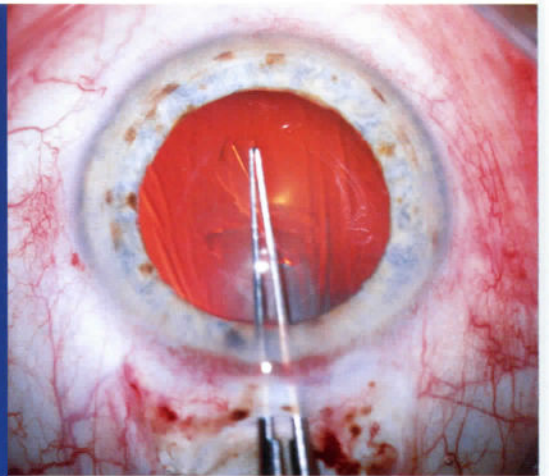
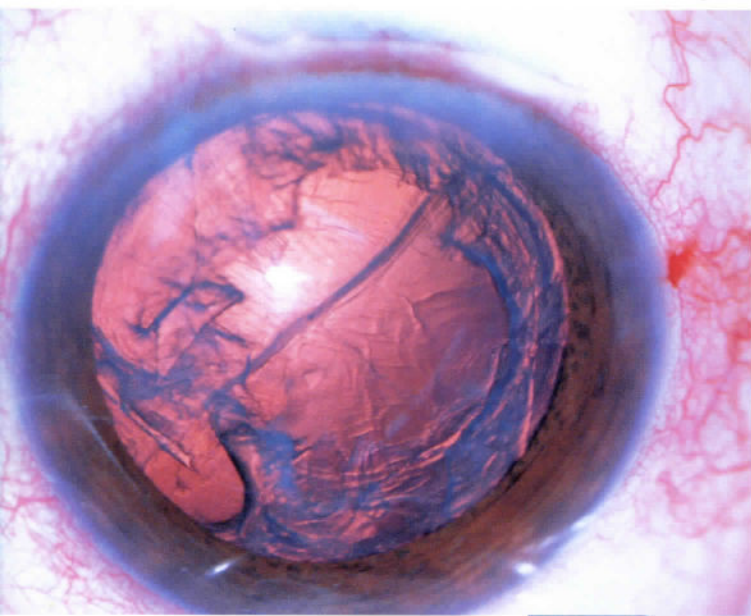


# OPMI® VISU 200 for Ophthalmology



# OPMI® VISU 200

## The ultimate in ophthalmology microsc



*Photos of surgery taken with the  
OPMI® VISU 200  
by Dr. Hütz, Bad Hersfeld,  
Germany*



OPMI® VISU 200 is the innovative, state-of-the-art surgical microscope from Carl Zeiss that sets a new standard of excellence in eye surgery.

### **Optical excellence - for both surgeon and assistant**

Dramatically improved apochromatic optics with a totally new design for a bright, crisp image with outstanding contrast, depth of focus, color fidelity and resolution. Excellent red reflex, even when the patient's eye is decentered.

### **Sheer comfort**

Relaxed work in all stages of surgery.

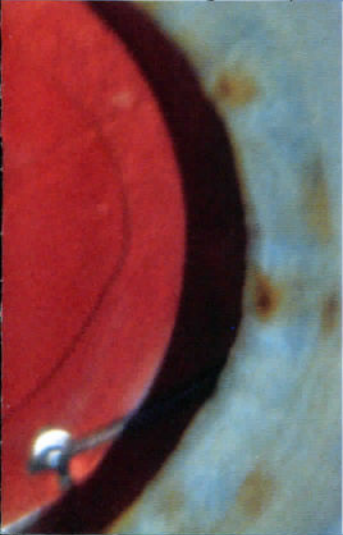
### **Safety by design**

Maximum reliability with fully automatic lamp change. Protection against exposure to harmful UV and thermal radiation. A bright, razor-sharp image for both surgeon and assistant, even at low light levels, to minimize patient exposure.





opes



# OPMI® VISU 200

## Experience the difference

### **Apochromatic optics:**

**Brilliance, definition and contrast**  
- maximum image quality, minimum eye fatigue

Maximum image quality with optimum brightness and brilliance is the result of totally new, apochromatic optics for full color correction.

