

High quality microscope for otolaryngology

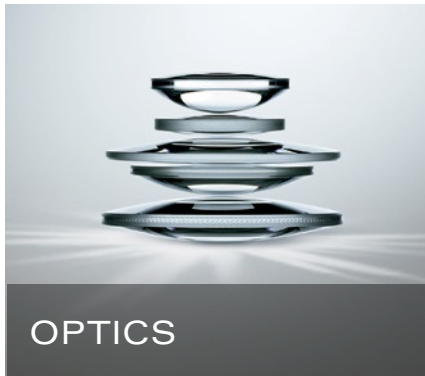
# LEICA M320 FOR ENT

OR quality for your clinic



# OR QUALITY FOR YOUR CLINIC

The Leica M320 microscope for ENT combines superior OR-quality optics with cutting-edge LED illumination for outstanding visualization and long-term reliability. Smoothly maneuverable and customizable, the Leica M320 also supports your working comfort and responds to the demands of your clinic. The optional HD camera facilitates communication with patients and delivers additional benefits for teaching.



## OPTICS

- > Premium optics and illumination:  
See exactly what you need to see  
Pages 4-5



## ERGONOMICS

- > Ergonomic design:  
Easy handling, greater efficiency  
Pages 6-7



## IMAGING

- > High-definition imaging technology:  
Communication made simple  
Pages 8-9



## ADAPTABILITY

- > Configurable and hygienic:  
Equipment that fits your needs  
Page 10







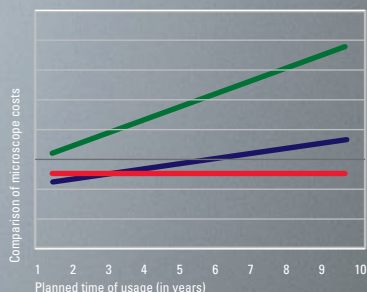
# SEE EXACTLY WHAT YOU NEED TO SEE

Double LED illumination and apochromatic optics for bright, clear visualization even in deep channels

The core role of a diagnostic ENT microscope is to enable you to see minute anatomical details even in deep channels, so that you can make a thorough diagnosis. The apochromatic optics and double LED illumination of the Leica M320 support you by delivering exactly what you need – a crisp, bright, true-color image, with impressive depth of field. For added flexibility, the microscope can also be used for simple surgical procedures. With trusted OR-quality optics in a versatile, economic microscope, why compromise?

## Start saving from day one

Total cost of microscope ownership



- Leica M320 with LED
- Other microscopes with halogen
- Other microscopes with xenon

Comparison is based on initial purchase price, average consumption of bulbs, and periodic fiber optic cable replacement costs.

## Bright, true-to-life color images

- > Two daylight temperature LEDs deliver bright, vivid colors for easy differentiation of anatomical details
- > Long bulb lifetime of approx. 60,000 hours for minimal cost of ownership
- > Light source integrated into the optics carrier with no external fiber optics for long-lasting light intensity

## Crystal clear visualization

- > High resolution and large depth of field for impressive detail
- > Premium quality apochromatic optics combined with LED lighting deliver an enhanced view even in deep cavities
- > Full range of objective lenses including the Leica M320 MultiFoc objective for efficient adjustment of working distance



## Minimum workflow interruption

- > 5-step magnification changer allows simple, quick magnification adjustments for minimum interruption to workflow
- > Magnification steps of 6.4x, 10x, 16x, 25x, and 40x

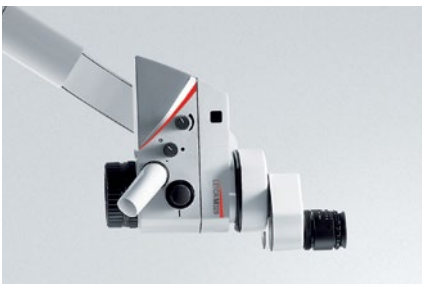
# EASY HANDLING, GREATER EFFICIENCY

Customizable ergonomic design and ease-of-use enhance comfort and efficiency

When addressing your needs as an ENT surgeon, we went beyond the refinement of optics and LED illumination to also deliver ease-of-use and maneuverability. All of the system articulations are exactly where they need to be and move with high-level precision. The microscope can be effortlessly positioned anywhere. The sophisticated mechanical engineering is easy to feel while using the microscope, and the stand features vibration-minimizing bearings for overall stability.

## An individual fit

Select from an assortment of product accessories to ideally suit your working preferences and comfort, including a wide range of binoculars and objective lenses, and the choice of a single or dual handle. The result is a unique, customized microscope designed for the personal comfort of every user.



