use:

- ➜ Confocal Microscopy
- ➜ Multiphoton Microscopy

As the only broadband confocal, the Leica TCS SP5 fully covers the main requirements in confocal and multiphoton imaging with optimal overall performance and provides the full range of scan speeds at highest resolution.

With its well proven high efficiency SP-detection (five channels simultaneously) and optional AOBS for dynamic beam splitting, the Leica TCS SP5 delivers bright, noise-free images with minimal photodamage at high speed.

The system is the platform for the new fixed stage microscope DM6000 CFS for physiological and electrophysiological experiments and for the new superresolution fluorescence microscope Leica TCS STED.

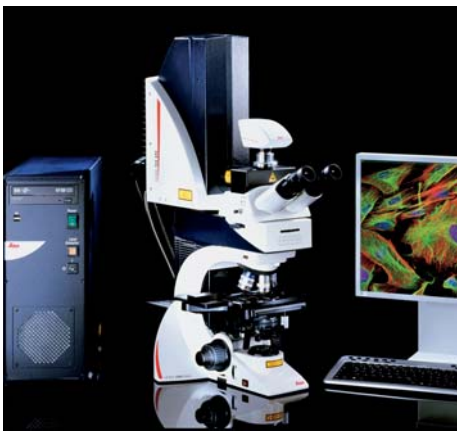
Leica TCS SPE

High resolution spectral confocal

The Leica TCS SPE is the new high resolution spectral confocal for daily research and routine examination. The highly integrated system is optimized for target applications in research laboratories and pharma-biotechnology. Providing all important features, it offers spectacular imaging at an attractive price.

The newest technology is implemented in the Leica TCS SPE and this system is the only confocal in its class providing true spectral detection.

The TCS SPE is very easy to use and first results are quickly achieved, even by confocal newcomers. Its robust, durable hardware with long-life components and the new Leica software platform LAS AF ensure smooth and fast operation.



Range of use:

→ Confocal Microscopy

Leica TCS 4PI

High-resolution 4Pi fluorescence system

Range of use:

➜ Superresolution Light Microscopy

Enter the fluorescence nanoworld by superresolution with the Leica TCS 4PI, the first commercial 4Pi system worldwide.

With its spectacular resolution enhancements and 3D capabilities it allows precise localization of cell constituents, parasites and viruses in three dimensional cell space. Structures far too small for the resolution limits of widefield and confocal microscopes can now be investigated with the Leica TCS 4PI.

This microscopy system is the answer to the contemporary need in the biomedical environment for higher spatial resolution while maintaining capabilities of live cell imaging and keeping existing protocols for structure specific fluorescence labeling.

Leica FCM1000

Fiber Confocal Microscopes

The Leica FCM1000 is the first imaging solution developed for – and fully adapted to – *in vivo* and *in situ* small animal imaging.

In vivo observation of live processes requires a high degree of miniaturization for minimally invasive access as well as an ultra-high frame rate for real-time dynamic recording.

With its fibered microprobes the Leica FCM1000 is designed to access virtually anywhere in the living animal. A simple contact with the tissue of interest is enough to generate high-speed recordings of cellular or vascular events.

Range of use:

→ Endoscopic Confocal Microscopy

Stereomicroscopes

www.leica-microsystems.com/Stereomicroscopes

Leica ES2

Educational stereomicroscope, 2-step, 10x/30x, integrated LED illumination

The Leica ES2 is the perfect solution for the high-school market. From the 2-magnification starter model to the digital zoom model with its integrated 3-megapixel CMOS camera, the new Leica educational stereomicroscopes combine superb optical and illumination quality with ease of use and comfort for extended use. The rugged design is completely maintenance-free and is built for rough-and-tumble school environments. Like all our instruments, the quality, lead-free optics and recyclable housing satisfy environmental management requirements.

Range of use:

→ Education

Leica EZ4

Educational stereomicroscope, 4.4:1, 8x-35x, integrated LED illumination

The new Leica E-series stands out from the crowd of educational stereomicroscopes by offering the best value for money and the following features: Leica's typical high image quality, color and detail fidelity, mechanical precision for decades of maintenance-free functionality, precise zoom and focusing systems for the most exact control, power LED illumination system for incident and transmitted light. Our unique Leica 3-way incident light technology on all Leica EZ4 models provides observers of a wide variety of objects – from strongly structured objects to flat probes – with optimal illumination to obtain a maximum of information. The integrated LEDs can be switched individually, dimmed and combined with transmitted light. The membrane switch that controls the illuminator is integrated in the base and has a watertight seal.

Range of use:

→ Education

Leica EZ4 D

Educational stereomicroscope, 4.4:1, 8x-35x, integrated LED illumination, integrated 3.0 MPixel CMOS camera

The Leica EZ4 D, with its integrated 3-megapixel CMOS camera and Leica application software, allows the direct storage of image data on 128 MB SD card or the connection to PC, Mac, video recorder or beamer. The application software included with the Leica EZ4 D controls image capture and storage, live image display on connected PCs or Macs, and the archival and optimization of image data.

Range of use:

→ Education

Leica EZ5

Stereomicroscope with 5:1 zoom ratio, 10x-50x magnification, 100 mm standard working distance

The Leica EZ5 stereomicroscope is a fundamental component of any manufacturing system that requires precise optical testing during equipment and component assembly, processing, and testing. If your manufacturing facility requires accurate and reliable optical inspection and testing, the Leica EZ5 is the ideal solution.

The compact, lightweight Leica EZ5 stereomicroscope features high-performance optics and provides crisp, sharp image quality combined with straightforward handling. And, this easy-to-use and cost-effective stereomicroscope offers a multitude of features to ensure complete user comfort during operation.

Range of use:

- → Quality Control
- → OEM

Leica S4 E

Greenough stereomicroscope

The Leica S4 E with 4.8:1 zoom and standard magnification of 6.3x-30x is the basic model of the Leica StereoZoom® line.
This complete line of stereomicroscopes with Greenough optical system offers an affordable and comprehensive program for all applications, from manufacturing quality inspection and assembly, OEM integration, and student laboratory use, to exacting research and development tasks.

Range of use:

- ➜ Quality Control
- ➜ Routine Manual

Leica S6 T

Greenough stereomicroscope

The Leica S6 T with 6.3:1 zoom and a standard magnification of 6.3x-40x is the world's first and only fully electrostatic dissipative stereomicroscope. This patented member of the Leica StereoZoom line is essential for critical inspection of ESD sensitive electronic components such as computer hard drives.
The Leica S6 T with incident light or T swivel arm stand is the ultimate in ESD protection.

Range of use:

- → Quality Control
- → Routine Manual

Leica MS5

High-performance stereomicroscope with 5 steps

The Leica MS5 with five-step magnification changer is the most flexible routine stereomicroscope in the world. The Leica MS5 is in line with the Leica tradition of providing ever-better facilities for ergonomic, fatigue-free working.

Range of use:

→ Routine Manual

Leica MZ6

High-performance stereomicroscope with zoom 6:1

The Leica MZ6 modular stereomicroscope with 6.3:1 zoom covers important magnification ranges between 6.3x and 40x for the non-destructive 3-D observation of unprepared objects in science, and for inspection and assembly in technology.

Range of use:

→ Routine Manual

Leica S6 D

Greenough stereomicroscope

The Leica S6 D with 6.3:1 zoom and a standard magnification of 6.3x-40x is the documentation model of the Leica StereoZoom line. This StereoZoom® with integrated photo/video port offers an affordable and comprehensive documentation solution for all fields of application like manufacturing, quality inspection, small parts assembly, OEM integration, student laboratory use or other research and development tasks.

Range of use:

→ Routine Manual

Leica S6 E

Greenough stereomicroscope

The S6 E with 6.3:1 zoom and a standard magnification of 6.3x-40x has a comfortable 38° viewing angle. The optical design of the S6 E, coupled with this ergonomic viewing position allows this microscope to be used for long periods without causing eye strain, resulting in faster, more efficient inspections, and increased productivity. Clear, sharp images are always produced by the Leica S6 E, as it is a chromatically optimized and robustly manufactured microscope.

Range of use:

→ Routine Manual

Leica S8 APO

Greenough stereomicroscope

The Leica S8 APO is the flagship of our Leica StereoZoom® line. The instrument offers an 8:1 zoom with a standard magnification of 10x-80x. It is the world's only high performance Greenough style stereomicroscope with a fully apochromatic corrected 1.0x objective and zoom lens system. Researchers engaged in critical applications such as microinjection or fine pitch wire bonding will find that our S8 APO makes a world of difference in their work.

Range of use:

- ➜ Routine Manual
- ➜ Research Manual

Leica LED2000

Integrated incident light LED stand

Made for the Leica S4E and all S6 models, the high quality Leica LED2000 illumination suits all incident light applications to provide a cost effective solution where no transmitted light is needed. With five illumination options available, you can choose exactly where and how much incident light you want to apply to your sample.

Range of use:

→ Routine Manual

Leica LED2500

Integrated incident and transmitted light LED stand

Made for the Leica S4E and all S6 models, the Leica LED2500 includes both incident and transmitted light capabilities, which can either be used together or controlled individually. With a 60 mm active light diameter, the LED2500 is perfect for performing detailed inspection with consistent light levels across samples with a large field of view.

Range of use:

➜ Routine Manual

Leica FluoCombi III™

Fluorescence from 3D to high resolution

The Leica FluoCombi III is an extremely useful accessory for the Leica MZ16 F and MZ16 FA fluorescence stereomicroscopes. Expressed Drosophila, C. elegans, zebrafish or Arabidopsis can be sorted in the generous three-dimensional field of view and screened with the same instrument at 460x magnification and 1500 Lp/mm resolution, e.g. in gene technology, in-vivo investigation or similar. In many cases, sensitive samples or specimens no longer need to be transferred to a light microscope.
Highest resolution up to the edges of the field of vision: planapochromatic 5x high resolution micro objective.

