


# Leica M520 OH3

The smartest system for the high-end specialist

**Leica**  
MICROSYSTEMS



Leica



# M520 OH3

Leica Microsystems announces a major achievement in the development of microsurgical microscopes. Leica has always stood for excellence in optics. Outstanding contrast, brilliance, sharpness, resolution, color fidelity, and precision are all hallmarks of the Leica image. To help you get the very most from these optics, Leica microscopes incorporate an array of innovative technologies and intelligent solutions – such as superior illumination concepts and positioning systems. Leica gives you more than just great optics. We optimize your view.

**Now Leica is introducing once more a unique innovation: The Leica M520 OH3 surgical microscope.**

By utilizing superior materials, design technologies and manufacturing to highest standards of quality, the Leica M520 OH3 is built for long service life and outstanding reliability. The Leica M520 OH3, used by neurosurgery, ENT, and spine surgery, sets a new standard in advanced surgical microscopes. The new Leica M520 OH3 fulfils yet again Leica's vision of providing specialists worldwide the best viewing conditions to enable successful surgery.





**Everything you've ever wanted in this top class**

# The new Leica M520 optics

## Featuring OptiChrome™

Since 1997 Leica has gained thousands of satisfied users of its Leica M500 N optical system.

Leica now presents a substantial step forward, the new Leica M520 featuring latest OptiChrome™ technology. The integration of all new glass, coatings, and design parameters to deliver these important benefits:

- **Longer** 32% extended working distance to 470mm
- **Deeper** 30% increased depth of focus at same magnification
- **Brighter** 30% more light intensity
- **Sharper** Higher contrast and crisper, sharper image

10 years of relentless research and clinical experience of OptiChrome™ optics have now culminated in the world's most advanced optical system. The new Leica M520 OptiChrome™.









# Superior reach

## **Lightweight, compact and yet still superior reach**

The Leica M520 OH3 stands out of your way. It reaches in with a very long and extremely agile swing arm. You get the best of both worlds – perfect positioning for your operation and optimal space management. Just position the microscope over the operating field where you need it. It's effortless, instant, and precise. Even with its long swingarm, the Leica M520 OH3 takes up very little space in your OR.





**With it's 100° range of lateral movement you easily can achieve most challenging side views.**



**The 150° range of inclination angle combined with the most compact microscope provides you unmatched ergonomics even in most difficult positions.**



# Range of movement



## **Effortless positioning**

The Leica M520 OH3 offers a greatly expanded range of movement in all dimensions for improved surgical maneuverability. Setting the desired position is as effortless as moving a feather – The secret: The stand has a patented advanced movement system that achieves perfect balance in six axes and all locations/angles of the surgical microscope.

The Leica M520 OH3 provides superior reach and clearance, allowing it to be conveniently located behind the surgeon for the unique overhead positioning or anywhere around or across the table.

# Complete auto-balance



## **Only two pushes of one button**

and the patented auto-balance system fully balances all six axes. Built in, as well, is the Leica Intelligent Set Up System (ISUS). It provides the routine setup, the flexibility to store up to eight of your own configurations, and the auto-diagnostic system.



## **Two completely independent**

300 Watt Xenon arc-lamp illumination systems are incorporated in the Leica M520 OH3, for increased safety and convenience.

# Full control

The Leica M520 OH3 has a newly designed 300 Watt Xenon arc-lamp illumination system, which has an increased light output and improved reliability and heat control. A back up light system of equal light quality and quantity gives the surgeon comfort in knowing his/her surgery will not be disturbed by a light failure.

In addition to the electro-magnetic controlled free-floating six axes, the Leica M520 OH3 has robotic functions on axes five and six to allow further movement precision. The robotic functions can be activated by hand and/or foot controls. Used in combination, the mouth switch with the foot control, allows the surgeon to have full control of all movements, while the hands can still be kept at the surgical field.

## **Ease of positioning**

with the ergonomically designed mouthswitch as you've never experienced before

## **Designed for perfect ergonomics**

and durability the pistol grips provide control of the microscope, the stand and IGS functions.

