

**OPMI pico**  
**Elevating the level of care.**



**Enhance Patient Outcomes.**





Microscope technology from Carl Zeiss makes the most minute details and finest structures clearly visible, enabling you to visualize brilliant, high-contrast, true-color images. Most importantly: better vision is the key to improving the quality of the diagnosis and the treatment.

**Designed for today's practice. OPMI® pico.**

OPMI pico is a compact, high-performance, easy-to-use microscope. In addition to its ergonomic design, it features many innovative functions that optimize the quality of diagnosis and treatment. Complete integration of cables, light source, light guide, video camera and control console is a practical design decision that allows OPMI pico to compliment the overall image of any practice while eliminating any interference with your work.

The integrated video camera option for OPMI pico facilitates one-touch, on-demand documentation essential to the communication process with both patients and staff during treatment.

Carl Zeiss is renowned for their superior optics. With apochromatic coatings, more light is transferred to the viewer's eye, ensuring a significant increase in image resolution, contrast and depth perception. The result is more brilliant, true-color images.

The integrated product design is as unique as the superior optics, and is part of the countless functions that Carl Zeiss delivers with OPMI pico.

Photo:

Dr. Stephane Browet, Koekelberg, Belgium

## For better ergonomics.

OPMI pico is a true advancement in the prevention of neck strain and back problems. Experience it for yourself: only a microscope makes it possible to work in a comfortable and ergonomically correct position.

**The five-step magnification changer** delivers brilliant images – from an overview of the working field down to the finest details. No matter your region of interest, you sit upright the entire time.

Objective lenses with focal lengths of 200 mm, 250 mm and 300 mm are available to **precisely match the microscope to your personal working distance.**

**The ergonomically designed grips** fit perfectly and securely in your hands, enabling you to easily place OPMI pico in the desired position.





## Create more trust.

A picture is worth a thousand words. Explain your diagnosis, the treatment and the results to the patient to ensure a thorough understanding of the benefits of the procedure. Through your step-by-step explanation, you foster a higher level of trust between you and your patient. After all, seeing is believing.

OPMI pico provides all the necessary options needed to carry out effective communication, including the digital MediLive® solutions that enable you to document your work using videos and photos. There are also MediLive systems to edit, archive and present your work, allowing for easy presentation to a group of colleagues or to a referrer.



Photo:

Practice of Dr. Wolfgang Bolz, Prof. Dr. Hannes Wachtel,  
Prof. Dr. Markus Hürzeler, Dr. Otto Zuhr,  
Dr. Wolf Richter, Munich, Germany



## For more integration.

OPMI pico is a compact microscope that optimally fits into your practice workflow. It is characterized by its elegant form, which was honored with the red dot award for its design quality and very easy-to-use functions. Simply plug in the cable and OPMI pico is ready for use. There are no exposed cables or external components to interfere with your work. All functional elements such as the video control console, video camera, cables, light sources, and light guides have been completely integrated into the microscope.

### **Integrated light source with swing-in backup lamp module.**

You have the choice of halogen or xenon illumination. Xenon has a light temperature characteristic of natural daylight.

**The light guide and the power cable are integrated.**

No hanging cables to interfere with your work.

**Integrated video control console.**

Intuitive system adjustments allow you to fine tune the video image.

**Integrated MediLive Primo video camera (optional).** Freeze functionality captures still shots for patient and staff communication during treatment. A rotatable video image enables your patient and staff to always view the image upright.

**Integrated MediLive Primo video camera with Digital Interface (optional).** Easily capture videos and store still images. Transfer video to your computer via the integrated digital video port. Still images can be stored directly to a USB stick.



We would like to thank Dr. Mohr in Neu-Isenburg for kindly allowing us to take photographs in his practice.

## For more operating comfort.

The design focus during development of OPMI pico was extreme functionality. The microscope is precisely tailored to the needs of dentistry. There are numerous functions designed to support your comfort in every phase of treatment. Everything can be intuitively operated from the user's position without ever having to divert your attention from the field of treatment.

The unique optical system of OPMI pico offers magnifications finely tuned to each other, continuous brightness adjustment and a fine focusing feature that provides you with a new quality of vision and work.


### **MORA Interface – the pinnacle of ergonomics.**

The MORA Interface enables you to easily and precisely move OPMI pico into the desired position. Even considering the unique, smooth operation of the MORA Interface, you'll find the most impressive feature to be the upright viewing position that remains constant regardless of the angle of the microscope. This allows you to remain in a comfortable position at all times without taking your eyes off the subject.



### **MORA Interface.**

Enhanced mobility and comfort. You always remain upright and comfortable, regardless of how OPMI pico is positioned.



**Continuous brightness regulation at your fingertips.**

Allows you to easily adjust the light intensity for any clinical situation.

