



Your Line of Sight

Leica StereoZoom®: Quality Stereomicroscopes
Setting a New Performance Class Standard

**New in the range: The fully apochromatic Leica S8 APO
and the Leica S6 D with photo output**

Leica
MICROSYSTEMS

Leading Edge Technology in a New Price Category

Microscopes and systems from Leica Microsystems enjoy an excellent reputation among technology companies and scientists all over the world. Innovative, high-quality and precisely made instruments offer our customers a technological advantage, increased performance and more success. With the new StereoZoom® line Leica Microsystems offers a comprehensive stereomicroscope range for all applications – ***Your Line of Sight.***

From the six models and a comprehensive range of accessories you can choose the optimum service for solving current and future problems. The areas of application of the StereoZoom® line range from inspection of production and assembly, OEM integration and training to sophisticated observation and documentation tasks in research and development. To protect objects from the damaging influences of electrostatic discharge (ESD), the Leica StereoZoom® S4 E, S6 E, S6, S6 D and S8 APO models including stand and cold light source are encased in a patented antistatic housing. For the inspection of highly sensitive electronic components, an electrostatic dissipative version, the Leica S6 T StereoZoom® Terminator, is available.

The unique Leica StereoZoom® S8 APO is the first stereomicroscope on the market with completely apochromatic corrected Greenough system. This unrivalled instrument offers an unbelievable resolution of 600 Lp/mm (approx. 1 micrometer) and a maximum magnification of 640x. Never before was such a high performance available in a cost-effective instrument with optical Greenough Design.

Link to the Future

Visit our exciting website www.stereozoom.com and see what the new “Line of Sight” has to offer: high quality optics, ergonomic design and durable construction for your best value.

*StereoZoom® is a trademark registered in the Principal Register of the US Patent and Trademark Office.

Optical System based on Greenough

The optical system of Leica's StereoZoom® line consists of two beam paths converging at 12°. Since the lens pairs are positioned closely together, the stereomicroscopes can have a very “slender” design toward the base. Advantage: small space requirement for bonder and machine applications, unobstructed access when working on an object, plenty of space for tools, free view of object field.

The Greenough system permits cost-effective correction of aberrations, such as chromasia, image field curvature and distortion. The new Leica StereoZoom® line uses the optimally corrected lens center for the image. This provides high optical performance with large, level, non-distorted fields of view and chromatically optimized, high-contrast images.



LEICA S4E

Success with New Optics

As a businessman, you know that the success of your company is based on profitable and competitive production which is in line with the market. With consistent quality management and visual quality inspections using powerful stereomicroscopes, you can eliminate such cost factors as quality defects, rejects and insufficient productivity. You have clear requirements for your stereomicroscopes: quality optics, durability and high added value.

The requirements set by laboratory researchers are always high. Researchers are continuously searching for ever more detailed information. The world-class optics and comfortable, versatile work stations of the Leica StereoZoom® line expand the range of vision and assist researchers in making the next "great discovery".

Quality Optics

You expect fast, accurate viewing, positive and effortless identification of details and reliable results in repetitive tasks. Only an optically powerful and mature stereomicroscope can meet these requirements:

One that provides clear, sharp, non-distorted, flat, high-contrast images with optimal chromatic correction. One that offers very large fields of view and working distances. Leica StereoZoom® will convince you across the entire line. Particularly because it ensures fatigue-free viewing and working.

Durability

You expect a stereomicroscope to be permanently reliable, easy to use and accurate, even if treated roughly. As an investment in the future, a stereomicroscope must be capable of being equipped for a wide variety of applications. Versatility, usability and high adaptability based on an extensive assortment of accessories are also a must. Finally, an optical tool must be space saving and capable of invisible integration in your machines and laminar flow cabinets. Leica StereoZoom® is your solution. This line is consistently designed for permanent utility.