## **12 Functions**

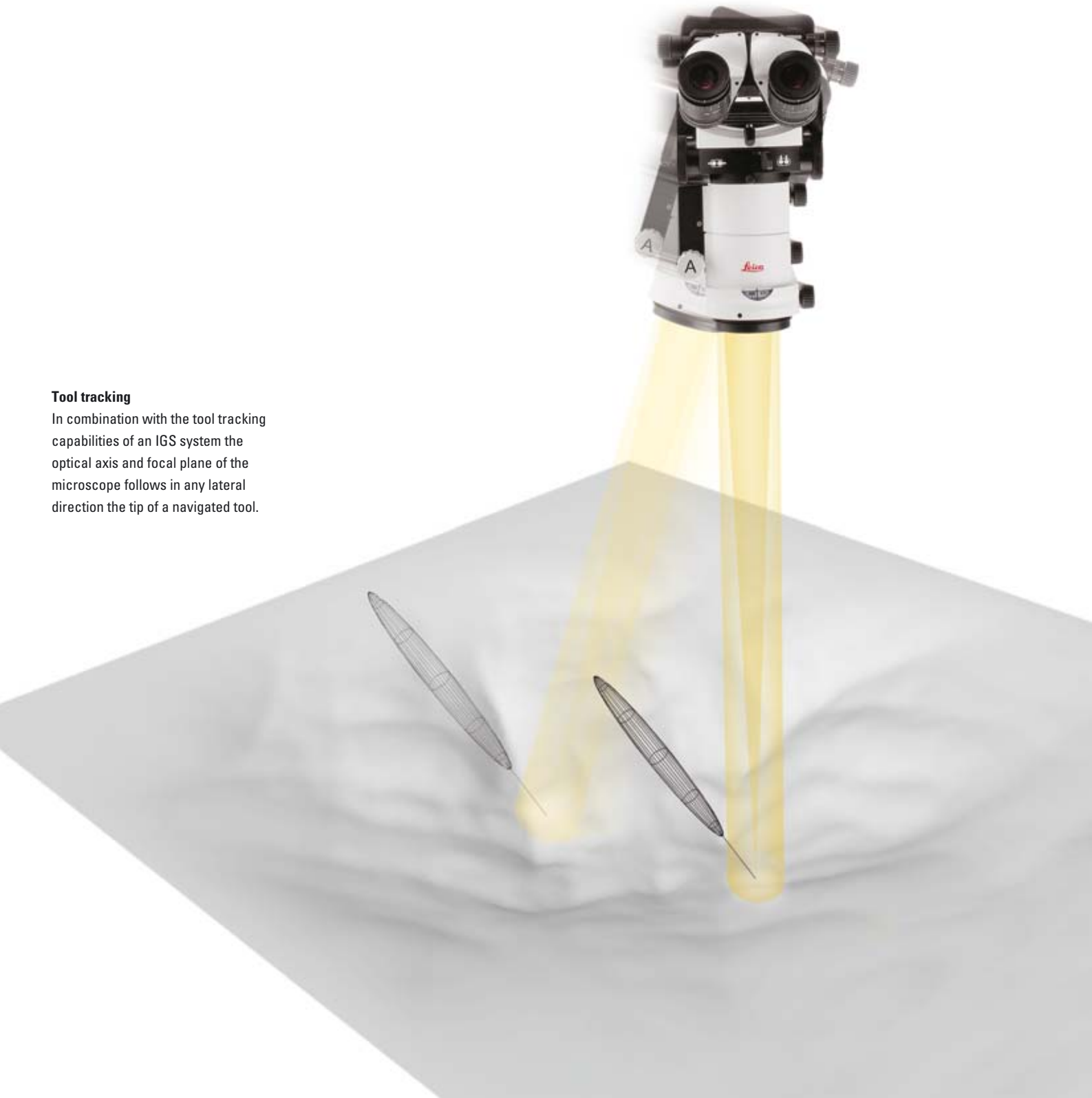
all in one foot-switch, simple to control and allowing the surgeon's hands to remain in the surgical field.