### **Red reflex:**

**Rich in contrast, low in reflections**

Focused on the special requirements of eye surgery: high light intensity without any unnecessary reflections on the cornea but with a bright red reflex for cataract surgery, even when the patient's eye is decentered. All made possible by the patented  $\pm 2^\circ$  illumination.

### **Effortless positioning with just two fingers**

- Press the button to release the magnetic clutches in the carrier arm of the S8 Floor Stand and then move VISU 200 effortlessly across the surgical field to the position you want.
- Simply let go of the button and VISU 200 will be reliably locked in position above the surgical field. It couldn't be easier.

### **Intelligent, flexible:**

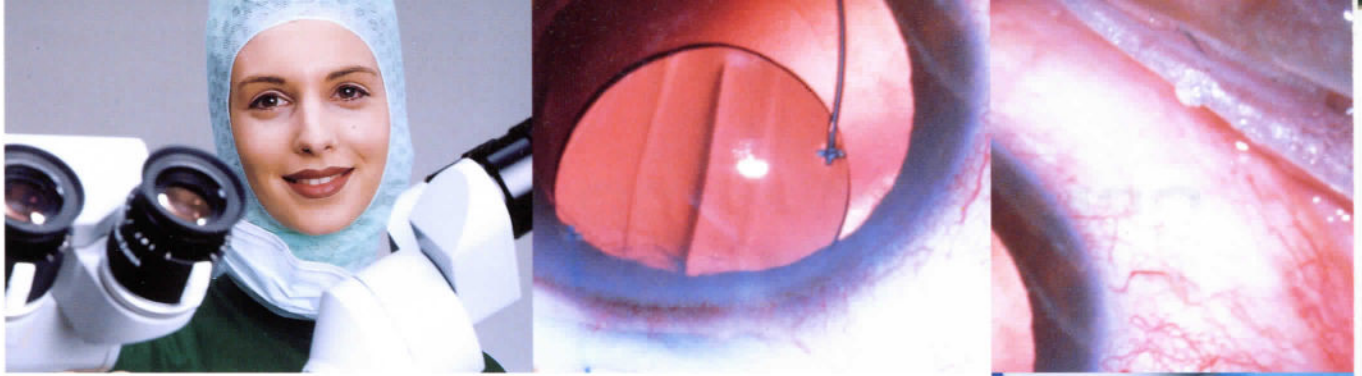
**Tailor it to your needs**

A wide choice of possibilities for storing configuration parameters for up to nine surgeons or types of surgery, e.g. magnification, lamp brightness, or zoom, focus and X/Y speeds.

*Many possibilities  
of parameter storage  
on the S8 Floor Stand*







**Dynamic:  
computer-controlled speed**

The motor speeds for XY and focus are dependent on the current magnification:  
high magnification = slow,  
low magnification = fast.

**Main and assistant's microscopes: total independence for perfect teamwork**

OPMI® VISU 200 allows different magnifications to be set on the two microscopes – with ergonomic viewing comfort for both the main surgeon and the assistant.

The red reflex is visible with outstanding clarity and brightness in both the main and the assistant's microscopes.

**A new concept of mobility:  
the S8 Floor Stand**

A major benefit for OR staff: its maneuvering handle and large casters make the S8 Floor Stand easy to move and relocate with minimum effort.