Range of use:

→ Fluorescence

Leica L2

Cold light source

Optimal illumination improves people's optical performance and reduces error rates. The use of cold light sources has been catching on in stereomicroscopy because they illuminate objects intensely.
The Leica L2 cold light source is powerful, small, compact, affordable, and is suited to all applications in industry and science. Besides classically angled lighting with one or two armed light guides, other equipment is available for coaxial, vertical, and transmitted illumination methods.

Range of use:

→ Illumination

Leica L5 FL

Fluorescence system for blue or green fluorescence, adaptable to Leica S and M stereomicroscopes

Efficient cold light fluorescence system

On a worldwide level, the unique Leica MZ FLIII fluorescence stereomicroscope has become indispensable for qualified research and analysis tasks in genetics and molecular biology. An easy-to-use fluorescence system is now available for daily routine work, such as dissecting, selecting, and sorting exprimed models, as well as for forensics and industrial stereofluorescence applications.

The new Leica L5 FL fluorescence system for blue or green fluorescence can easily be adapted, even subsequently, to Leica S and M stereomicroscopes to be immediately operational. This provides the user with an effective, handy, and easy-to-use instrument.

Range of use:

→ Fluorescence

Leica MacroFluo™

High resolution, multidimensional fluorescence zoom system

Leica MacroFluo introduces the world of fluorescence to macroscopy and vice versa and lets you experience a new dimension of brilliant images of the highest possible precision. For this purpose, we combined the excellent optics of our apochromatic Leica Z6 APO (6.3:1) and Z16 APO (16:1) zoom systems with brilliant Leica fluorescence technology.

The result: the first and only macro documentation systems for fluorescence and images of a unique sharpness, precision and depth of information.

The unique feature of the MacroFluo concept is the combination of large working distances and fields of view of a stereomicroscope with the vertical optical path typical of microscopes.

Range of use:

- ➜ Research Manual
- ➜ Fluorescence

Leica MZ7.5

High-performance stereomicroscope with 7.9:1 zoom

The Leica MZ75 high-performance stereomicroscope with 7.9:1 zoom offers leading-edge optical technology at an affordable price. Companies and users throughout the world have the opportunity to experience the performance and the quality of a Leica.

Range of use:

→ Research Manual

Leica MZ9.5

High-performance stereomicroscope with zoom 9.5:1

The Leica MZ95 high-performance stereomicroscope features an advantageous 9.5:1 zoom ratio and magnifications up to 480x. The high resolution up to 300 line pairs per millimeter, extremely high image contrast, and amazing sharpness offer the ultimate in image fidelity and data transfer for critical inspection applications.

Range of use:

→ Research Manual

Leica MZ10 F

High-performance stereomicroscope with 10:1 zoom

The new Leica MZ10 F fluorescence stereomicroscope offers splendid advantages for biology, medicine, molecular biology and technology. Research into the functions and interactions of living organisms requires fluorescence labelling, a procedure permitting in-vivo observation of growth processes to gain an insight into the distribution and development of certain structures of living cells and tissues. Stereomicroscopes are used early in the research process to screen samples and sort or dissect them. Offering a magnification range from 8x-80x and a high resolution of 375 Lp/mm in the standard configuration, the Leica MZ10 F is the perfect choice for daily routine tasks.

Range of use:

→ Fluorescence

Leica MZ12.5

High-performance stereomicroscope with 12.5:1 zoom

The Leica MZ12.5 high-performance stereomicroscope with 12.5:1 zoom provides the user with more information, more details, and with more knowledge. The performance in terms of contrast, richness of detail, resolution, and color fidelity is unsurpassed and extends the limits of microscopic observation.

Range of use:

➜ Research Manual

Leica MZ16

High-performance stereomicroscope with 16:1 zoom

With the introduction of MZ16 and MZ16 A, Leica Microsystems celebrates a milestone in the world of stereomicroscopy; these two products are targeted at the high-end life science research and industrial inspection markets that demand higher performance. With these two instruments comes the first stereomicroscope that provides a completely motorized workstation, setting standards for our competition in automation and working ergonomy, and once again proving that Leica Microsystems is an innovator strictly focused on meeting customers' needs.

Range of use:

→ Research Manual

Leica MZ16 F

The world's first fully apochromatic fluorescence stereomicroscope

Worldwide, the manual Leica MZ16 F is the most powerful fluorescence stereomicroscope. Due to its unique features with respect to optical performance and fluorescence quality, the new Leica MZ16 F is the ideal research and lab instrument for demanding fluorescence microscopy examinations in biology, medicine, chemistry, electronics,geology, archaeology, aeronautics, cosmetics, pharmaceutical industry, agronomy, criminology, and much more. These are the most important arguments in favor of the Leica MZ16 F.

Range of use:

- ➜ Research Manual
- ➜ Fluorescence

Leica Swingarm Stands

Accessory

In the electronics industry, stereomicroscopes are required for visual inspection of large printed circuit boards. The surfaces of cylindrical bearings in motors are visually inspected for quality during the automotive production process. Biologists conduct surgeries on mice and rat brains to research how nerves conduct signals and regenerate after trauma. These are just a few examples of how large specimens, or the tools required to test or manipulate these specimens, require a special type of stereomicroscope stand.

Leica Microsystems offers the perfect solution: a new swingarm stand series. The wide extension range of the swingarm, heavy load capacity, ability to connect a focus arm with a wide variety of adaptation options, outstanding vibration-dissipation – these are just a few of the many convenient features.

Range of use:

- Research Manual
- Quality Control

Leica TL BFDF

Transmitted light stand for brightfield and darkfield applications

The Leica TL BFDF base features continuously adjustable changeover between brightfield and darkfield, providing high contrast for stained amplitude specimens. It also offers versatile options. The light rays can be deflected through the object from steep to flat and a high or low degree of diffusion can be selected. For example, if the light rays are deflected absolutely vertically through the object, an exact brightfield with maximum brightness is created. The specimen appears with full contrast and in natural color on a bright, homogenous background.

Range of use:

- ➜ Research Manual
- ➜ Research Automated

Leica TL RC

Transmitted light stand with partial illumination technique for every brightness

Contrasting method for clear, transparent specimens

The Rottermann Contrast™ technique is a partial illumination technique that shows the changes of the refractive index as differences in brightness. Phase structures then typically appear as spatial, relief-type images – like hills in the positive relief-contrast and as indentations in inverted relief contrast.

Together with the new Leica cold light source CLS150 LS, the TL RC™ enables the internal shutter to be controlled directly via the connected PC.

Range of use:

- → Research Manual
- → Research Automated

Leica TL RCI™

Transmitted light stand with partial illumination technique with USB ports

The transmitted-light base TL RCI™ has two USB ports and two CAN bus interfaces. The brightness of the light source can be controlled via a USB mouse, for example. In combination with the motorized Leica stereomicroscopes and macroscopes, motorized focus and the Leica Application Suite (LAS) software, you are able to exercise full control via the computer over the zoom level, focusing, color temperature, brightness and shutter of the illumination. A large number of test series can thus be extracted from the Leica Application Suite (LAS) software and automated!

Range of use:

- ➜ Research Manual
- ➜ Research Automated

Leica TL ST

Full control of the transmitted light in every angle

Operating a transmitted-light base can be so simple: you have a potentiometer available for setting the brightness. The mirror guiding the light through the specimen at different angles can glide across the horizontal plane. The tilt angle of the mirror is then automatically aligned.

In this way you have full control of the transmitted light without having to spend a great deal of time looking for the optimum transmitted-light angle.

The novel halogen lamp deserves a closer look and is particularly efficient – with a capacity of only 20 W it reaches the light utilization of the normal 35 W lamps. The heating effect is noticeably reduced, which is a particular benefit for temperature-sensitive samples.

Range of use:

- Research Manual
- Research Automated

Leica MATS

Thermocontrol heating stages

Range of use:

- ➜ Research Manual
- ➜ Research Automated

The Leica thermocontrol system MATS (Microscope-stage Automatic Thermocontrol System) is a heating system for microscopes and stereomicroscopes and allows the viewing of sensitive microscopic specimens under accurate temperature conditions.

The Leica MATS plastic stage frame conducts heat at a lower rate than metal allowing less heat to leave the stage area and a more accurate thermal distribution to be achieved.

Temperatures varying from room temperature to 50°C are possible with this system allowing every heating need to be captured.

Leica MZ16 A

High-performance stereomicroscope with 16:1 zoom, fully apochromatic

With the introduction of MZ16 and MZ16 A, Leica Microsystems celebrates a new milestone in the world of stereomicroscopy; these two new products are targeted at the high-end life science research and industrial inspection markets that demand higher performance. With these two new instruments comes the first stereomicroscope that provides a completely motorized workstation, setting new standards for our competition in automation and working ergonomy, and once again proving that Leica Microsystems is an innovator strictly focused on meeting customers' needs.

Range of use:

→ Research Automated

Leica MZ16 FA

The world's first motorized, automated, fully apochromatic stereofluorescence stereomicroscope

Range of use:

➜ Research Automated

Discover how to gain more information faster. As the world's first motorized, automated, fully planapochromatic fluorescence stereomicroscope, the Leica MZ16 FA lets you control the filter changer, zoom, focus, UV shutter, and the double iris aperture at the touch of a button, and repeats your multifluorescence experiments automatically, quickly, exactly, and ergonomically. The Leica MZ16 FA is the fluorescence stereomicroscope with greatest zoom capability (16:1), highest resolution (840 Lp/mm), highest magnification (115x with standard optics), a patented illumination/filter system for the most intense fluorescence on jet black backgrounds, and an HL RC™ innovative high-performance transmitted-light base for excellent relief contrast.