Value Added

In return for your investment, you expect a stereomicroscope to provide a substantial benefit to your operation and performance that will guarantee your long-term success. Because for example it reliably detects, by virtue of its high quality optics, possible defects in production. Because it demonstrably increases the productivity of your employees thanks to its optimum, fatigue-free and simple operation. And, finally, because it comes with competent advice, first-class customer service, rapid delivery and prompt technical assistance from Leica's years of experience. Leica StereoZoom® meets your expectations. And, it has an excellent price-performance ratio.

The slim and compact outfit:
Leica S6E with incident-light stand and
Leica L2 cold light source

Leica Design by Christophe Apothéloz





NEW: Leica S8 APO



NEW: Leica S6 D

Only the Leica StereoZoom® line offers you

- Maximum 36.5mm field of view
- Versions with 38° and 60° viewing angle
- Ergonomic objectives for ergonomic viewing
- Terminator version
- Transmitted light stand with adjustable reflector
- 40× eyepieces for eyeglass wearers
- Video and photography with coaxial illumination

World First: Leica S8 APO

The first stereomicroscope with fully apochromatic Greenough system and the Leica S6 D with photo output complete the StereoZoom® line.

Leica S8 APO with apochromatic 8:1 zoom for the highest requirements

- Apochromatic optics system
- Apochromatic objectives
- Maximum resolution 600 Lp/mm
- 10×–80× magnification, working distance 75mm*
- Video/photo output
- Adjustable zoom limits
- Eyepiece for those who wear glasses
- Antistatic

Leica S6 D with 6.3:1 zoom and video/photo output

- Ergonomic 38° viewing angle
- 6.3×–40× magnification, working distance 110mm, field of view diameter 36.5mm*
- Adjustable zoom limits
- Achromatic standard objectives
- Ergonomic objectives for variable viewing height, magnification and working distance
- Eyepieces for those who wear glasses
- Antistatic

Leica S6 T Terminator with 6.3:1 zoom

- Ergonomic 38° viewing angle
- 6.3×–40× magnification, working distance 110mm, field diameter 36.5mm*
- Dissipative surface for optimum ESD protection
- Adjustable zoom limits
- Achromatic standard objectives
- Ergonomic objectives for variable viewing height, magnification and working distance
- Eyepieces for eyeglass wearers

* Basic equipment without objective, with 10× eyepieces

For an overview of performance features, see back page of brochure.

A Single Line, Many Applications



Leica S6 T



Leica S6



Leica S6 E



Leica S4 E

Leica S6 E with 6.3:1 zoom

- Ergonomic 38° viewing angle
- 6.3×–40× magnification, working distance 110mm, field diameter 36.5mm*
- Adjustable zoom limits
- Achromatic standard objectives
- Ergonomic objectives for variable viewing height, magnification and working distance
- Eyepieces for eyeglass wearers
- Antistatic

Leica S6 with 6.3:1 zoom and 60° viewing

- Ergonomic 60° viewing angle on tilted stereomicroscope
- 6.3×–40× magnification, working distance 110mm, field diameter 36.5mm*
- Adjustable zoom limits
- Achromatic standard objectives
- Ergonomic objectives for variable viewing height, magnification and working distance
- Eyepieces for eyeglass wearers
- Antistatic

Leica S4 E with 4.8:1 zoom

- Ergonomic 38° viewing angle
- 6.3×–30× magnification, working distance 110mm, field diameter 36.5mm*
- The only device in its class with 2 ergonomic objectives for variable viewing height, magnification and working distance
- Achromatic standard objectives
- Eyepieces for eyeglass wearers
- Antistatic

Best Long-term Selection



Ergonomic objective 0.6×–0.75× on Leica S6 E, working distances 77mm and 137mm



Leica S6 on focus drive, tiltable, for OEM



Leica L2 cold light source with arm for flexible light guide

A stereomicroscope is an investment that can clearly provide better and faster work results. Prerequisite: it delivers optimum performance to solve the tasks at hand. For this reason the StereoZoom® line allows you to individually equip each device with corresponding accessories. Leica's time-tested modular design principle permits exact instrument configuration to meet a wide variety of applications.