*Easily accessible control for  
the  $\pm 2^\circ$  illumination*

*OPMI® VISU 200  
on the S8 Floor Stand*

*Mobility and stability in one:  
S8 Floor Stand*

# OPMI® VISU 200

## More light. More space. More comfort.

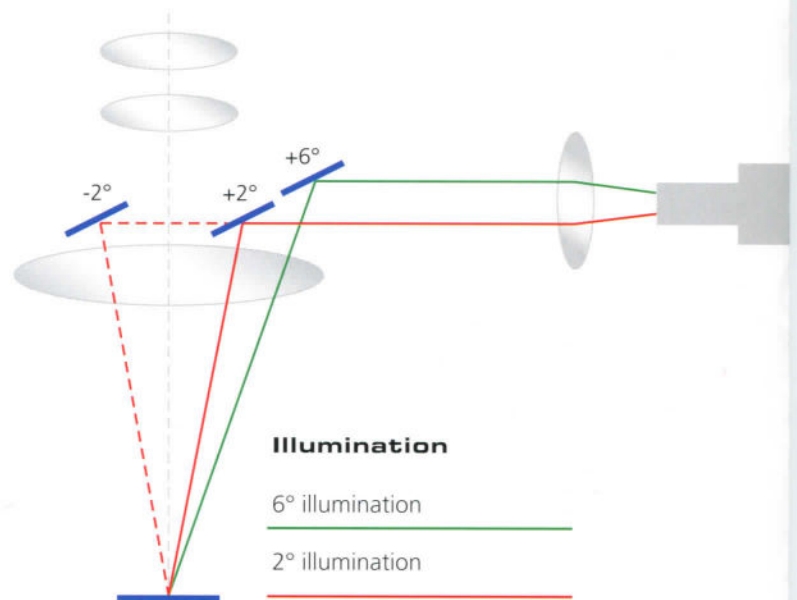


### The main microscope

The outstanding features of the OPMI® VISU 200 surgical microscope have been achieved by focusing sharply on the needs of the surgeon and the patient.

The compact design of VISU 200 reduces the distance between the surgeon and the surgical field.

The ergonomic viewing angle of the 50° tiltable tube guarantees maximum user comfort.



The 12.5x eyepieces ensure excellent orientation at low magnifications. 10x eyepieces are available as an option.

The controls for setting the optimum illumination of the patient's eye are all within easy reach: +2° illumination for the bright red reflex, switchable to -2° to ensure that the red reflex is still clearly visible when the patient's eye is decentered. The 6° illumination can be faded out continuously for optimum image contrast and definition at all times.

The patented, swing-in retinal protection device shields the retina against excessive irradiation.





*The assistant's microscope with 30° wedge (optional)*

### The assistant's microscope

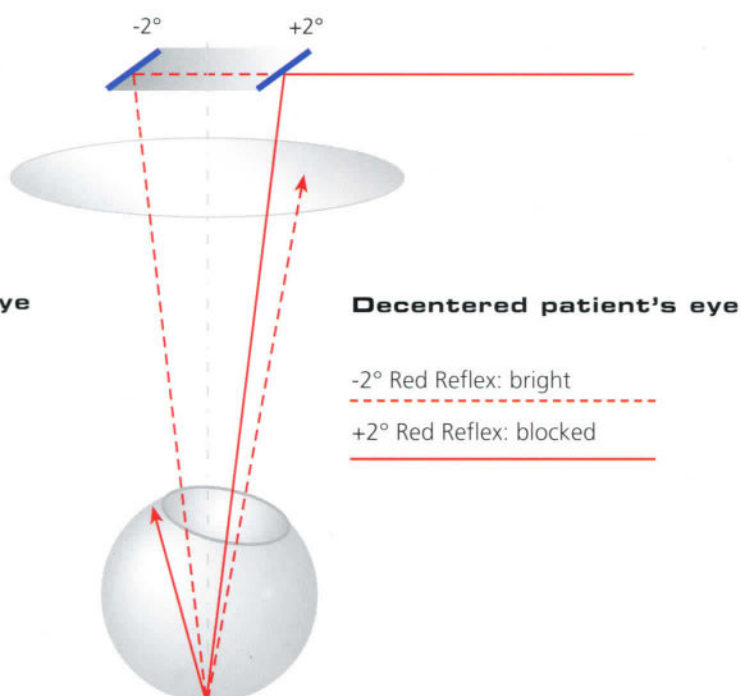
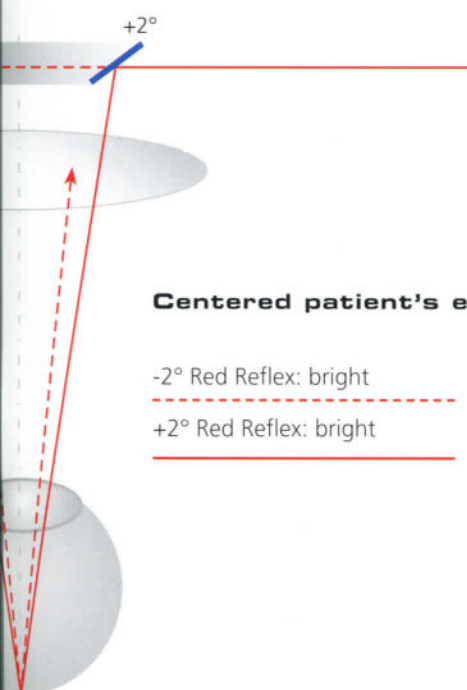
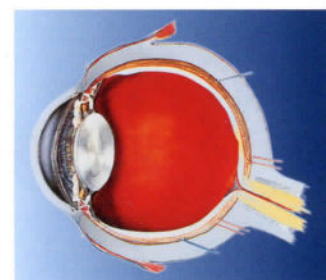
Separate fine focusing and magnification controls facilitate the assistant's work. The red reflex is seen brightly and clearly in both eyepieces.