Leica Z6 APO & Z16 APO

High-performance zoom systems for perfect documentation

Our complete individual measurement and inspection stations leave nothing to be desired. The new zoom systems include the widest line of accessory products to meet every imaginable examination, training, and documentation task. The Leica Z6 APO and Z16 APO are suitable for measuring, documenting and analyzing in the QA lab, just as they are suited for biology, geology, histology, and training.

Leica Z16 APO offers a 16:1 zoom with a zoom range of 0.57x to 9.2x. The high-magnification Leica Z16 APO is exceptionally well-suited for use in microelectronics as well as laboratory workstations in medicine, biology, education, research, development, and criminology.

Range of use:

- → Quality Control
- → Zoom System

Leica Z6 APO A & Z16 APO A

High-performance zoom systems for perfect documentation

The modular zoom systems Leica Z6 APO A and Z16 APO A correspond to the highest quality standards worldwide and meet all requirements for first-class documentation, manufacture and inspection. The high-performance fully apochromatic optics made of high-quality, multiple-coated, lead-free glasses, in combination with the plan-apochromatic objectives provide parallax-free imaging for authentic, detail-rich image material. But the two zoom systems are not only exceptional with respect to the optics, they also excel with respect to operating comfort at the highest level.

Range of use:

- Quality Control
- Research Automated
- Zoom System

Leica Colposcope

Step or zoom stereomicroscope with illumination

The high-performance Leica Colposcope provides a maximum of information and confidence for gynecological diagnosis, at a very competitive price, and represents a good long-term investment.

Not available in the US!

Range of use:

→ Colposcope

Imaging Systems

Imaging Systems

www.leica-microsystems.com/Imaging_Systems

Leica CW4000

High resolution imaging system for cytogenetics

The Leica CW4000 total imaging solution combines a number of cytogenetics imaging applications with Leica microscopes and cameras to offer a flexible cytogenetics imaging system. Leica CW4000 comes in a variety of configurations, offering application solutions for Karyotyping, FISH, MFISH and CGH analysis. Applications range from karyotyping human metaphases in clinical applications to non-human karyotyping in research institutes as well as offering professional solutions for experiments such as advanced multicolor FISH assays in cancer and oncology studies.

Range of use:

→ Cytogenetics workstation

Leica Q550 MW

Fully optimized for materials science and analysis

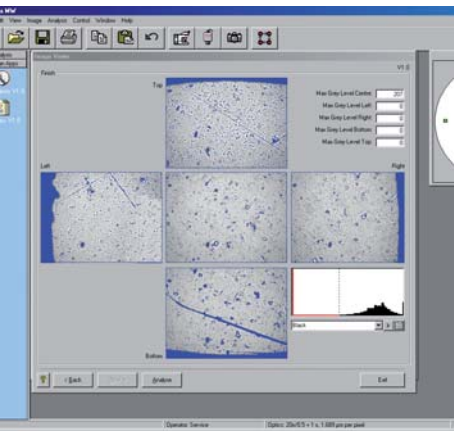
The Q550 MW materials workstation is an imaging solution that integrates automated microscopy, computing and digital image analysis to increase laboratory productivity by efficiently performing routine, yet sophisticated analytical tasks, accurately and automatically.

Sample applications:
– Steel inclusion rating
– Hardness testing
– Quality testing
– Coating analysis
– Automotive inspection
– Filter inspection

Range of use:
→ Quantitative Imaging
→ Materials Imaging

Leica QClean

Analysis software for the measurement and classification of particles on filters



Range of use:

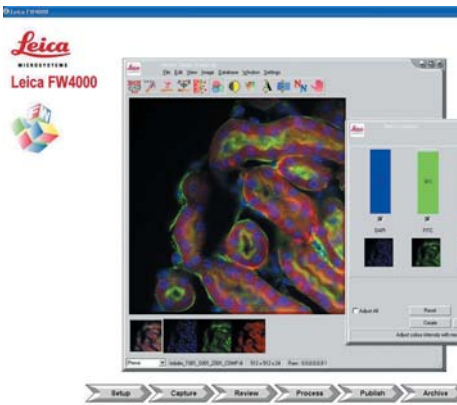
→ Materials Imaging

Leica QClean is a quality assurance imaging solution running on the established Leica MW image analysis workstation. Leica QClean controls Leica microscope systems for the automated measurement and classification of particles on circular shaped samples, such as filters in quality assurance. The system automatically measures filters where the cleaning fluid of micro mechanic and engine components has been poured through, and dried in an oven. The size and number of particles measured on this filter are used for characterizing the cleanliness of the components to standard quality requirements defined by the customer. Furthermore, Leica QClean is fully compatible with most industrial standards including VDA 19 and ISO 16232.

Leica FW4000

Fluorescence imaging

Leica FW4000 Application Modules are designed as an easy to use, modular (by application) fluorescence imaging solution. The modularity of Leica FW4000 makes it applicable for both entry level and complex imaging solutions. The system is designed to be highly versatile in its choice of components and software facilities, making it suitable for a wide range of applications. Each Leica FW4000 Application Module is flexible and intuitive for professional fluorescence imaging.



Range of use:

→ Fluorescence workstation

Leica QWin

Image processing and analysis software

Leica QWin is a highly versatile image analysis and processing solution for quantitative microscopy which provides complete control of Leica microscopes, macroscopes and Leica digital cameras. The modular and scaleable nature of Leica QWin is such that its capability ranges from simple interactive image measurements to automatic, multi parameter measurements of an immense number of features. Leica QWin is available in 5 editions including QWin Runner, QWin Lite, QWin Plus, QWin Standard and QWin Professional. Each edition is designed to meet a variety of needs and offers professional upgrade options as your requirements grow.

Range of use:

→ Quantitative Imaging

Leica Application Suite

Demanding microscopy

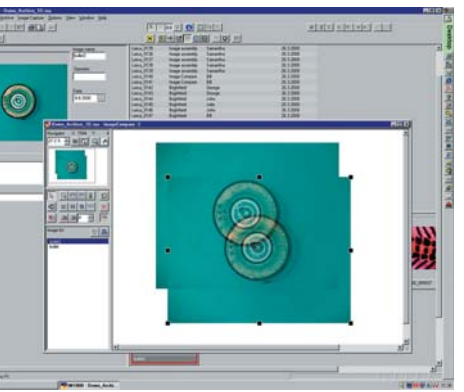
The new Leica Application Suite integrates Leica automated microscopes, digital cameras and software into one common micro-imaging environment to provide an easy to use and consistent platform.
Leica Application Suite solves and accelerates routine and research analysis. The rich image processing functions make it suitable for a diverse range of imaging tasks such as visualization, enhancement, measurements, and documentation. Additional modules can be added to further enhance the powerful functionality of LAS such as Image Overlay, MultiFocus, MultiTime, MultiStep, Extended Annotation, Interactive Measurement, and Reticule requirements.

Range of use:

- Imaging Software
- Quantitative Imaging

Leica IM1000

Digital data management solution



The need for professional, customer specific digital data management solutions has never been greater – particularly in view of the increasing use of digital cameras. Leica Microsystems introduces an improved version of Leica Image Manager, a versatile image management application for the acquisition, processing, measurement and output of images as well as for data exchange and data backup. The modular concept of Leica IM also enables the user to specify a system that is tailored to each individual's specific needs and with special networking options, all requirements from small local networks to large companywide systems can be linked.

Range of use:

➜ Imaging Software

Leica Stereo Explorer

3D views of surfaces as you have never seen before

Digital technology has opened up possibilities for turning stereo-pairs into real three-dimensional images that can be viewed and measured from different perspectives. The modular Leica Stereo Explorer software package is the perfect complement to the Leica IC3D stereo camera for accurate imaging of the three-dimensional surfaces of the specimens being examined. From the two-dimensional stereopairs, Leica Stereo Explorer automatically calculates a 3D data record that can be viewed and analyzed using a computer. The realistic image, which appears in relief, makes it easier for the user to identify complex surfaces, greatly improves education and training, and enables better diagnoses in technical, biological and forensic fields.

Range of use:

- Imaging Software
- 3D Display System

Camera Systems

Camera Systems

www.leica-microsystems.com/Camera_Systems

Leica EC3

Affordable high speed digital color camera

Range of use:

➜ Education

The Leica EC3 is an affordable high speed digital color camera that offers fast, real-time imaging of up to 15 frames per second. When combined with a Leica microscope and used in conjunction with the included LAS EZ software, it is the perfect solution for performing a variety of imaging tasks such as annotations, calibrations, and image measurements.

The real time speed of the Leica EC3 camera means that training on microscopic techniques is now effortless. Live or captured images can optionally be displayed in full-screen mode on a computer monitor to ensure visibility. Furthermore, the Leica EC3's high 3.1 megapixel resolution produces excellent images, which makes the camera the perfect choice for visual presentation.

Leica DC150

Digital color camera

The Leica DC150 digital camera system connects directly to your microscope to combine the best elements of micro- and macro-photography. Sporting a finely fashioned compact anthracite metal body, the Leica DC150 has 8 million pixels and up-to-the-minute digital features: optical 3.6x and digital zoom, innovative digital signal processing, compatibility with SD memory card, USB interface, and a wealth of other impressive functions. With the new sound recording feature, up to one minute of spoken notes can be saved per image.

Range of use:

→ Various

Leica DFC290

Powerful digital color camera system for real-time imaging

Range of use:

→ Various

The DFC290 is a color Digital FireWire Camera that offers real-time live images that can be focused and orientated directly from a computer. The 3 Megapixel CMOS sensor digitizes information of the sensor in the camera head, leading to optimum noise suppression and detailed images. All color renderings, image geometry and dimensions are correct to ensure accurate results are obtained during image analysis and image processing. The Leica DFC290 is wholly compatible with Leica's microscopes and Leica software to form an integrated and powerful imaging system for microscopy applications. Combining the Leica DFC290 with the new LAS Modules provides a sophisticated solution for critical analysis and documentation. The camera is compatible with PC/Mac software and is designed to simplify the imaging process from capture through to processing.