Tailored Performance

With the new StereoZoom® line, you select precisely the performance you need: even the basic Leica S4 E model with 4.8:1 zoom for routine inspections gives you access to the entire assortment of objectives, eyepieces, stands and illuminators. The Leica S6 models with 6.3:1 zoom are optionally available with 38° viewing angle (S6 E/S6 D/S6 T) or 60° viewing angle (S6), with video/photo output (S6 D) or as patented Terminator version (S6 T) with corresponding incident light stand or T-swivel arm stand for working areas subject to ESD.

The unique Leica StereoZoom® S8 APO with 8:1 apochromatic zoom, apochromatic objectives and video/photo output is the perfect basis for sophisticated applications, in particular for digital documentation and analysis.

Stands for Every Situation

The stands for the StereoZoom® line permit comfortable working in every dimension. The stable incident light stand is available in an antistatic and dissipative version. With the transmitted light accessory, the base can be economically equipped for viewing transparent objects with a special effect: with a tilting mirror, the light can be guided through the objects at any angle from vertical to flat. Oblique to dark-field-type transmitted light provides contrast to certain object structures and contours. Semi-transparent objects, e.g. foraminifera and fish eggs, gain in resolution and information content.

The swing-arm stand and flex arm offer plenty of clearance for printed circuit boards, components, art objects and dental work.

The Ergonomics of Viewing

When working with the StereoZoom® line, users are struck by the large and clear fields of view and the flat, sharp images. Even inspecting the finest detail does not cause eyestrain. In the standard version, the Leica S4 E and S6 models offer the largest field of view (36.5mm) in their product class, guaranteeing faster and better inspection of objects.

The Ergonomics of Sitting

The Leica S4 E and S6 models ensure a fatigue-free head position. 0.6×–0.75× ergonomic objective with a variable working distance of 77mm–137mm, and 0.7×–1.0× objective with a variable working distance of 48mm–98mm, permit fine adjustment of magnification, working distance and viewing height, without time-consuming lens changes (for detailed information, see contents of pocket in back cover). The Leica S6 with 60° viewing angle offers optimum comfort at the tilted stereomicroscope.

Ease of Operation

For repetitive inspections with identical magnifications the zoom range can be individually limited on the Leica S6 models and on the Leica S8 APO. Focus and zoom can be moved smoothly and precisely; the controls have a nice feel and provide a good grip. Adjustability of the focus drive can be set to meet individual preferences. For applications that require a lateral working position, the stereomicroscope can be laterally rotated 360°.



Transmitted light base and universal light guide for oblique transmitted illumination



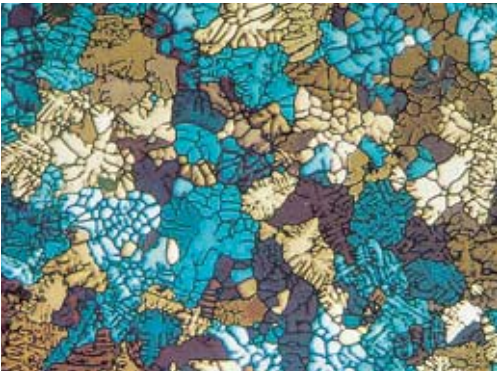
Leica S6 E with 60° viewing angle, tilted on swingarm stand



Image rotator for vertical/oblique observation™: 360° view without tilting or rotating the object

Leica StereoZoom® S8 APO

Top of the Line



Leica S8 APO as a Greenough stereomicroscope is unrivalled in every respect and again underlines just how much Leica Microsystems is leading in innovation. As the only stereomicroscope on the market based on the Greenough principle, the Leica S8 APO is equipped with a fully apochromatic optics system, an apochromatic 8:1 zoom and apochromatic objectives.