The manual, 5-step magnification changer and the 175 mm and 200 mm objective lenses are apochromatically corrected to provide a brilliant, crisp image across the entire magnification range.

Ergonomic design:

The inclination of the assistant's microscope can be set between 40° and 55°. An optional 30° optical wedge allows the assistant to choose

between a tilted or virtually horizontal viewing angle. The assistant's microscope can be used on either the right or left, depending on the position required for the assistant.



# OPMI® VISU 200 on the S8 Floor Stand – the new benchmark for eye surgery



## Automatic storage of your configuration settings

OPMI® VISU 200 stores predetermined settings for brightness, magnification, motor speed and the configuration of the foot control panel for up to nine different users.

The press of a button recenters the XY coupling and the focus and resets the zoom to a position defined by the surgeon.

## Lamps: Focus on safety

The lamp voltage can be preset. The brightness is controlled either manually or via the foot control panel.

If a lamp fails, surgery does not need to be interrupted. The lamp change is fully automatic. The system detects the failure and moves the new lamp into position in just an instant.

A filter in the lamp housing protects against excessive UV radiation. Infrared (thermal) radiation is effectively removed. The fiber optic illumination additionally prevents any build-up of heat on the microscope – an important benefit when drapes are used.

## Effortless positioning – reliable locking

The totally new design of the microscope suspension system makes preparation for surgery easy.

- Press the button to release the magnetic clutches in the carrier arm of the S8 Floor Stand and then move VISU 200 effortlessly across the surgical field to the position you want.
- Simply let go of the button and VISU 200 will be reliably locked in position above the surgical field. It couldn't be easier.







*With the maneuvering handle and large wheels, OPMI® VISU 200 can be easily moved and effortlessly steered into position – even through narrow doorways.*

### **S8 mobility**

The large wheels on the S8 Floor Stand allow the OPMI® VISU 200 to be transported easily and effortlessly to other locations. The maneuvering handle is ideal for pulling, pushing and steering the system, making it easier to handle – and making the job of the OR staff easier.



# Always in the picture

## Video documentation

The low-weight, space-saving video cameras in no way hinder surgery.

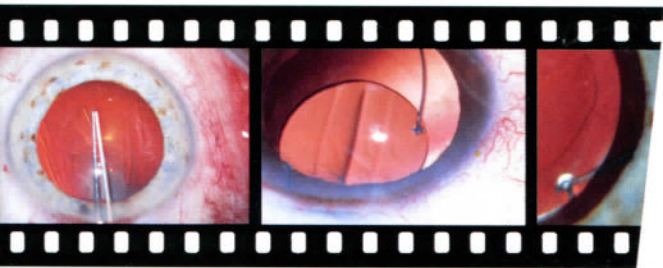
1-chip and 3-chip video cameras are available in various versions to provide true-color images.

1-chip cameras are extremely sensitive to light and need only a minimum of illumination. They are light and compact.

3-chip cameras provide maximum resolution with excellent color rendition.

Small, compact cameras need little space and do not obstruct the surgeon's work. Camera functions are foot-controlled. PAL and NTSC standards are supported.

## 35 mm photography



## The full line of accessories

### Fiber slit illuminator

A high-contrast image on the fundus, better access to the inner eye without sclerotomy, examination of the posterior lens capsule, and membrane peeling are just some of the many benefits of the slit illuminator.