Leica DFC300 FX

Digital color camera for fluorescence applications

The Leica DFC300 FX Digital Color Camera specializes in high sensitivity imaging in fluorescence for genetic research, biotechnology and medicine. The Leica DFC300 FX digital camera records live cells, sequences of motion and fluorescence specimens or particles that are susceptible to photobleaching, even at the lowest light intensities. High sensitivity in the visible spectrum ensures reliable results in fluorescence microscopy, especially for GFP and other low illumination applications. The stylish camera housing is lightweight and compact, and easily attaches to your particular microscope (c-mount). The Leica DFC300 FX camera also provides quick transfer for PC and Macs with standard FireWire interface.

Range of use:

→ Fluorescence

Leica DFC340 FX

Specifically designed for imaging applications with limited light

The high dynamic range offered by the Leica DFC340 FX allows dark and light objects (monochrome) to be recorded and evaluated within the same image. The 2-megapixel CCD sensor in the digital camera ensures that each image reveals extraordinary detail for the most critical publication quality. The progressive scan readout mode provides full resolution in every live and captured frame. A variety of binning and readout modes adapt to both bright and dim signals in the images to ensure near real time live speeds while reducing the risk of photobleaching the most sensitive samples.

Range of use:

→ Fluorescence

Leica DFC350 FX

Monochrome digital camera for fluorescence applications

The Leica DFC350 FX monochrome Digital Camera is specially designed for fluorescence analytical imaging requirements. Featuring 1.4 megapixel resolution and a FireWire interface, it records live cells, sequences of motion and fluorescence specimens or particles that are susceptible to photobleaching, even at the lowest light intensities. High sensitivity in the visible and infrared spectrum ensures reliable results in fluorescence microscopy, especially for GFP and other low illumination applications. The stylish housing is lightweight and compact, and easily attaches to your particular microscope (c-mount).

Range of use:

→ Fluorescence

Leica DFC420

Digital color camera (c-mount) for all applications

Excellent picture quality is essential for precise image analysis, documentation and reporting. The 5 megapixel Leica DFC420 Digital Camera system with multishot technology and FireWire interface provides high-resolution pictures with outstanding detail accuracy and brilliant color reproduction. The Leica DFC420 is the cost-effective alternative to traditional film photography and analog video camera systems. Exceptional picture quality and ease of use make the Leica DFC420 the perfect choice for precise, fast imaging for documentation and analysis.

Range of use:

→ Various

Leica DFC420 C

Digital FireWire color camera for analysis & documentation

The DFC420 C is a high resolution Digital FireWire Camera with integrated Peltier cooling that allows crisp, sharp images to be created without noise, even under low illumination. The advanced 5 megapixel sensor digitizes information of the CCD chip in the camera head, leading to optimum noise suppression and highly detailed images. Exceptional picture quality and ease of use make the Leica DFC420 C a perfect choice for brightfield, darkfield and phase contrast microscopy in life science, industrial and clinical applications. The Leica DFC420 C is compatible with Leica's microscopes, stereomicroscopes and macroscopes and Leica software to form an integrated and powerful imaging system for microscopy applications. Combining the Leica DFC420 C with the new LAS modules provides a sophisticated solution for routine and research analysis.

Range of use:

→ Various

Leica DFC490

Digital color camera (c-mount) for all applications

Range of use:

➜ Various

New applications in life science and industry require innovative approaches to imaging. Quickly producing high quality images for documentation, evaluation and analysis is a key factor for imaging success. The Leica DFC490 digital camera system with multishot technology and FireWire interface provides images for the highest color fidelity, resolution and detail. Real time speeds can be achieved using an array of innovative read-out modes.

The innovative Leica DFC490 integrates an 8 Megapixel CCD, which offers superior quality, ultra high resolution images that were previously only possible with multiple acquisition cameras. High resolution CCD's are especially beneficial for low magnification imaging on microscopes as the amount of information provided by the optical system is much larger than in high magnification conditions.

Leica DFC500

High resolution digital camera system

The Leica DFC500 digital camera system allows versatile use of all modern microscopic procedures in research, development, medicine, science and industry. Leica DFC500 digital cameras, with 12 megapixels and a color depth of 42 bits RGB, take difficult pictures of objects in extremely poor light, e.g. with weak fluorescence.

Range of use:

→ Various

Leica IC 3D

Digital color camera for M stereomicroscopes

Leica Microsystems is proud to produce the most complete 3-D microscopic imaging system. Images that could previously only be visualized through stereoscope eyepieces can now be captured and displayed electronically. Starting with a high-performance stereo-microscope, we add a dual-chip digital camera which can produce a true 3-D image on screen for training purposes and capture these images for further processing to reveal specimen measurement data such as profile, surface area, and volume. The complete 3-D picture of microscopic specimens, from eyepiece to on-screen to topographical measurements, is now at your fingertips.

Range of use:

→ Various

Leica IC A

Integrated video module for M stereomicroscopes

The Leica IC A is an ergonomic, reasonably priced, high-performance video camera for Leica M stereomicroscopes and for the Leica Colposcope.

The Leica IC A opens up new horizons in industrial quality control, in the interpretation of thin section images, in education, in medicine, in the demonstration of images to large groups of people, and in digital post-processing.

Range of use:

→ Various

Leica ICC A

Analog video camera for compound microscopes (DML series)

The Leica ICC A is an ergonomic, reasonably-priced, high-performance video camera for Leica DM L microscopes. The Leica ICC A opens up new horizons for the image analysis of thin sections in science, for education, medicine, industrial quality control, as well as for training, live presentations to large audiences, and digital post-processing.

Range of use:

→ Various

Surgical Microscopes

Surgical Microscopes

www.leica-microsystems.com/Surgical_Microscopes

Leica DI C500

Digital imaging color module for surgical microscopes

All important and necessary patient data can now be displayed in the Leica M525/M520/M500N optical platform on the Leica OH4, OH3, MS3 or F40 with a multitude of benefits: highest brightness, contrast >300:1, true color and 1024x768 pixel resolution.

The new Master-I-View™ function allows the surgeon to observe the data with his dominant eye, left or right. Leica's Quad-Shutter Technology™ automatically controls the appearance of different data types by taking care of the individual setup. A lightsaving, ergonomic beamsplitter design rounds off the outstanding functionality of this new Leica module.

Range of use:

- Neurosurgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Documentation System

Leica ULT500

Ultra observation unit for surgical microscopes

The Leica ULT500 (Leica Ultra Observer) is the new lightsaving solution for complete and flexible co-observation for all applications with the M525/M520/M500N optics carriers as in neurosurgery, spinal surgery or ENT.

A compact design allows better ergonomics for the surgeon and the assistants, the observation ports can easily be switched. Modular like all Leica accessories, the Leica Ultra Observer can be mounted easily and directly to any Leica OH4, MS3 or F40 as well as to any previous model such as Leica OH3, OHS1, MS2 or MS1.

Range of use:

- Neurosurgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Documentation System

Leica Zoom Video Adapter

Zoom video adapter with integrated fine focus and neutral density filter

The Leica Zoom Video Adapter produces images with a previously unobtainable brilliance and natural color intensity. Changing the magnification and refocusing for the most successful documentation is now possible, in standard situations or in teaching.

The Leica Zoom Video Adapter fits individual requirements. Whether the surgeon already has or wants to acquire a 1-chip CCD or a 3-chip CCD camera with C-mount, Leica's Zoom Video Adapter integrates perfectly to compensate varying light intensities of any available screens and video cameras.

Range of use:

- Ophthalmic Surgery
- Neurosurgery
- ENT Surgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Veterinary Surgery
- Documentation System

Leica M300

Diagnostic microscope system with surgical optics and 5-step magnification

We believe that excellent diagnosis is just as important as a successful operation. That's why we designed the Leica M300 to the same high quality specifications as our reputed surgical microscopes. The result: images of a standard you won't find in any other diagnostic microscope.

Although the Leica M300 naturally does not have all the features of a surgical microscope, it shows you more diagnostic details than any conventional product. There is no other diagnostic microscope offering anywhere near the same light intensity and imaging quality.

Range of use:

- ENT Surgery
- Gynaecologic Surgery
- Dental Surgery
- Veterinary Surgery

Leica M400 E

Surgical microscope for ENT surgery, with 5-step magnification

Range of use:

- ENT Surgery
- Gynaecologic Surgery
- Dental Surgery
- Veterinary Surgery

The Leica M400 E offers brilliant optics with outstanding field depth and superlative contrast. Brought straight to the operating table with the long swivel arm, the Leica M400 E incorporates Leica's patented one-hand-movement system, an extremely smooth balancing system for reliably fast and precise positioning.

Besides the integrated halogen illumination with coaxial light beam there is also an optional light intensifier or a xenon light source. The standard configuration has a wide range of accessories for shared viewing and documentation. Thanks to its compact design, surgery is more comfortable and more efficient.

Leica M525 F40

Surgical microscope system for neuro-, ENT-, & PRS surgery

The new Leica M525 F40 provides unique support for neurosurgeons, ENT, and spinal specialists during surgery. Leica's M525 OptiChrome™ premium optics and the compact Leica F40 stand are the perfect answer to the challenges of microsurgery.

Best viewing, perfect balance, easy mobility, optimal stability and excellent value for money all define this new Leica microscope system. The slim design of the Leica F40 stand conceals innovative engineering that provides a unique homogeneity of movement. Sophisticated interface solutions make the Leica M525 F40 compatible with neuronavigation/IGS systems.