For the first time, the Leica S8 APO makes available a cost-effective, high-performance instrument with high user benefit to meet the demands of quality research and development specialists in industry, science and education. An instrument with the leading edge technology of Leica Microsystems.

Knowledge as the Focal Point

Apochromatic optics provides the user with a maximum of precise information and findings. Thanks to the latest optics technology, the chromatic aberrations are corrected to eliminate any interfering color fringes and to render even the finest details ultra sharp. Contrast, brilliance, sharpness, resolution, color fidelity and reproduction accuracy are unsurpassed. The advantage of apochromatic correction is best observed in objects that have fine, low-contrast structures such as large animal cells, cilia plants or metallic microelectronic structures.

The Leica S8 APO offers magnifications of 3.2–640× (10–80× standard magnification) and achieves an unbelievable resolution of 600 Lp/mm and all that for an unbelievably low price.

Benefit as a Principle

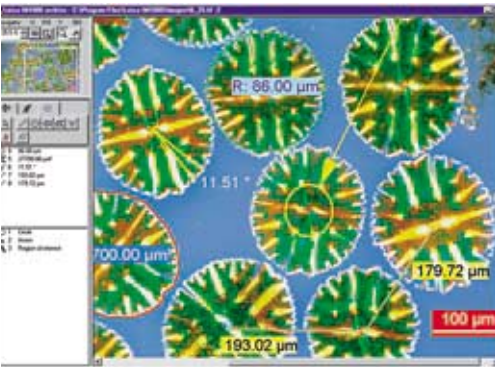
The user benefits, of course, from the excellent image quality of the Leica S8 APO when documenting valuable work results and can photograph, film, record, or transmit important processes. With the built-in video/photo tube, Leica S8 APO is ready at any time to be adapted to professional digital image recording systems or to automatic photo systems from Leica Microsystems.



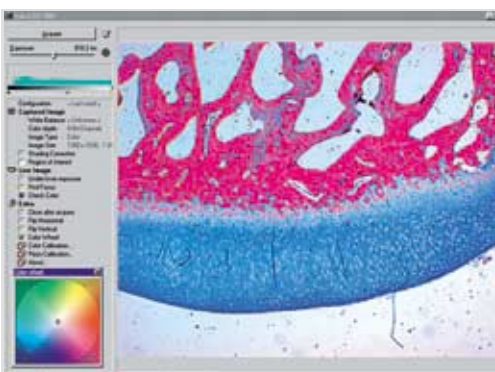
Leica StereoZoom® S8 APO with
Leica DC300 digital recording system
and transmitted light stand



Professional Digital System Solutions



Leica IM 1000 image management software, measurement module



Intuitive camera software from Leica Microsystems



Digital photography without phototube:
Leica DC150 Digital Still Camera (6 Megapixels)
on the Leica StereoZoom® S6 E

The new Leica DC camera line distinguishes itself through the most modern digital technology, performance and versatility and meets the highest requirements of digital photography for microscopy. The total modular design offers not only the right camera for each application, but also the appropriate software with comfortable image producing and processing functions, as well as the image management software for archiving, processing and analysis.

The Leica S6 D and S8 APO StereoZoom® models with built-in video/photo tube are perfectly suited for all modern documentation and image transmission techniques and the simple, quick setup of professional digital image recording systems or also for automatic photo systems from Leica Microsystems and conventional film or analog video cameras. The built-in light divider guides 100% of the available light into the camera.

New Leica DC Digital Cameras

The new digital image recording systems, Leica DC150 (6 Megapixels), Leica DC300 (7.2 Megapixels) and Leica DC500 (12 Megapixels), present customer-specific, future-oriented solutions that fulfill all of the needs in research, development, medicine, science and industry. Innovative camera optics, the high-resolution sensor and most modern software guarantee the best image quality, high resolution, sensitivity and color fidelity and enable measurement and analysis of high levels of detail and greater precision.

