

From Eye to Insight

*Leica*  
MICROSYSTEMS

## LEICA M620 F20

Easy-to-use, high quality surgical microscope  
for Ophthalmology



# LEICA M620 F20



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

### **High-quality and reliable performance**

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

### **Compact, light and easy to move**

The Leica F20 floorstand is compact and moves easily. With the high-quality precision bearings and a long swingarm, the stand is highly maneuverable and easy to set up for surgery.

# BRILLIANCE IN OPTICS AND LIGHT



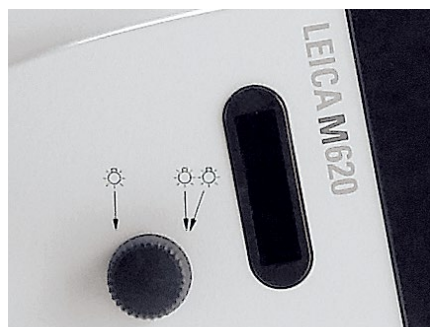
Leica OptiChrome for higher contrast and crisper, sharper images in natural color.

## **Leica OptiChrome Optics**

Leica Microsystems' crisp, sharp OptiChrome optics give the surgeon natural color, outstanding depth of focus and high contrast for maximum detail recognition. The high degree of light transmission with OptiChrome technology allows the surgeon to use lower degrees of illumination and thus provides better patient safety.

## **Direct Halogen Illumination**

Leica Microsystems' exclusive Direct Halogen Illumination system ensures that the surgeon will have homogeneous illumination to see crisp images even at low light levels. Direct illumination is a feature that consistently places Leica ophthalmic microscopes above the systems with fiber optics illumination.



Under sterile conditions, the jalousie provides perfect Red Reflex.

## **Outstanding Red Reflex**

Based on more than 25 years of experience with Direct Halogen Illumination, Leica Microsystems developed an illumination concept that allows an absolutely stable Red Reflex. Even with difficult starting positions or heavy pigmentation of the patient's eye, the Red Reflex has outstanding intensity.

## **Individually optimized Red Reflex**

The jalousie, which can be operated in sterile conditions, allows perfect illumination for any surgical situation with optimum contrast and depth of field. It helps to further enhance and optimize the Red Reflex.

Proven, Direct Halogen Illumination  
for crystal-clear images



# INTUITIVE CONTROL AND INCREASED SAFETY



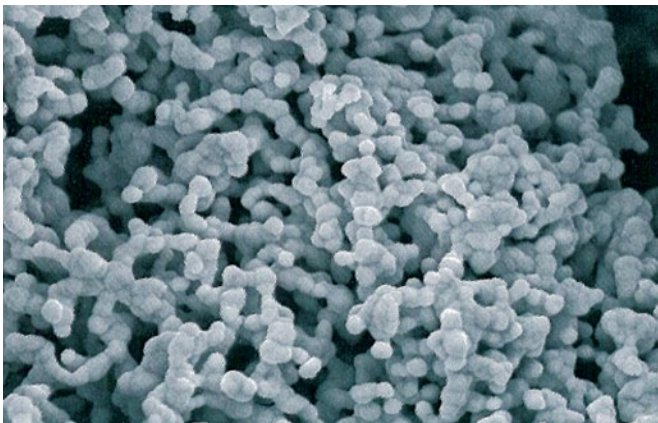
Intuitive controls for light intensity, focus, zoom, and XY speed.

## **Straightforward operation**

Leica Microsystems' touchscreen, built into the floorstand for convenient, easy access, offers intuitive control of all Leica M620 functions. The surgeon can see the microscope's functions at a glance on the screen. Individual user settings can be programmed for each surgeon to increase efficiency.

## **Auto Reset and the microscope is ready-to-use**

When the surgeon pushes the swingarm up after each procedure, all microscope functions automatically reset and the microscope is ready for the next case.



Typical structure of a metal powder (Ag) produced via inert gas condensation (nano powder).

## **AgProtect: The anti-microbial coating for added safety**

Leica Microsystems' anti-microbial nano silver coating, AgProtect, provides outstanding protection to microscope users by reducing their exposure to surface pathogens. The AgProtect covers the microscope's outside surfaces and protects the operator and other individuals in the work area by penetrating the membranes of microbes to prevent replication. Leica Microsystems contributes added safety for its customers, medical teams and their patients through AgProtect.