A new feature of the Leica M525 microscope is **AutoIris™** – the coupling of the illumination brightness control to the working distance for even more reliable work at short distances.

Range of use:

- Neurosurgery
- ENT Surgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Veterinary Surgery

Leica M525 MC1

Surgical microscope system for neuro-, ENT-, & PRS surgery

Range of use:

- Neurosurgery
- ENT Surgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Gynaecologic Surgery
- Dental Surgery
- Veterinary Surgery

The Leica M525 MC1 features the premium OptiChrome™ optical system. It stands securely on the floor and can be positioned quickly and precisely. Its unique balancing system provides the best possible support for ENT surgery, neurosurgery and a variety of multidisciplinary applications. Leica ErgonOptic™ offers a range of observation options.

Standard features include a 300 W high-performance xenon lamp, motorized 6:1 zoom and motorized focus via multifocal lens from 207 mm to 470 mm – both with variable speeds. The intelligent ISUS setup system supports custom configurations and fast responses by the surgical team thanks to the autodiagnostic function.

A new feature of the Leica M525 microscope is **AutoIris™** – the coupling of the illumination brightness control to the working distance for even more reliable work at short distances.

Leica M525 MS3

Surgical microscope system for neurosurgery

The Leica M525 MS3 is a robotic stand with premium OptiChrome™ optics for neuro-, spine surgery and ENT. Due to the six electromagnetic brakes, the stand can easily be moved in six axes and is also combined with robot movements in three axes.

New, easy-grip handles of robust cast metal have been designed for ergonomic positioning. Each handle has an easy-to-operate joystick to activate the motorized XY adjustment of the optics carrier. A 150° inclination range combined with an ultra compact optical microscope allows the surgeon to adjust the position of the microscope comfortably even during extremely difficult operations. Ready for XY-tool-tracking with IGS.

A new feature of the Leica M525 microscope is **AutoIris™** – the coupling of the illumination brightness control to the working distance for even more reliable work at short distances.

Range of use:

- Neurosurgery
- ENT Surgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery

Leica M525 OH4

Premium surgical microscope system for neurosurgery

Designed and manufactured using superior materials and the highest quality standards, the premium Leica M525 OH4 is built for long service life and outstanding reliability. The Leica M525 OH4 fulfils Leica's vision of providing the best viewing conditions and the greatest maneuverability to enable successful surgery.

The Leica M525 OH4 stand not only complements Leica's M525 optics, but also adds to the overall microsurgical experience with superior movement, innovative illumination and user-friendly features.

Range of use:

- Neurosurgery
- ENT Surgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery

Leica M620 F18

Floorstand surgical microscope system for ophthalmology

The new Leica M620 F18 is a perfect balance of form and function. Precision optics combined with finest mechanics make the Leica M620 F18 an outstanding choice. Swiss design, quality and precision – the Leica M620 F18 meets the needs of modern day ophthalmic surgery.

The Leica M620 features Leica's exclusive OptiChrome™ optics combined with Leica's exclusive Direct Halogen Illumination system. As a result of more than 25 years of experience in developing surgical microscopes dedicated to ophthalmology, the new Leica M620 F18 offers the quality and reliability of a premium surgical microscope at an attractive price/performance value.

The new Leica M620 F18 floorstand is compact and moves easily. With the new high-quality precision bearings and a long swingarm, the stand is highly maneuverable and easy to set up for surgery.

Range of use:

- Ophthalmic Surgery
- Veterinary Surgery

Leica M620 TTS

Table top microscope system for ophthalmology

High-caliber teaching equipment is a fundamental prerequisite for the best learning environment. Using a high-quality microscope under the supervision of a qualified specialist is one of the keys to successful advanced education and practice.

The new Leica M620 TTS (table top stand) microscope meets the needs of surgical trainees as well as trainers. The M620 TTS microscope system offers brilliant resolution, a large depth of field with outstanding stereopsis, and natural color reproduction on a convenient table top stand.

Range of use:

→ Ophthalmic Surgery

Leica M651

High-performance multidiscipline medical microscope as well as non-medical stereomicroscope, with 5-step magnification

The Leica M651 has been specially designed for use in microsurgery and is well known for its remarkably clear, sharp images, great depth of field, pronounced 3D effect, high light intensity, and its faithful color rendering.

Due to its high perfomance, the Leica M651 is also used for various technical, industrial and research applications. The brilliant Leica optics in combination with an easy to handle and stable floor stand perfectly support the work in all of these fields and offer an outstanding price performance ratio.

Range of use:

- Gynaecologic Surgery
- Veterinary Surgery

Leica M651 MSD

Table top microscope for teaching and practice

Range of use:

- Ophthalmic Surgery
- Veterinary Surgery

The table top model of the field proven Leica M651 surgical microscope offers beginners ideal conditions for practicing microsurgical techniques. It is equally suitable for advanced surgeons who want to refresh their skills.

The Leica M651 MSD is well known for its peak performance in image definition, depth of field range, stereopsis, light intensity and color rendering: ideal conditions for prospective surgeons to get used to their own hand movements in a magnified image, learn to differentiate between minuscle features and learn to use the finest surgical thread available.

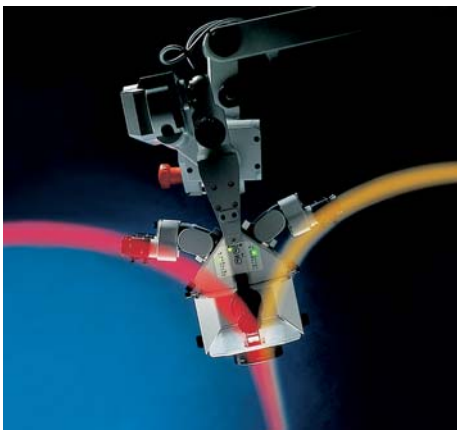
Leica M680

Dual surgical microscope

The unique "two-in-one" surgical microscope Leica M680 has been specially designed to provide ideal conditions for two surgeons working together. Leica's unique 2x2 formula is represented by two independent zoom systems and two independent focusing systems with a remarkable depth of field and an outstanding wide field of view.

Besides conventional operating, one push of a button couples the two magnification changers, allowing solo operations to be performed with the Leica M680 while retaining the individual focusing facilities.

Thanks to Leica M680 you simply see better and more.



Range of use:

- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Gynaecologic Surgery
- Veterinary Surgery

Leica M820 F19

Surgical APO microscope system for ophthalmology

With the Leica M820 F19 high performance microscope with OptiChrome™ optics for ophthalmic surgery Leica Microsystems expands its product range of the M8 series for demanding ophthalmology.

The combination of excellent optics with comfortable handling and easy maneuverability of the Leica F19 compact stand sets the Leica M820 F19 apart as a surgical microscope with an outstanding price performance ratio.

Range of use:

→ Ophthalmic Surgery

Leica M844 F19

Surgical APO microscope system for ophthalmology

The Leica M844 with its Leica F19 stand contains four high precision mechanical friction brakes for homogenous arm movement and high operating stability. The Leica M844 F19 carries the original APO OptiChrome™ optics, stands on the same small footprint and holds the same two-in-one display and XY unit as the Leica M844 F40.

Range of use:

→ Ophthalmic Surgery

Leica M844 F40

Surgical APO microscope system for ophthalmology

Range of use:

→ Ophthalmic Surgery

The Leica M844 F40 is the premium class surgical microscope system for ophthalmology. Optimal lighting conditions are provided by the Leica direct halogen illumination system for improved contrast and Red Reflex.

The original APO OptiChrome™ optics in conjunction with the Quad-Zoom™ zoom system guarantee optical brilliance. APO OptiChrome™, in combination with the Leica F40 floor stand, are the ideal answers to the challenges of ophthalmic microsurgery in the 21st century.

The Leica M844 F40 provides the best preconditions for safe, fatigue-free work – regardless of the physical size and posture of the user.

Leica 2D

Compact camera module for microsurgical applications

The Leica 2D video system offers you two smart solutions for microsurgical video imaging: The Leica 2D pick-up system, an integrated camera module to fit on all Leica M series and the Leica 2D C-mount for an installation with standard video adapters.

The compact minimal-height design ensures optimal ergonomic conditions. The separate 2D camera control unit provides you with a BNC, S-Video and RGB output signal and ensures that all commercially available TV monitors can be used with the system.

Range of use:

- Ophthalmic Surgery
- Neurosurgery
- ENT Surgery
- Orthopaedic Surgery
- Plastic/Reconstructive Surgery
- Veterinary Surgery
- Documentation System

Leica MDRS4

Leica medical digital recording system

The **new** Leica MDRS4 is a compact, powerful digital recording system, specifically designed to mount on a surgical microscope. The Leica MDRS4 provides a completely integrated yet independent video recording system.

The Leica MDRS4 records directly to a 100 MB hard drive and if desired synchronally to a USB drive. Within 15 minutes a complete DVD will be burnt. The new Leica MDRS4 is the ideal solution to create high-quality videos and still images for networking, documentation and archiving to patient records.

Range of use:

→ Documentation System

Histology Systems and Materials Sectioning

www.leica-microsystems.com/Histology_Systems
www.leica-microsystems.com/Materials_Sectioning

Leica IP C & IP S

Modular printing systems for cassettes and microscope slides

Comfortable, error-free printing at high resolution. Every Leica machine is designed for high throughput. This also applies to our new Leica IP C and IP S ink-jet printing systems for automated imprinting of microscope slides (Leica IP S) and specimen cassettes (Leica IP C). The two all-new printers offer unmatched printing quality without compromising on printing flexibility: one- and two-dimensional barcodes, logos, photographs, and alphanumeric characters. All data remain clearly legible as the imprints are chemically and mechanically resistant. Furthermore, errors arising from manual labeling are simply a thing of the past.