# Tool tracking with IGS

## Tool tracking

In combination with the tool tracking capabilities of an IGS system the optical axis and focal plane of the microscope follows in any lateral direction the tip of a navigated tool.



# Motorized inclination and tilt



In addition to the electro-magnetic controlled free-floating six axes, the Leica M520 OH3 has robotic functions on two axes (X/Y) to allow further movement precision. The robotic functions can be activated by hand and/or foot controls. Combined with an IGS computer, the stand's robotic ability allows the microscope to follow the surgeon's hand instruments, thus eliminating the need for the surgeon to take his/her hand away from the surgical site to move the microscope.

**The handle's ultra precise**  
joystick allows micrometric movements for tilt and inclination. When preselected, it also serves to control the image injection functions.





# Full IGS compatible

## Prepared for all data

The compact design of the ErgoMod™ system, the Leica M520, provides the surgeon with outstanding Leica optical quality and imparts brilliant image contrast, high color fidelity, maximum depth of field with highest perception of image plasticity, and more light than ever before. In addition, the compact design results in a substantially shorter eyepiece-to-field distance. Completed with a variety of ergonomic accessories like the variable angle binocular tube, optical modules with optimized light management or high tech components for IGS and high definition image integration makes the Leica M520 the system of choice.

### In combination with IGS systems

or used independently, the Leica DI C500 Dual Imaging Module handles more data formats than ever before – high-resolution RGB video signals, correlated data from IGS systems, standard CT or MRI data, data monitoring, and more.

### Endoscopy

The Leica M520 OH3 can be used easily for neuro endoscopy application in combination with the Leica DI C500. A high performance converter transfers the video signal, typically RGB, into excellent XGA quality. With the Leica DI C500 the surgeon observes truly what he could observe on a very good OR-monitor.

### The Leica ULT 500

with its effective light management, ensures that image brightness is always optimal. Regardless of accessories or whether the assistant tube or video adapter is mounted left or right.





# Leica Microsystems worldwide



Leica Microsystems is active in the fields of microscopy, specimen preparation, image analysis, laser technology, medical technology, and equipment for the semiconductor industry. The international technology group headquartered in Wetzlar, Germany has grown from such traditional brand names as Leitz, Wild, Reichert, Jung, and Cambridge Instruments. Leica's division of Surgical Microscopy is located in Switzerland, known worldwide for quality and precision.

## **Made by Leica**

Leica Microsystems develops innovative technologies and system solutions that offer high value to users worldwide. Leica quality has earned international respect. Our high-quality standards apply equally to all eleven of our production centers in seven countries.

## **At your service**

Technology is just one key to the success of Leica Microsystems. Serving you is the other. Your local Leica representative is ready to give you friendly and competent advice – in your language and wherever you are. Prompt support and service have the highest priority at Leica Surgical Microscopy. We will handle all your needs directly and dependably. For us, that's just as normal as the perfect organization of our delivery, setup, and training services.

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# Leica Microsystems – the brand for outstanding products

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

Leica, the leading brand for microscopes and scientific instruments, has developed from five brand names, all with a long tradition: Wild, Leitz, Reichert, Jung and Cambridge Instruments. Leica symbolizes not only tradition, but also innovation.

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

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and representatives of Leica Microsystems in more than 100 countries.

The Business Unit SOM, within Leica Microsystems, holds the management system certificates for the international standards ISO 9001 and ISO 14001 / EN 46001 relating to quality management, quality assurance and environmental management.

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

### Microscopy

Our expertise in microscopy is the basis for all our solutions for visualization, measurement and analysis of microstructures in life sciences and industry.

### Specimen Preparation

We specialize in supplying complete solutions for histology and cytopathology.

### Imaging Systems

With confocal laser technology and image analysis systems, we provide three-dimensional viewing facilities and offer new solutions for cytogenetics, pathology and material sciences.

### Medical Equipment

Innovative technologies in our surgical microscopes offer new therapeutic approaches in microsurgery. With automated instruments for ophthalmology, we enable new diagnostic methods to be applied.

### Semiconductor Equipment

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

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