# FLEXIBILITY FOR INDIVIDUAL NEEDS



## Leica Rotatable Beamsplitter

Leica M620 with Video Adapter at the rear and rotatable assistant microscope tube.

Leica Microsystems accessories, including video cameras, adapt seamlessly with the Leica M620 series microscopes.

## Going temporal? Swing around...

For those surgical procedures where an assistant is needed, especially with the growing number of temporal approach cataract surgeries, Leica Microsystems proudly presents the world's first two-beam path solution – the Leica Rotatable Beamsplitter. The easy side-to-side quick change of the assistant observer optics enables time-saving between cases, increases efficiency in the operating room and minimizes potential damages to the binoculars. Also the interface for the Leica Video Adapter is conveniently placed at the rear for maximum flexibility.



## Standard Beamsplitter

Leica M620 with Video Adapter and assistant microscope tube. The stereo assistant tube can be attached to either side of the beamsplitter.

## Wide variety of binoculars provide comfort

Long working hours under the wrong ergonomic conditions can cause fatigue and discomfort. For this reason Leica Microsystems has a wide selection of binoculars and objective lenses to choose from to provide comfort for the surgeon.



Leica M620 with new 5°–25° binocular tube and compact handles.



Leica Microsystems' range of binocular ergonomic solutions to meet individual comfort needs.

# FLEXIBILITY FOR INDIVIDUAL NEEDS



## Unique Leica Zoom Video Adapter

The Leica Zoom Video Adapter with its 3× optical zoom and fine focus allow individual magnification adjustment of the video image separate and independent of the microscope zoom. A sterile fine focus adjustment on the video adapter fine tunes images to perfection.

## Integrated Leica 2D Video System

The Leica 2D video module can be easily integrated with the beam path of the Leica M620 F20 and offers good ergonomic conditions for the surgeon due to its compact design.

## Retinal accessories

For application in posterior segment surgery the Leica M620 can carry the most common accessories like inverters, Oculus BIOM system or laser-filters.

The wide selection of foot switches fulfills any ergonomic need. All functions can be individually programmed according to the preferences of each surgeon.

### Leica Wireless Footswitch

Using ISM bandwidth technology, it offers maximum mobility for a fast and easy switch between left and right eye procedures.



# TECHNICAL SPECIFICATIONS

## OPTICS LEICA M620

Magnification changer	6:1 zoom, motorized, adjustable speed
Focusing	Motorized, 50 mm, adjustable speed, with automatic reset
Objective	APO Leica WD = 175 mm, 200 mm Achromatic Leica f = 175 mm, 200 mm and 225 mm
Eyepieces	Widefield eyepieces for those wearing glasses 8.33×, 10× and 12.5×; Diopter adjustment +/- 5 with adjustable eyecup
Illumination	Homogenous, coaxial illumination; Integrated Red Reflex illumination, light intensity adjustable via control unit and/or footswitch jalousie for continuous, situation-dependent reduction of ambient illumination via sterile controls; Quick-change lamp mount with 2 halogen lamps, 12V/50W filter changer with UV projective filter; 2 free openings for selectable filters diameter 32 mm
Inclining mechanism	+/- 5° manual fine adjustment, sterile operation
XY-unit	Positioning range 50 mm in X and Y direction; Adjustable speed, reset button, automatic reset at power on
Control unit	Multifunctional display for brightness, magnification, reset and user selection, adjusting the speed of drives, individual user programming, Auto Reset
Hand/Footswitch	12-function footswitch with controls arranged longitudinally or transversally, wired or wireless  Optional: 6- and 16-function wired footswitch, 12- and 16-function wireless footswitch, 12-function handswitch

## FLOOR STAND LEICA F20

Type	F20 Compact floorstand
Base	Compact base with 4 movable rollers, 4 foot brakes
Base dimension	608 × 608 mm
Maximum load	6.5 kg accessories on the microscope
Maximum reach	1444 mm
Minimum transport height	1902 mm
Weight approx.	210 kg (minimum equipment)