Range of use:

➜ Histology Printing Systems

Leica ASP300 S

Fully-enclosed tissue processor

The Leica ASP300 S smart, fully enclosed tissue processor is designed for routine and research histopathology. Proven technology combined with top quality components and Leica´s RemoteCare™ diagnostic (optional) provide superior instrument reliability. Straightforward routine user operations by an intuitive user interface, color touch screen and a variety of "smart" features, such as Reagent Management System and quick start for commonly used programs, improve specimen quality and laboratory economy.

Range of use:

→ Tissue Processing

Leica Peloris™

Rapid tissue processor

Range of use:

➜ Tissue Processing

Peloris is a rapid tissue processor that creates high quality results for any tissue. It has a xylene-free option and a unique ActivFlo™ system that generates ideal processing conditions. A range of consumables adds extra value with solid Parablocks™ wax for easy, safe wax transfer, cassettes that eliminate biopsy pads, and reagents to completely eliminate xylene. With Peloris, any laboratory can enjoy the confidence of high quality results while meeting new workflow challenges like reduced turnaround times, Lean production and same day diagnosis.

Peloris is a high-productivity system that is ideal for laboratories pursuing Lean Histology™ and six sigma principles.

Leica EG1150

Modular tissue embedding system

The Leica EG1150 modular tissue embedding center incorporates two separate components, the Leica EG1150 C cold plate and the Leica EG1150 H heated paraffin dispensing module. The independent modules offer the flexibility to arrange embedding workflow in either direction (left to right or right to left) to suit the user's needs.

For orienting specimens from biopsies and other, especially very small specimens, an adjustable magnifier is available as an option.

Range of use:

→ Embedding

Leica EG1160

Embedding center, dispenser and hot plate

Range of use:

➜ Embedding

Compact dimensions, ease of operation, and excellent standards of convenience and safety characterize the Leica EG1160 paraffin embedding station. The separately heated paraffin dispensing system of the Leica EG1160 with an integrated filter ensures constant, reproducible paraffin flow at ten different flow rate settings.

All instrument functions – including the automatic starting time – are individually programmable at just the press of a button. Large and temperature-controlled hand rest areas give the user maximum freedom of movement.

The Leica EG1160 offers a wide range of accessories (cold light source, vacuum attachment and magnifier).

Leica LN22

Nitrogen freezing device

The Leica LN22 liquid nitrogen freezing attachment was designed specifically for use with the Leica RM2265 rotary microtome. Sections of uncompromising quality can be obtained from even the most challenging specimens in the fields of industry and materials research – at section thickness settings between 0.25 and 100 µm and working temperatures as low as -150 °C.
With the Leica RM2265, changing from ambient temperature to low-temperature sectioning and vice versa can be realized quickly and easily.

Range of use:
→ Sectioning

Leica RM2125

Manual rotary microtome

The Leica RM2125 compact rotary microtome – the standard for laboratory routine. It is designed specifically for paraffin sectioning applications in routine laboratories. Offering the latest in technology at a very attractive price/benefit ratio the focus is set on what is essential without compromising on sectioning quality, ease of operation and user safety. With our tailor-made range of optional accessories, you can set up these instruments in virtually any configuration for both routine and special applications.

Range of use:

➜ Sectioning

Leica RM2235

Manual rotary microtome

The Leica RM2235 is a robust rotary microtome designed for manual sectioning of primarily biological specimens embedded in paraffin. Low-maintenance cross roller bearings for horizontal and vertical specimen movement ensure accurate reproducibility of the section thickness and optimum quality even when sectioning hard tissues. It boasts numerous features previously unavailable in this microtome class. The Leica RM2235 comes in two different basic versions and in different configurations to meet all current user requirements in the field of clinical histopathology.

Range of use:

→ Sectioning

Leica RM2245

Semi-motorized rotary microtome

Range of use:

➜ Sectioning

The RM2245 is a semi-motorized rotary microtome, designed for routine and research applications in histology, histopathology and industrial quality assurance laboratories. Manual sectioning is enhanced by the high-precision motorized specimen feed, which results in efficient operation with maximum section reproducibility. With the Leica RM2245 there is a choice between the conventional manual sectioning method of full handwheel rotation and the "rocking mode". In rocking mode, the handwheel is only turned back and forth over a short distance. The RM2245 comes with a holder system for disposable blades, a size-optimized control panel and a precision specimen orientation with clear zero reference point.

Leica RM2255

Fully motorized rotary microtome

The Leica RM2255 rotary microtome, designed for fully motorized sectioning of both paraffin- and resin-embedded specimens, offers a broad application spectrum in routine and research laboratories in histology as well as in industrial materials and quality control. Its two-in-one design concept, which allows motorized as well as manual sectioning, provides reproducible quality sections. The entire accessory line including knife holders, specimen clamping systems and specimen orientation device has been re-engineered providing the most superior technology available on the microtomy market.

Range of use:

→ Sectioning

Leica RM2265

Fully motorized rotary microtome

The Leica RM2265 is Leica's top-of- the-line fully motorized and programmable rotary microtome designed primarily to satisfy the requirements of biomedical researchers sectioning hard to semi-soft materials and customers needing to section industrial materials for quality assurance and materials defects analysis. The RM2265 is also the instrument of choice for sectioning at ultra-low temperatures (-150 °C) in combination with the Leica LN22 liquid nitrogen freezing attachment.

Range of use:

→ Sectioning

Leica SM2000 R

Sliding microtome

The Leica SM2000 R sliding microtome with low-maintenance cross-roller-bearing guideways is designed to section paraffin-embedded samples in routine histopathology laboratories. The SM2000 R can also be used for the specific industrial applications of foam and wood sectioning. The easy-to-use knife holder is designed to accommodate both standard knives and disposable blades. The instrument is available fully equipped to meet most of today's sliding microtome sectioning requirements or can be customized to meet more special applications.

Range of use:

→ Sectioning

Leica SM2400

Sliding microtome (paraffin, plastics)

Designed for biomedical and industrial applications, the Leica SM2400 is a universal instrument for a variety of applications in all laboratories where paraffin or various industrial materials need to be sectioned. Its sturdy construction lends it qualities that ensure excellent sectioning results. The safety features of the system, such as a sledge locking device and knife guard are some of the outstanding features to guarantee convenient operation.

Range of use:

→ Sectioning

Leica SM2500 & SP2600 Ultramiller

Heavy-duty sliding microtome with separate electronic control unit

Superior system for sectioning and surface preparation of large and hard specimens.

The Leica SM2500 is the microtome of choice for all sectioning applications involving large and hard specimens. You can configure the Leica SM2500 for applications in both biomedicine and industry using the wide range of accessories.

In addition, the Leica SM2500 can be fitted with the optional ultramilling attachment Leica SP2600 for preparation of particularly high-quality specimen surfaces.

Range of use:

- Sectioning
- Ultramilling

Leica SP1600

Saw microtome

Range of use:

➜ Sectioning

The Leica SP1600 saw microtome is designed for cutting hard and brittle materials such as bone and teeth embedded in methyl methacrylate with or without implants with a maximum size of 35 mm in diameter. Implant materials such as steel, titanium or bioceramics cause no problems for the Leica SP1600 saw microtome. It is used in structural bone research laboratories, dental institutes and various industrial laboratories. The specimen is clamped in the center of a diamond-coated internal-hole saw and pushed by a spring mechanism against the saw blade which rotates horizontally at a speed of 600 rpm, producing specimen slices of the desired thickness.

Leica SP9000

Automatic knife sharpener

The Leica SP9000 knife sharpener is designed for resharpening c-profile microtome knives up to 22 cm in length, giving a used knife edge the sharpness of a new or factory-reconditioned knife. The knife is resharpened by clamping it in the knife holder at a fixed angle. The transparent plastic cover of the instrument is closed during the honing procedure to ensure safe operation and to avoid dust and grinding particles being scattered over the work place.

Range of use:

→ Sectioning

Leica VT1000 S

Vibrating blade microtome

Range of use:

➜ Sectioning

The Leica VT1000 S is a vibrating blade microtome, designed specifically to meet the highly sophisticated sectioning requirements in the fields of neurophysiology, neuropathology and experimental (brain) research – such as patch-clamping technique – and some industrial applications related to structural analysis of foam and other very soft materials.

The Leica VT1000 S can easily be adapted, depending on the application, by altering the frequency between 0 and100 Hz and by selecting the appropriate amplitude (0.2 to 1 mm in 5 steps). The instrument features a very fine adjustable knife advance speed between 0.025 to 2.5 mm/s and programmable sectioning window and specimen retraction.

Leica VT1200 & VT1200 S

Vibrating blade microtome

The Leica VT1200 and VT1200 S vibrating blade microtomes are designed for sectioning of unfixed tissue specimens. The Leica VT1200/S microtomes feature a blade holder design that minimizes vertical deflection of the blade and protects delicate specimens, such as brain, spinal cord and other mammalian tissues, from mechanical damage. Instrument stability and minimal vertical deflection result in sections of the highest quality, while retaining viable cells on the section surfaces in greater numbers.

The semi-automated Leica VT1200 is designed for users who prefer to control the sectioning parameters manually, whereas the Leica VT1200 S is the fully automated and recommended model for multi-user laboratories.

Range of use:

→ Sectioning

Leica CM1100

Bench top cryostat for clinical pathology

State-of-the-art technology and perfect user friendliness characterize the large Leica cryostats – distinctive features which are also available in a compact, portable design. With the need for mobile diagnostics ever increasing, the Leica CM1100 is the ideal cryostat for safe and fast on-the-spot evaluation – at the same time it is also an excellent back-up instrument. With a total weight of only 50 kg, the Leica CM1100 can be easily carried and be transported in practically any vehicle.