### Mono and stereo coobservation

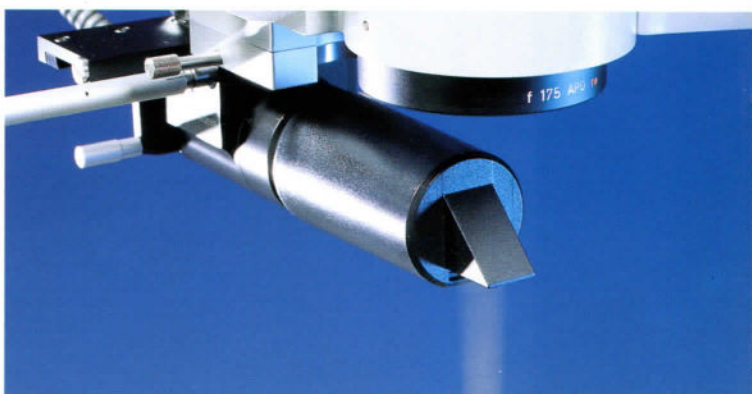
### Dual inclined illumination

The dual inclined illumination, attached to the objective lens with a supporting ring, allows homogenous illumination over a large area.

### Drapes, sterilization caps

An asepsis set helps keep the controls germ-free. Drapes can be used without difficulty.

*Fiber slit illuminator*





# Specifications

## Main microscope

apochromatic optics  
motorized zoom system, zoom ratio 1 : 6

Focusing range 50 mm

Tilttable tube 50°, f=170 mm  
eyepieces 12.5 x (10x optional)  
objective lens f=175 mm (f=200 mm optional)  
magnification 5x – 30.1x  
field of view diameter 7.5 – 44.9 mm

## Assistant's microscope

5-step magnification changer  
separate fine focusing  
adjustable tilt angle, 30° optical wedge (optional)  
eyepieces 10x

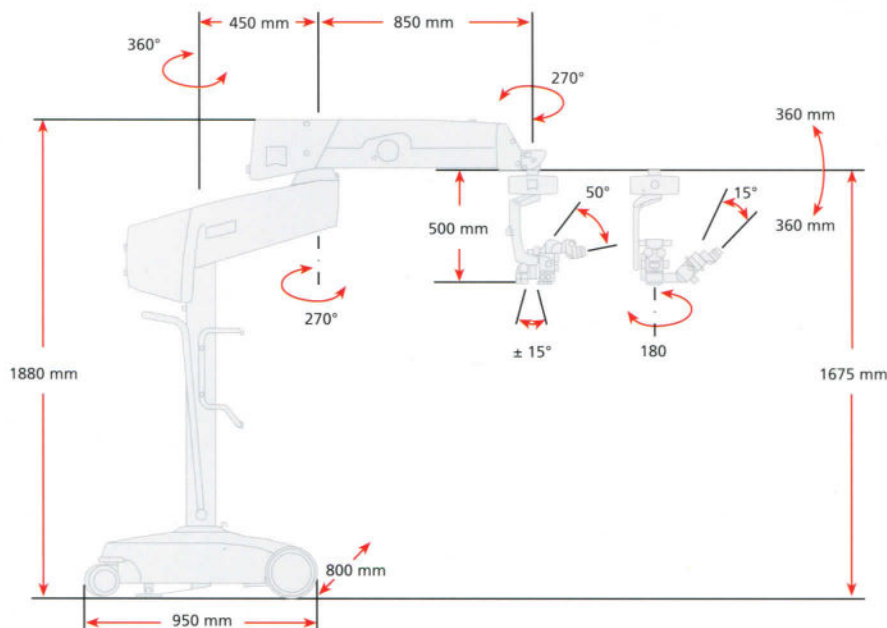
## XY coupling

range of adjustment 40 mm x 40 mm  
control for automatic reset of XY, zoom, focus  
inversion of XY direction of travel possible via foot control panel

## Illumination

fiber light guide, two lamp housings, each with  
two 12 V 100 W halogen lamps  
fully automatic change to back-up lamp in event of  
lamp failure  
filter against UV radiation  
protection against IR exposure  
footswitch control of illumination intensity

## Dimensions



## Illumination geometry

patented 2° illumination for red reflex  
with +2° and -2° settings, DE 40 28 60 5 C2  
6°, with facility for continuous fading  
patented retinal protection device, DE 33 39 17 2 C2  
patented field stop for reduced glare, G 91 03 43 3.7

## Weights

VISU 200 (without accessories) 13 kg  
S8 Floor Stand approx. 200 kg  
max. weight capacity of suspension arm (including  
VISU 200) 20 kg