**The 180° tiltable tube.**

Allows you to work in maximum comfort in a variety of positions and on difficult-to-reach areas. Your back will thank you – particularly during longer procedures.

**Widefield eyepieces (12.5x or 10x).**

Large visual field with 3-D, stereoscopic image. Special diopter settings also make them suitable for eyeglass wearers.

**5-step magnification changer.**

Optimally matched magnifications for brilliant images – from an overview of the working field to ultra-fine details.

**Fine focusing**

Adjust the focus to your personal needs.

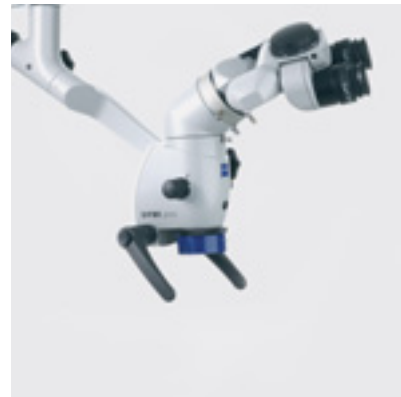
**Focusing objective lens.**

Easy operation for both left and right-handed users. A variety of working distances are available.

# For even more possibilities.

The large selection of accessories enable you to configure OPMI pico for any conceivable treatment situation. Everything is as easy and intuitive to operate as the microscope itself.

## Ergonomic design and



**Angled optics and tube dovetail.** For a comfortable position during work on difficult-to-reach areas.

## Digital visualization



MediLive Primo **1 CCD video camera** (integrated).



MediLive Primo Digital Interface **1 CCD video camera** (integrated).

## Optics and illumination



**Orange filter.** Prevents premature curing of composite materials.



**Double iris diaphragm.** For optimum depth of field.



**Xenon or halogen illumination.** Includes integrated backup lamp module.



**Continuous brightness control.** Adjustment at your fingertips.

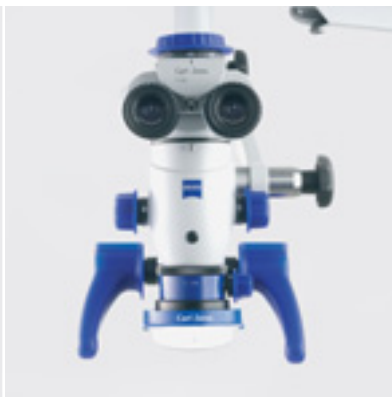
## operating comfort



**Foot control panel.** For convenient navigation and storage of images.



**VisionGuard® Drape.** For sterile working environments.



**Sterilizable caps and handgrip drapes.** For asepsis.



**Medilive Trio Dent 3 CCD video camera.**



**Adapter** for a SLR (single lens reflex) camera.

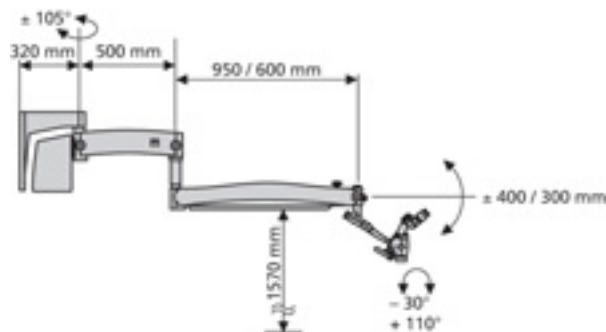
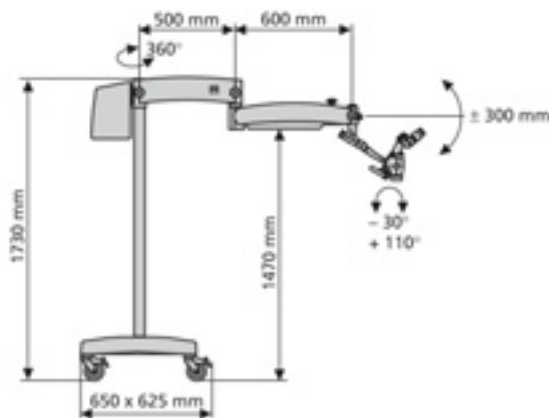
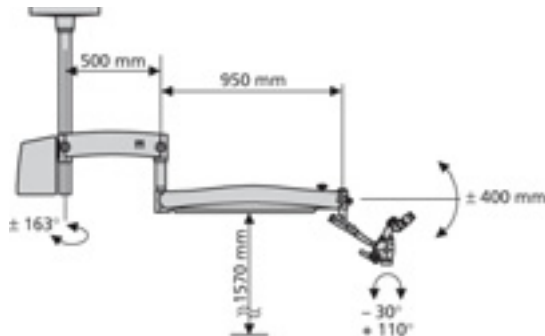