Leica Image Manager

The Leica Image Manager provides you with a sophisticated image management software program with numerous options such as measuring, image comparison, image processing, image super-imposing, presentation, MultiFocus. With this, numerous work procedures in scientific photography and microscopy as well as in industrial image compilation and image processing are made more efficient and more economical.

Leica MPS Automatic Photo System

To document important work results on conventional film materials, Leica offers a cost-effective, easy to use microphoto system. Largely automatic functions take care of complex settings and calculations to eliminate sources of errors and incorrect exposures.

Leica StereoZoom® S6 D with
Leica DC300 digital image recording
system (7.2 Megapixels)



Perfect Light on Every Level



Vertical illumination for strongly structured slide preparations and for brightening depressions and holes



Coaxial illumination for reflecting, flat objects like polished metal components, wafers, chips, or layered surfaces

Compact Cold Light Source Leica L2

Optimally adjusted in performance and price, the new Leica L2 cold light source is the high-capacity light partner of the StereoZoom® line. Leica L2 is powerful, compact and suitable for all applications in industry and science. In addition to conventional oblique lighting with single or double light guides, accessories for coaxial, vertical and transmitted light methods are available.

As an antistatic cold light source, Leica L2 can be directly coupled with the stereomicroscope. Combinations with Leica stereomicroscopes, which are also antistatic, provide ideal inspection instruments for electrostatically sensitive work areas (see pocket in the back cover for detailed information).

Modest Space Requirements

The slender design of the StereoZoom® line with the incident- or transmitted light stand and the Leica L2 cold light source requires a minimum amount of space on a work surface, in laminar flow cabinets or in OEM applications (see pocket in back cover for dimensional drawings). Other advantages of the surprisingly light devices with a persuasive 110mm working distance: easy access, plenty of space for tools, free view of the object, readily integrated in machines and easily carried from one workstation to another.

Leica Microsystems Worldwide

Leica Microsystems is active in the areas of microscopy, specimen preparation, image analysis, confocal laser technology, medical technology and equipment for the semiconductor industry. The international technology group with headquarters in Wetzlar, Germany, has grown from these world-famous brand names that are rich in tradition: Wild, Leitz, Reichert, Jung and Cambridge Instruments.

Made by Leica

Leica Microsystems develops system solutions for high customer benefit and innovative leading edge technology in a quality that has earned its international reputation. The same high quality standards apply to all 11 production locations in 7 countries. Leica is synonymous with quality throughout the world.

Leica for You

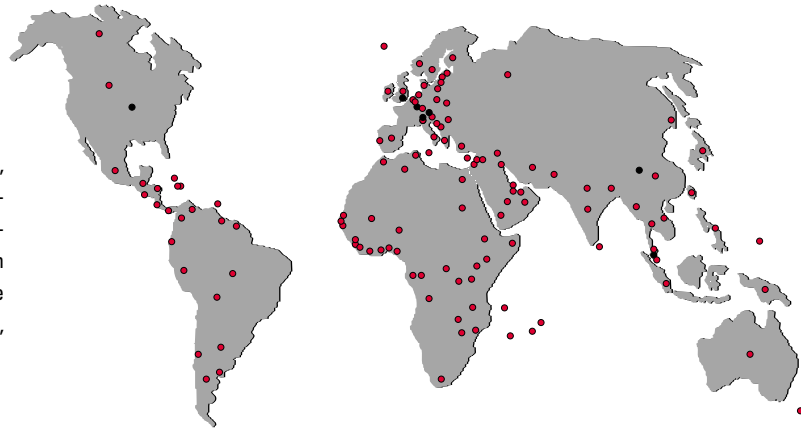
Technology is one aspect of the success of Leica Microsystems, while customer focus is another. Our employees offer courteous, competent advice, service and representation on site and in the language of your country.

www.stereozoom.com

You will find valuable information on the products and services of Leica Microsystems on the Internet as well as contact information for distributors near you.

www.stereozoom.com

will give you direct access to the Stereomicroscopy Business Unit with headquarters in Heerbrugg, Switzerland. Visit us to get more information on the new StereoZoom® line.