## Electrical design

protection class 1, type B

## Accessories

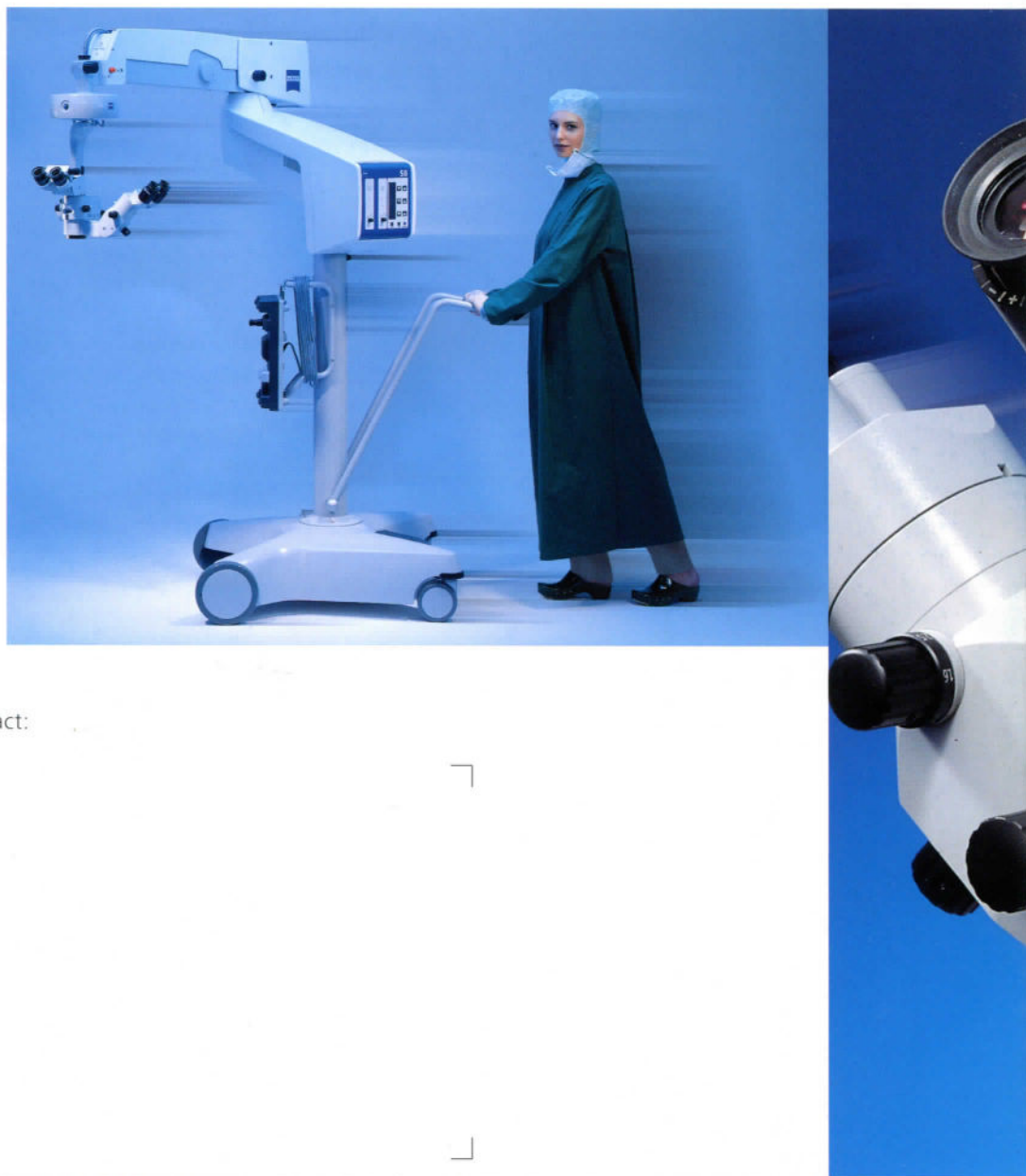
fiber slit illuminator, coobservation tubes (mono  
and stereo), video and 35 mm photography,  
dual fiber illumination

## Asepsis

drapes, sterilization caps

## Other suspension systems

S23 Ceiling Mount  
and, via adapter cable, S6, S61, S3, S4 suspension  
systems



For advice, please contact:

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