Range of use:

➜ Sectioning

Leica CM1510 S

Cryostat for routine histology

The Leica CM1510 S is a cryostat which reliably meets all demands in routine cryomicrotomy and excels by outstanding economic efficiency: a very attractively priced instrument which leaves nothing to be desired in its class; compact dimensions – especially advantageous in laboratories where space is limited; high specimen throughput for rapid and efficient performance, and a proven track record of reliability. And of course – just as any other Leica product – the Leica CM1510 S offers exemplary safety standards and is capable of fulfilling even the most exacting operator requirements for excellent ergonomics.

Range of use:

→ Sectioning

Leica CM1850

Cryostat for clinical applications

The Leica CM1850 cryostat for standard applications in the clinical histopathology laboratory is designed for easy use and a high-volume workload. The insulation technology used enhances the durability of the refrigerating system and maintains stable cryochamber temperatures even when operating the instrument under unfavorable environmental conditions.

Range of use:

➜ Sectioning

Leica CM1850 UV

Cryostat for routine histology

The Leica CM1850 UV incorporates the proven excellent features of its predecessor – and much more. It is equipped with an optimized refrigeration system affording extremely short specimen freezing times.
The cryochamber can be disinfected quickly and effectively at any time with ultraviolet light (UVC) for increased operator safety. UV surface disinfection significantly reduces the danger of infection by bacteria, spores and viruses.
Leica's new, antimicrobial nano-silver coating, AgProtect™, provides outstanding protection to cryostat users by reducing exposure to surface pathogens. Leica's AgProtect™ covers the cryostat's outside surfaces and protects the operator and other individuals in the work area by penetrating the membranes of microbes to prevent replication. The outstanding safety of the CM1850 UV has been tested and certified by an independent laboratory.

Range of use:

→ Sectioning

Leica CM1900

Rapid sectioning cryostat for routine diagnostics

The versatile and uncomplicated use of the Leica CM1900 as well as the reliable results obtained make it the instrument of choice in many routine as well as advanced cryostat applications. The open top stainless steel cryochamber with separate specimen cooling is easily accessible and offers ample space for convenient working and storage of specimens. The cryostat can be easily disinfected with the Leica Cryofect spray at a temperature of around -20° C.

Range of use:

→ Sectioning

Leica CM1900 UV

Rapid sectioning cryostat for routine diagnostics

The Leica CM1900 UV comes with excellent references: the efficient germicidal effect of UVC rays for surface disinfection in the Leica CM1900 UV cryostat has been proven by an independent laboratory. Expert opinion furnishes detailed information on the test procedure and the efficacy of the method. The procedure is ozone-free and non toxic for the user. Userfriendly selection between short and long term exposure can be initiated without the need of changing the operating temperatures. UVC surface disinfection is effective at ambient, mid or low range temperatures and can be terminated to allow urgent incoming cases to be immediately sectioned.

Range of use:

→ Sectioning

Leica CM3050 S

Research cryostat

The Leica CM3050 S cryostat was designed primarily for the demanding needs of cryosectioning systems in the field of biomedical, neuro-anatomical and pharmaceutical research. Particularly when working with delicate specimens – for example brain samples in neuroscience – the precise specimen orientation and the specimen feed system via step motor guarantees reproducible thin serial sections of maximum quality. The Leica motorized CM3050 S is available with or without active specimen cooling. An ergonomic height adjustment can be retrofitted, enabling the user to operate the cryostat in a sitting or standing position.

Range of use:

→ Sectioning

Leica CM3600 XP

Cryomacrotome

The Leica CM3600 XP is a fully computerized cryomacrotome for whole-body sectioning primarily in the fields for quantitative investigation of the effect of labeled compounds, pharmaceuticals and (bio)-chemicals in pre-clinical studies, as well as detailed anatomical and morphological analysis.

The Leica CM3600 XP instrument software based on Windows^{xp} allows the creation and recording of GLP compliant documentation.

Sections of reproducible thickness can be produced with the sturdy heavy duty microtome and directly dehydrated in the large stainless steel cabinet. The standard knife holder allows sectioning of specimens of up to the size of 450x150x160 mm (LxWxH).

Range of use:

→ Sectioning

Leica CV5030

Robotic coverslipper

The Leica CV5030 fully automated glass coverslipper produces slides with superior optical quality for reliable long-term storage. It is designed to coverslip microscope glass slides bearing tissue sections or cytopathology smears. The capability of handling a large variety of slide racks from different suppliers makes the Leica CV5030 a most flexible instrument. All common mounting media, including xylene-free varieties, can be used according to individual operator settings. The system is capable of high-throughput coverslipping of more than 500 slides per hour using standard microscope slides and glass coverslips of different sizes. The operator can choose between wet and dry coverslipping.

Range of use:

→ Coverslipping

Leica ST4040

Linear stainer

The Leica ST4040 Linear Staining System is designed to meet the current and future needs of today's high throughput staining laboratories. Routine applications such as H&E can be run at a throughput capacity of up to 1000 slides per hour. The modular design of the system allows the customer utmost flexibility in instrument configurations to meet the needs in both staining volume and workflow of histopathology and cytopathology laboratories. In addition, optional loading and unloading stations are available to further increase capacity.

Range of use:

→ Staining

Leica ST5010

Autostainer XL

The Leica Autostainer XL is a robotic staining system for performing all standard routine staining methods of thin sections mounted on glass slides. The system is a fully self-contained bench top unit with 18 reagent stations, an integrated oven and 5 wash stations with flow control valves. Continuous loading and unloading of slide carrier racks ensures that the instrument is flexible even when the workload is high.

In addition, the Leica ST5010 can accommodate up to 11 slide racks containing 30 slides each, processing at least 200 slides per hour, depending on the program run.

Range of use:

➜ Staining

Leica ST5020

Multistainer

With the Leica ST5020 Multistainer, a new level of performance is introduced to the pathology laboratory. This new system was designed to achieve perfect staining results and enable modern histology and cytology laboratories to experience an unsurpassed level of flexibility. Both routine and special staining protocols can be performed alone or in combination to produce consistent and high-quality staining results.

The Leica ST5020 features a unique user interface built around a solvent-resistant color touch screen.

Based on a modular design principle, the Leica ST5020 can be easily set up to meet individual laboratory needs.

Range of use:

→ Staining

Leica TS5015

Transfer station to automate the staining and coverslipping process between ST5010 (Autostainer XL) and CV5030

The Leica TS5015 Transfer Station interfaces the Leica Autostainer XL (ST5010) with the Leica CV5030 Coverslipper.

The Leica ST5010 is the solution for automated, routine slide staining in histology and cytology. Since its introduction, it has been technically enhanced and made in Germany according to the highest manufacturing standards. With the availability of the CV interface, thousands of laboratories now have the unique opportunity to upgrade to a walk-away system and significantly reduce hands-on time.

The simple operation makes the CV5030 easily adaptable to the varying requirements of routine samples, such as histology sections, cytology smears or monolayer preparations.

Range of use:

→ Staining

Leica TS5025

Transfer station to automate the staining and coverslipping process between ST5020 (Multistainer) and CV5030

The Leica TS5025 Transfer Station interfaces the Leica ST5020 (Multistainer) with the Leica CV5030 Coverslipper. Both instruments can be combined to set up an integrated, fully automated staining/coverslipping workstation. Together, the Leica ST5020 Multistainer and the CV5030 Coverslipper create a highly flexible system featuring walk-away convenience.

After a staining process is finished, the slide racks are transported via the transfer station from the stainer into the coverslipper.

Range of use:

→ Staining

Leica Bond™

Fully automated IHC and ISH

Range of use:

➜ Staining

The fully integrated Bond system is improving the quality and workflow of IHC and ISH staining. With complete automation and specially developed reagents (including ready-to-use antibodies), the Bond system eliminates unnecessary manual handling and ensures consistency at every step.

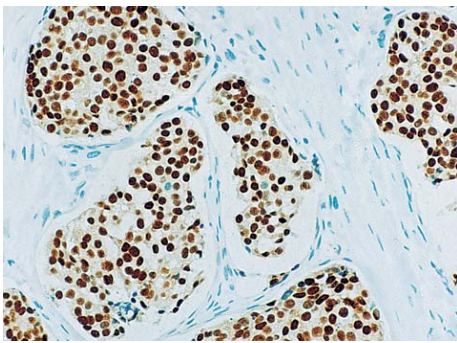
Bond also has a unique continuous processing capability with three independent slide trays. This allows laboratories to start slides as soon as they are ready while retaining capacity to add more slides at any time. Continuous processing ensures stained slides are ready exactly when they are needed.

Bond is a high-productivity system that is ideal for laboratories pursuing Lean Histology™ and six sigma principles.

Leica Novocastra™

IHC and ISH reagents

The Novocastra reagent range includes antibodies, probes, detection systems and ancillaries. These advanced products reflect over 20 years of development experience and provide superior results for immunohistochemistry and in situ hybridization. Manufactured in-house by Novocastra scientists, these products have earned a reputation for quality and innovation. Our highly qualified scientific team collaborates closely with key opinion leaders. This ensures our latest products focus on diagnostically useful target proteins and are effective on formalin-fixed, paraffin-embedded human tissue. The range contains over 1,400 products and is continually expanding with new clinically-focused reagents.



Range of use:

→ Staining

EM Sample Preparation

EM Sample Preparation

www.leica-microsystems.com/EM_Sample_Preparation

Leica EM UC6

Ultramicrotome for ultrathin sectioning and facing

The Leica EM UC6 Ultramicrotome offers a range of outstanding features and benefits of use from the absolute beginner to the skilled ultramicrotomist. The eucentric movement of the viewing system allows examination of sections even with lowered water level (as with e.g. Lowycryl) without loss of ergonomic posture. Defined positions provide optimal positioning of the stereo microscope for alignment with glass and diamond knives. The innovative touch sensitive control unit of the Leica EM UC6 enables fast and safe alignment of knife and specimen with help files and prompts to hand for beginners. The AutoTrim function with programmable knife and cutting movements simplifies the trimming process.