North America

- Canada
- USA

South America

- Argentina
- Bolivia
- Brazil
- Chile
- Columbia
- Costa Rica
- Cuba
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Jamaica
- Mexico
- Paraguay
- Peru
- Surinam
- Trinidad Tobago
- Uruguay
- Venezuela

Europe

- Albania
- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Great Britain
- Greece
- Holland
- Hungary
- Iceland
- Ireland
- Italy
- Lithuania
- Luxemburg
- Malta
- Norway
- Poland
- Portugal
- Republic of Belarus
- Rumania
- Russia
- Slovakian Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey

Africa

- Algeria
- Angola
- Benin
- Burkina Faso
- Burundi
- Comoro
- Congo
- Egypt
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Ivory Coast
- Kenya
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritius
- Morocco
- Mozambique
- Niger
- Nigeria
- Reunion
- Rwanda
- Senegal
- Sierra Leone
- Somalia
- South Africa
- Sudan
- Tunisia
- Uganda
- Zaire
- Zambia
- Zimbabwe

Asia and the Pacific

- Australia
- Bahrain
- Bangladesh
- Burma
- China
- Guam
- India
- Indonesia
- Iran
- Iraq
- Israel
- Japan
- Jordan
- Korea
- Kuwait
- Lebanon
- Malaysia
- Nepal
- New Caledonia
- New Zealand
- Oceania
- Oman
- Pakistan
- Papua New Guinea
- Philippines
- Qatar
- Saudi Arabia
- Singapore
- Sri Lanka
- Syria
- Taiwan
- Thailand
- United Arab Emirates
- Vietnam
- Yemen

Leica StereoZoom® at a Glance

	Leica S4 E	Leica S6	Leica S6 E	Leica S6 T	Leica S6 D	Leica S8 APO
Optics system	Greenough	Greenough	Greenough	Greenough	Greenough	Greenough apochromatic
Viewing angle	38°	60°	38°	38°	38°	38°
Zoom	4.8:1	6.3:1	6.3:1	6.3:1	6.3:1	8:1
Magnification (basic equipment)	6.3×–30×	6.3×–40×	6.3×–40×	6.3×–40×	6.3×–40×	10×–80×
Maximum resolution	372 Lp/mm	432 Lp/mm	432 Lp/mm	432 Lp/mm	432 Lp/mm	600 Lp/mm
Maximum numerical aperture	0.124	0.144	0.144	0.144	0.144	0.2
Working distance (basic equipment)	110mm					75mm
Field of view (basic equipment)	36.5mm					23mm
Adjustable zoom limits		2	2	2	2	2
Video/Photo tube					100% photo	100% photo
Standard objectives	Achromats 0.32×, 0.5×, 0.63×, 0.75×, 1.6×, 2.0×					Apochromats 0.63×, 1.6×, 2.0× Achromat 0.32×
Ergonomic objectives	0.6×–0.75×/77–137mm, 0.7×–1.0×/48–98mm					
Adjustable objective	0.3×–0.4×/200–350mm					
ESD protection	antistatic	antistatic	antistatic	conductive, Terminator	antistatic	antistatic
Adjustable eyepieces for eyeglass wearers, with cups	10×, 16×, 20×, 25×, 40×					
Illumination	Compact Leica L2 cold light source					

Technical information and data are included in the pocket of the back cover.

Quality with a Future

At Leica, every stereomicroscope and every individual component is manufactured and calibrated with the greatest care using the closest manufacturing tolerances and environmentally sound processes. Of course, devices of the StereoZoom® line meet all the quality and functional test requirements of ISO 9001 and ISO 14001.