**Straight binocular tube**

- > Ideal for simple procedures



**Binocular tube with 30° to 150° movement**

- > Enhanced positioning and ergonomic benefits



**Binocular tube with 180° movement**

- > Adjusts to your various needs
- > Improved ergonomics and working flexibility



The Leica M320 F12 adapts to individual working preferences; for example, the surgeon can choose either a perpendicular or inclined arm.



### Stay Focused

The optional Leica M320 MultiFoc Objective with variable working distance from 200 mm to 300 mm allows you to make adjustments with a simple turn of the adjustment knob. By limiting the time and effort of repositioning, you maintain efficiency and concentration while retaining an ergonomic posture.

- > Interruption to workflow is decreased so you maintain efficiency and concentration
- > Movement is reduced so you can retain a comfortable working position
- > The adjustment knob can be positioned to the left, right, or centrally as preferred





### Integrated and modular

- > Fully integrated full HD camera with 10 MP images and video up to 1080 p for crystal-clear anatomical detail and true-to-life color (optional)
- > Modular design for easy upgrading



### Simple image storage

- > Store images and video on an SD memory card
- > Easily transfer to patient file via the SD memory card or via USB



### Flexible use and viewing

- > Simple operation via remote control or directly on the microscope
- > Live streaming to an external monitor for viewing by your assistant and patient



# COMMUNICATION MADE SIMPLE

Digital images and recordings support communication with your patients, team, and peers

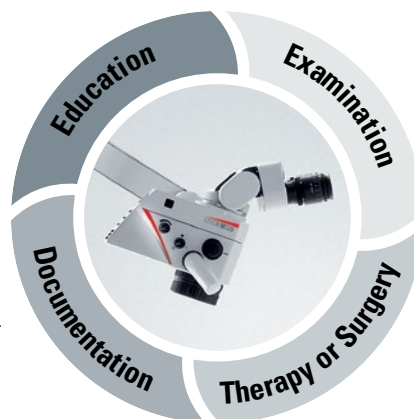
While the growing need for information places more demands on the ENT surgeon, it also opens up new opportunities for sharing and documenting surgical examinations and procedures. The Leica M320 supports your needs with an optional integrated full High Definition (HD) camera and recording system that captures crystal-clear anatomical detail in true-to-life color. Save all data onto an internal SD memory card or transfer directly via USB.

## **Share expertise and prepare for surgery**

Imaging technology makes it easy to share information for teaching during live consultations or surgery. Recordings enable you to document cases, keep records, and present at seminars or online to share your expertise and enhance your professional reputation. Images and video can also help you to develop your surgical plan and communicate to your OR team.

## **Strengthen patient trust**

Patients and families may become nervous when visiting a specialist. This is where the integrated full High Definition (HD) camera and monitor can support you. Using either live images or play-back, you can walk patients and their families through the steps of a procedure to help ease any concerns, encourage open dialogue and reinforce trust.



The Leica M320 – supporting your practice through the whole workflow, today and in the future

# EQUIPMENT THAT FITS YOUR NEEDS

Responds effortlessly to your working preferences, clinic space, and hygiene requirements

The Leica M320 is designed with your ENT practice in mind. With a range of mounting options and clean, integrated design, the Leica M320 delivers the flexibility, quality, and hygiene you need.

## Meets your hygiene requirements

The surface of the Leica M320 has been designed for easy cleaning and is additionally protected with a permanent antimicrobial coating that reduces contaminants on the microscope.

## Meets your clinic and surgery requirements

Whatever your surgery or clinic layout and working style, the Leica M320 is your all-in-one solution.

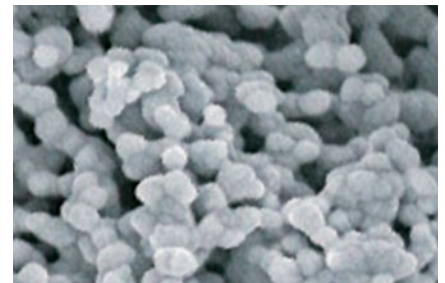
- > Available with a robust floor stand, floor plate, wall mount, or ceiling mount
- > Sleek, streamlined design complements the high-quality image of your clinic



Handles can be removed and sterilized



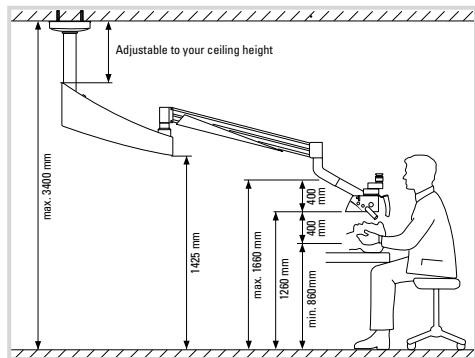
Virtually jointless with cables routed internally for easy cleaning