**Adapter FlexioStill** for digital cameras.



**Adapter FlexioMotion** for camcorders.

# OPMI pico by the numbers.



## OPMI pico microscope

### Magnification system

- Manual apochromatic magnification changer
- Five click stop positions:  
y = 0.4x, 0.6x, 1.0x, 1.6x, 2.5x

### Tubes

- 45° inclined binocular tube, f = 170 mm
- 0° - 180° tiltable binocular tube; f = 170 or f = 200 mm

### Eyepieces

- 12.5x and 10x widefield eyepieces, also suitable for eyeglass wearers

### Magnification range

example with f = 250 mm lens and 12.5x eyepiece:

Magnification/Field-of-view diameter:

3.4x	5.1x	8.5x	13.6x	21.3x
65 mm	43 mm	26 mm	16 mm	10 mm

### Focusing

- Manual focusing, focusing range 13 mm
- 3 focusing lenses available: f = 200 mm, f = 250 mm, f = 300 mm, interchangeable

### Microscope mount, mobility

Microscope body adapted to S100 suspension systems via

- 120° coupler
- MORA Interface (optional)
  - Mechanical Optical Rotating Assembly
  - Rotatable coupling for OPMI pico with +/-25° rotational range
  - Integrated, swing-in angular stop to increase depth of field
  - Patented, n. Dr. Assad F. Mora

Handgrips: 4 versions

### Additional optics

- Angled optics with tube dovetail (optional)
- Double iris diaphragm to increase the depth of field (optional)

### Suspension systems

S100 carrier system for user-friendly operation of OPMI pico

- Matched to a weight capacity of 2.5 to 7 kg
- S 100 floor stand
- Mobile solutions for the practice
- Dimensions base: 650 x 625 mm
- Weight: approx. 90 kg

S100 wall mount

- The space-saving alternative for small rooms
- Weight: Short arm: approx. 42 kg, long arm: approx. 43 kg

S100 ceiling mount

- Creates free space around the treatment chair
- Weight: approx. 54 kg

S100 Centro mount for support system KaVo Centro

- For space-saving integration into the office
- Weight: approx. 35 kg

### Illumination systems

- Integrated coaxial cold-light illumination
- Control knob to adjust brightness directly above the viewing tube
- Easy-to-reach, swing-in orange filter for composite materials
- Integrated 12V 100W halogen illumination with 2 halogen reflector lamps in the quick-change module
- Integrated 12V 180W xenon illumination with daylight characteristic including 2 xenon lamps in the quick-change module (optional)

### Camera systems (optional)

Integrated 1 CCD video camera

- Functioning and ready for use at any time
- Freeze function for capturing still shots
- Image rotate
- Customizable user settings
- Video standard: PAL/NTSC
- Ports: Y/C (S-Video) and VBS (composite)

In addition to the above-mentioned functions of the 1 CCD video camera, Integrated MediLive Primo Digital Interface also offers:

- Connected storage media: USB 2.0
- Digital video port: DV (IEEE 1394)

External MediLive Trio Dent 3 CCD video camera

- Customizable user-specific settings
- Video standard: PAL/NTSC
- Ports: Y/C (S-Video) and VBS (composite) RGB, Progressive Scan DV, DVI

Accessories to attach external cameras

- Splitter:
  - Angled optics with left and right documentation ports, optional with tube dovetail
  - Beam Splitter 20 with documentation ports
  - Beam Splitter 50 with documentation ports
  - MORA Interface with documentation port
- Adapters:
  - Video lens with C-mount interface for the attachment of external video cameras
  - Lens to attach external digital cameras

### Accessories

- Splash protection for the objective lens
- VisionGuard drapes for sterile work

### Electrical data

- Rated voltage:
  - 115 VAC (100...120 VAC  $\pm$  10%);
  - 230 VAC (220...240 VAC  $\pm$  10%)
- Power consumption Halogen illumination: 115 VAC max. 2.0 A; 230 VAC max. 1.0 A
- Power consumption Xenon illumination: 115 VAC max. 5.0 A; 230 VAC max. 2.5 A
- Rated frequency: 50...60 Hz
- Fuses Halogen illumination:
  - 115 VAC T 6.3 A/H 250 V;
  - 230 VAC T 3.15 A/H 250 V
- Xenon illumination: automatic circuit breaker
- Electrical standard Protection class I, Degree of protection IPX0, Product classification I in acc. with 93/42/EEC Annex IX

### Compliance

- DIN EN ISO 9001, DIN EN ISO 13485
- DIN EN 60601-1, IEC 601-1
- UL 60601-1, CAN/CSA-C22.2 No. 601.1



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