## ACCESSORIES

Assistant's attachment	Stereo co-viewer, Monocular co-viewer
Beam splitter	50% / 50%, 70% / 30% Leica Rotatable Beamsplitter
TV/photo	Leica 2D video system Leica Zoom Video Adapter (ZVA), 3:1 zoom, 35 mm to 100 mm focal length, c-mount, with fine focus Leica Manual Video Adapter (MVA), 55 mm, 70 mm focal length, c-mount, with fine focus Photo/TV dual attachment f = 60/85/107 mm for TV, f = 250/350 mm for 35 mm camera Photo attachment f = 250/350 mm
Wide-angle observation	BIOM, EIBOS
Inverters	AVI, SDI, OIVSL, ROLS
Laser	Can be fitted, adapters available from laser suppliers
Asepsis	Sterilizable components for all controls

## ELECTRICAL DATA

Supply	100–240 VAC (+/- 10%), 50/60 Hz / 250 VA
Protection class	Class 1
Safety type	Type B

## STANDARDS

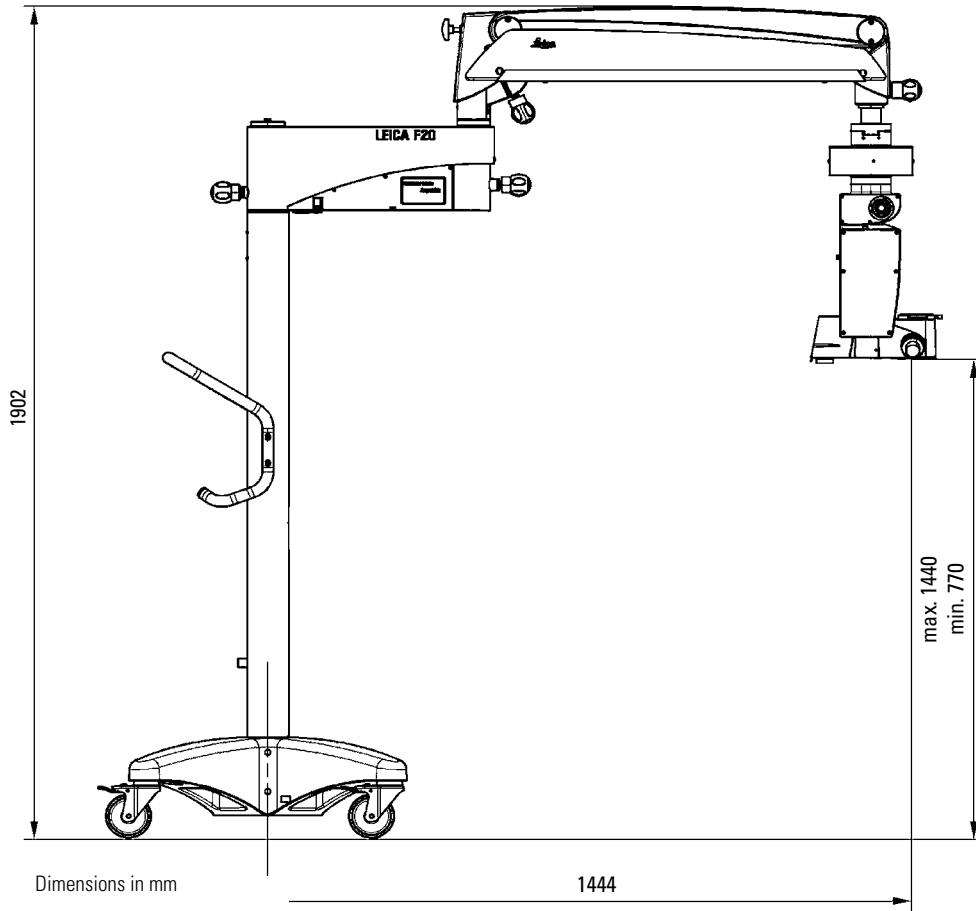
Council Directive 93/42/EEC on Medical Devices (MDD) and its amendments. Classification: Class I, in compliance with Annex IX, rule 1 and rule 12 of the directive. Medical Electrical Equipment, Part 1: General Requirements for Safety IEC 60601-1; EN 60601-1; UL60601-1; CAN/CSA-C22.2 NO. 601.1-M90. Electromagnetic 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 13485, and ISO 14001 relating to quality management, quality assurance and environmental management.



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MICROSYSTEMS



Dimensions in mm

1444

max. 1440  
min. 770

608 x 608mm

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Leica Microsystems (Schweiz) AG · Max Schmidheiny Strasse 201 · CH-9435 Heerbrugg  
T +41 71 726 3333 · F +41 71 726 3399

[www.leica-microsystems.com](http://www.leica-microsystems.com)

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