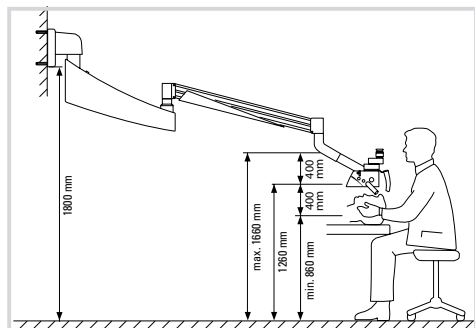
Leica AgProtect antimicrobial nano silver (Ag) coating reduces pathogens on the microscope surface

# LEICA M320

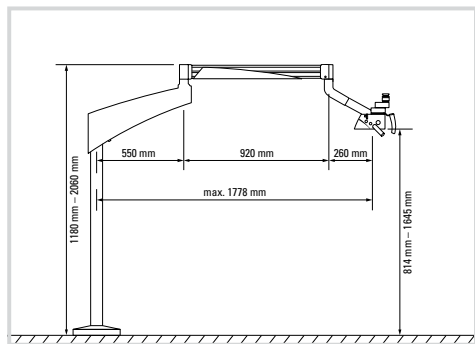
## TECHNICAL DATA



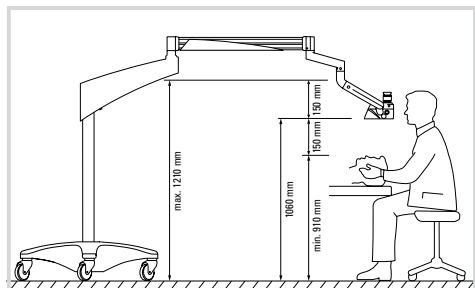
Leica C12 ceiling mount



Leica W12 wall mount



Leica FP12 floor plate



Leica F12 floor stand (short arm version also available)

### MICROSCOPE

Magnification	Manual <b>AP</b> ochromatic 5-step magnification changer 6.4x, 10x, 16x, 25x, 40x
Field of view	5.3 mm to 206 mm with 10x eyepiece
Stereo base	24 mm
Objectives	Fixed focal lengths from f=100 mm up to f=400 mm Fine focusing lenses with f=200, 250, 300 mm MultiFoc Objective lens with variable working distance of 200 mm to 300 mm
Eyepiece	10x21B, 12.5x17B, 8.33x22B, 10x21B with reticule
Reset functions	Limit switch for light on/off
Light source	Direct and long-lasting 2-LED illumination integrated into the optics carrier, with average service life of 60,000 h
UV filter	UV and IR-free LED illumination
Light intensity adjustment	Using a drive knob on the optics carrier

### VIDEO ACCESSORIES

Leica M320 HD video and photo camera	Integrated full HD video camera with 1080p, 1080i or 720p video resolution and 2, 5 or 10 Megapixel still photo resolution, camera, also has playback function for video, photo and thumbnail view, video (MPEG-4) and photo (jpg) storage on SD memory card (system comes with a 4GB SD memory card), or transfer via USB, video signal available in HDMI, video/photo control through IR remote control and two hard keys on camera body, all camera settings can be adjusted via on-screen menu
Remote control	IR-remote control for Leica M320 full HD video & photo camera
Leica M320 IVA Integrated Video Adapter	Integrated (optional) video adapter for attachment of external c-mount cameras, focal length of optics: f=55 mm
SD memory card	8GB supplied, up to 32GB can be used

### LIMITATIONS ON USE

The Leica M320 surgical microscope may be used in enclosed rooms and on flat surfaces with max. 0.3° unevenness; or at stable walls or ceilings that fulfill Leica Microsystems' specifications (see installation manual).



**STANDARDS**

Council Directive 93/42/EEC on Medical Devices (MDD) and its amendments. Classification: Class I, in compliance with Annex IX, rule 1 and rule 12 of the directive. Medical Electrical Equipment, Part 1: General Requirements for Safety IEC 60601-1; EN 60601-1; UL60601-1; CAN/CSA-C22.2 NO. 601.1-M90. Electromagnetic compatibility IEC 60601-1-2; EN 60601-1-2.

The Medical Division, within Leica Microsystems (Schweiz) AG, holds the management system certificates for the international standards ISO 9001, ISO 13485, and ISO 14001 relating to quality management, quality assurance and environmental management.



CONNECT  
WITH US!



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