Range of use:

- ➜ Industrial Materials
- ➜ Biological Specimens

Leica EM FC6

Low temperature sectioning system for Leica EM UC6

The Leica EM FC6 cryochamber is designed for low temperature sectioning of biological and industrial samples at temperatures from -15 to -185°C. It sets new standards in cryosectioning, not only for TEM but also for LM, SEM and AFM.

The Leica EM FC6 has been designed in accordance with customer requests for a more ergonomic, easy-to-use instrument with a wider temperature range and increased sectioning stability. Ergonomic hand rests ensure fatigue-free cryosectioning, while the integration of the EM FC6 controls in the control unit of the Leica EM UC6 saves space on the desk and the LED illumination of the chamber ensures a perfect view of the sections.

Range of use:

- Industrial Materials
- Biological Specimens

Leica EM FCS

Low temperature sectioning system for Leica Ultracut UCT

Range of use:

- Industrial Materials
- Biological Specimens

Low temperature sectioning system for biological and industrial samples at temperatures as low as -185°C. The FCS fits onto the Ultracut UCT, Ultracut R and Ultracut S becoming an integral part of the instrument. Sections can be made on either glass or diamond knives, the knife holder accommodating both plus a trimming tool.

Features include: contact free, through-the-wall, specimen holder system, open top design with no cover allowing easy access and no disturbing ice-condensation. Warmed external surfaces for operator comfort. Memory for 3x3 settings of knife, specimen and gas temperature. Accurate control of specimen, knife and chamber gas temperature. Alignment of knife with self-locking drives from outside the chamber.

Leica EM AC20

Automatic contrasting instrument for electron microscopy

The Leica EM AC20 is a new generation of automatic contrasting instruments for ultra-thin sections, developed in close cooperation with the scientific community. Not only does the Leica EM AC20 deliver high quality contrasting results but does so with a much lower reagent consumption. The instrument uses a peristaltic pump and non-contact valves, which means the reagents travel through nothing but tubing on their way to the chamber where the grids are located. This equals good results and easy maintenance.

Range of use:

→ Biological Specimens

Leica EM AFS2

Automatic freeze substitution system

The new Leica EM AFS2 is capable of freeze substitution and progressive lowering of temperature (PLT) techniques as well as allowing low temperature embedding and polymerization of resins. A stereomicroscope for viewing and positioning of the samples is available and the LED illumination from within the chamber makes work easy.

The freeze substitution processor EM FSP is an automatic reagent handling system. Sitting on the EM AFS2, it dispenses reagents for both freeze substitution and PLT techniques.

Range of use:

➜ Biological Specimens

Leica EM AMW

Automatic microwave tissue processor for electron microscopy

With the unique Leica EM AMW, tissue can be rapidly processed, embedded and polymerized into resin for subsequent electron microscopy analysis with unmatched automation, in hours rather than days. Leica's patented combination of microwave chamber and automatic reagent changer minimizes the manual effort and greatly speeds up processing time. Users can dedicate the time saved to other tasks and laboratory workflow can be significantly streamlined. The mono-mode microwave chamber of the Leica EM AMW focuses the energy on a defined area, resulting in a homogenous field pattern surrounding the sample, without hot and cold spots and negating the need for water loads. A software-controlled, non-contact infrared sensor monitors the temperature during processing and ensures accurate and reproducible results.

Range of use:

→ Biological Specimens

Leica EM CPC

Universal cryofixation and cryopreparation system

The modular design of the Leica EM CPC cryoworkstation facilitates quick and easy change of the cryofixation modules allowing plunge freezing of tissue into propane, bare grid method with ethane or metal mirror freezing (slam freezing) onto gold coated copper blocks.

Range of use:

➜ Biological Specimens

Leica EM IGL

The first automated immunogold labeling system

The first automated immunogold labeling system, the innovative Leica EM IGL, sets a new industry standard by automating the tedious, time-consuming manual process of immunogold labeling. The Leica EM IGL offers many advantages such as the simultaneous labeling of 24 grids as well as the ability to use up to 24 different primary antibodies in one run.

Automation with the EM IGL saves up to 80% of the user's time, thus saves costs and frees technicians for more productive activities.

Specimen safety is ensured by applying the correct sequence of reagents and minimizing cross contamination from forceps and loops during labeling. Reproducible results can be achieved time after time as the EM IGL follows the exact incubation times specified in the protocol.

Range of use:

→ Biological Specimens

Leica EM KMR2

Glass knifemaker

The Leica EM KMR2 glass knifemaker produces 45° glass knives from 6.4, 8 and 10 mm thick glass utilizing the balanced-break method. This method begins with a standard 400 mm long glass strip in any of the three thicknesses and continuously breaks the strip into equal halves. You then have a number of flat sided squares perfect for making 45° knives suitable for light and electron microscopy applications.
Accessories include knife boxes, scoring wheels and trufs, the ultramicrotomist's standard boat for glass knives.

Range of use:

- ➜ Industrial Materials
- ➜ Biological Specimens

Leica EM MM80 E

Metal mirror cryofixation system for impact freezing

The Leica EM MM80 E Metal Mirror Cryofixation system consists of an LN2 cooled gold coated, highly pure copper block used for the impact freezing (slam freezing) of samples such as tissues and cell suspensions to form a vitreous ice layer (vitrification) for freeze substitution and subsequent Transmission Electron Microscopy (TEM). This instrument ensures high quality results with simple operation, low initial costs, and low operating expense. In standby mode it uses less than 1 liter LN2/hour. The heating cycle automatically switches off after use.

Range of use:

→ Biological Specimens

Leica EM MP

Multi-heating plate

The Leica EM MP multiplate (hotplate) features three different temperatures for mounting trufs onto glass knives, drying semithin sections on glass slides and staining semithin sections. A perfect tool for the specimen preparation laboratory.

Range of use:

→ Biological Specimens

Leica EM PACT2

High pressure freezer

The new Leica EM PACT2 High Pressure Freezer is the first step in the preparation of samples for many subsequent techniques, allowing high quality freezing up to 200 µm into the specimen.
The instrument only needs to be connected to a standard power supply and comes with its own compressor located on the same trolley making it fully mobile.

The Rapid Transfer System EM RTS is an accessory to Leica EM PACT2. It allows an ease of sample preparation never before experienced in the field of High Pressure Freezing. Place your sample in the flat carrier held in the fork and simply push it into the instrument. The EM RTS does the rest. It takes the sample, locks it into the pod and shoots it into the Leica EM PACT2 where it is frozen – all in less than 2.5 seconds!

Range of use:

➜ Biological Specimens

Leica EM RAPID

Pharmaceutical milling system for pills

The Leica EM RAPID milling device has been designed for Research on Active Pharmaceutical Ingredient Dispersal preparation for investigation with NIR spectrophotometry. With a tungsten carbide or diamond miller, pills can be decapsulated without any smearing caused by the pills' coating. A stereo microscope offers brilliant observation while milling the sample. The adjustable milling speed allows preparation of even fragile pills. Investigations on a defined layer can be performed by stepwise removal with pre-selected step advances and total advance indication. Multiple glass slide and single pill holders reduce the lead time to the NIR instrument. A low-noise extraction unit with a Hepa filter provides a silent and safe environment.

Range of use:

- Industrial Materials
- Biological Specimens

Leica EM TP

Automated routine tissue processor

With the Leica EM TP tissues can be processed into resin for subsequent EM and LM analysis. The Tissue Processor has an exhaust system allowing safe use of toxic substances such as osmium. Individual seals reduce evaporation of reagents while the preheat/cool system allows the correct reagent temperature to be maintained throughout processing. Small vials are available for EM and larger ones for LM processing. The larger vials can also be used for high throughput EM-runs, utilizing the Tripod system, where over 150 EM samples can be processed in one run.

Range of use:

→ Biological Specimens

Leica EM TP4 C

Automatic tissue processor for resin processing of mineralized tissue

The Leica EM TP4 C Automatic Tissue Processor, for resin processing of mineralized tissue, has been adapted especially for the Technovit 9100 new (Heraeus Kulzer) resin embedding system for fast, fully automated processing at room temperature and at +4 °C.

Resin is the preferred embedding medium for undecalcified iliac crest biopsies as well as specific organ biopsies such as testicular and renal, selected regions of lymph nodes, lymphomata and fine-needle biopsies

Range of use:

➜ Biological Specimens

Leica EM TRIM2

Specimen trimming device for TEM, SEM, LM

The Leica EM TRIM2 is a high speed milling system with an integrated stereo microscope and LED ring illuminator for trimming of biological and industrial samples prior to ultramicrotomy. A pivot arm and adjustment assembly holds the specimen carrier for optimum orientation. It can be used with either tungsten carbide or diamond milling tools. The area of interest can be centered and a flat block face milled onto the front face of the sample.
For TEM and LM the sample must be trimmed to shape by adjusting the angle of the pivot arm and trimming the desired block shape – pyramidal, square rectangular, etc ... Viewing of the specimen perpendicular to the axis of the stereomicroscope allows distance definition i.e. from the front face of the sample. All this takes place under constant observation with the stereo microscope.

Range of use:

- Industrial Materials
- Biological Specimens

Leica EM TXP

Target surfacing system

The Leica EM TXP is a unique target preparation device especially developed for cutting and polishing samples prior to examination by SEM, TEM and LM techniques. It excels with challenging specimens where pin-pointing and preparing barely visible targets becomes easy. Before the Leica EM TXP, sawing, milling, grinding and polishing exactly to the target was often a very time-consuming and difficult procedure as points of interest were easily missed and specimens often difficult to handle due to their small size.

With the Leica EM TXP such samples can easily be prepared.

Range of use:

→ Industrial Materials

Order number: **English 924107**

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