OPMI PROergo
The smart solution for dentistry
The moment you see a hidden detail reveal a visible success. This is the moment we work for.
Comfort and information

A Carl Zeiss microscope enables greater precision and efficiency. Key benefits include:

**Magnification**
You can only treat what you can see. Optics from Carl Zeiss allow visualization of detail and fine structures, enabling you to enhance the quality of your diagnosis and treatment.

**Ergonomics**
Utilizing OPMI® PROergo during treatment facilitates a comfortable working position. The ergonomic design helps prevent back and neck pain, as well as more serious spine disorders.
Communication
Integrated video cameras make it possible to present the clinical treatment – before, during or after the procedure. High-quality diagnostic images and videos allow you to demonstrate the recommended course of action to your patients during treatment planning sessions.

Clever design
OPMI PROergo combines optical quality with working and operating comfort to deliver an intelligently designed product. From the cables to the control console, Carl Zeiss has integrated each part for convenient operation and a clean, sleek appearance.

When you select your Carl Zeiss microscope you also benefit from the years of experience and optical expertise that come with the name Carl Zeiss.
See more – treat more

OPMI PROergo from Carl Zeiss enables you to view otherwise difficult-to-see regions. The coaxial illumination puts light where it is needed. Even root canals are effectively illuminated and imaged.

Endodontics picture courtesy of:
Dr. Bijan Vahedi, Augsburg, Germany
Improved comfort – improved work

By providing you with a comfortable, upright position for your work, OPMI PROergo helps prevent the quick onset of fatigue as well as neck and back problems.

OPMI PROergo provides comfort and a smooth treatment routine with the following three functions:

**The motorized Varioskop** adjusts to your seated position. Focus the treatment area with the push of a button and without moving the microscope or changing your working position.

**The 180° tiltable tube** allows you to work in comfort in a variety of positions and on difficult-to-reach areas. Your back will thank you – particularly during longer procedures.

**The Free Float Magnetic System** offers effortless maneuvering and smooth, precise positioning. The microscope is always where you want it.
An ergonomic breakthrough

The Foldable Tube f170/f260* combines brilliant apochromatic optics and a unique design for maximum visualization flexibility. It allows dentists a wide range of comfortable working positions, magnification potential and positioning ergonomics – even at extreme treatment approach angles.

Greater comfort
The Foldable Tube f170/f260 introduces a new level of comfort:

Rotate the tube conveniently without moving the microscope head using the integrated 360° rotation function. No need for external rotating adapters while also reducing build height.

1.), 2.) 3.) Easily adjust angle, length and height as needed 4.) Relaxed working position as eye level is higher than arm posture

Greater detail
Instantly yield a 50% magnification gain for delicate and detailed procedures with the integrated PROMAG™ function. Choose between optimum magnification and maximum field of view with a quick turn of the knob.

PROMAG® for additional 50% detail magnification. Endodontics picture courtesy of: Dr. Bijan Vahedi, Augsburg, Germany

* f170: focal length of 170 mm like the tiltable tube
* f260: focal length of 260 mm provides additional 50% magnification (PROMAG)
Better communication – better patient compliance

Patients often have difficulty understanding diagnoses, courses of treatment and outcomes. Having the ability to communicate with your patients using clear images and video footage illustrating your clinical concerns is extremely valuable for treatment acceptance and compliance. A picture is worth a thousand words.

OPMI PROergo provides visualization and documentation solutions that enable you to illustrate your work – before, during and after the procedure. The video cameras and camera adapters for OPMI PROergo allow you to document the diagnostic results and treatment stages in digital quality and convincingly demonstrate the accuracy of the recommended procedure.

Furthermore, the MediLive® systems offer solutions for archiving and processing digital images and videos, which can be utilized in many different ways. They can be used to present cases and clinical outcomes to colleagues or document treatment for referrers.

In short: OPMI PROergo creates added value – for your patients, for your office and for you.

Endodontics picture courtesy of:
Dr. Rino Burkhardt, Zurich, Switzerland
Welcome to your practice

What you see when looking at OPMI PROergo is a microscope with a sleek, attractive design that matches the overall image of any practice.

What you do not see is the heart and soul of the instrument – the technology that drives it. The cables, light source, light guide, video camera and control console have all been completely integrated into the microscope. There are no exposed cables or external modules and instruments to interfere with your work.

The integrated product design reflects the high quality of the optics, and is part of the many functions that Carl Zeiss delivers with OPMI PROergo.

Integrated light guide and cable
No hanging cables to interfere with your work.

Integrated MediLive
Primo video camera
(optional)
Featuring a freeze function to capture still shots and a rotatable video image function for upright viewing which enables better communication with both patients and staff during treatment.
Integrated light source and backup lamp module
Whether you choose halogen or xenon illumination, there are no extra boxes to affix to the microscope.

Integrated control console
With a large LCD display and intuitive user menus, it is possible to program individual default settings to meet your practice requirements.
Quality and convenience in one

Carl Zeiss is known around the world for the high quality of its optics. A major feature in the production of Carl Zeiss optics is the apochromatic coating, which corrects for all three wavelengths of the visible spectrum. This ensures that there are no chromatic aberrations and enhances image resolution, contrast and depth perception.

The high quality of OPMI PROergo goes beyond the optics. You will also enjoy high operating comfort and convenience.

Integrated light source
You have the choice of halogen or xenon illumination. Xenon has a light temperature characteristic of natural daylight. Both illumination systems present homogenous, high-contrast illumination of the treatment field. Perhaps the most striking feature is the integrated backup lamp module that can be changed with the push of a button. No treatment interruptions.

Control console
Default settings such as light, zoom or magnification can be personalized and stored for various users, making clinical transitions quick and easy.
Wide-field eyepieces (12.5x or 10x)
Large visual field with 3D, stereoscopic image.
Special diopter settings also make them suitable for eyeglass wearers.

180° tiltable binocular tube
For an ergonomically correct, upright seated position even with extreme microscope positions.

Motorized Varioskop
Focus the treatment field at the push of a button without having to move the microscope or change your working position.

Motorized zoom
Continuous magnification. The brightness setting adjusts automatically as you increase or decrease magnification levels.

Ergonomically designed handgrips with function keys
Control the focus and zoom and set the other configurable function buttons to operate brightness, SpeedFokus® or image freeze.
Welcome to the state of weightlessness

Regardless of the model you select – floor stand, wall or ceiling mount – the free float magnetic system enables you to smoothly and easily position the microscope where you want it with ease.

**Free Float Magnetic System**
You can unlock the magnetic brakes with the push of a button on the handgrip. You can then easily maneuver the OPMI PROergo into the desired working position. The system locks back into place once the button is released. It’s that simple!

**SpeedFokus**
Manual focusing is a thing of the past. Carl Zeiss believes your hands have more important things to do during treatment. A press of a button is all that is needed to focus the microscope. SpeedFokus is an option available upon request.
OPMI PROergo is a system of almost unlimited possibilities. The configuration is tailored to the respective treatment or specific requirement. The available accessories and varying models of OPMI PROergo are as easy and intuitive to use as the microscope itself.

Ergonomic design and operating comfort

- **Foldable Tube f170/f260**
  - With PROMAG for 50% more magnification.

- **Angled optics and tube dovetail**
  - For work on difficult-to-reach areas.

- **Foot control panel**
  - Configurable functions allow you to free up your hands.

Digital visualization

- **MediLive Primo**
  - Integrated 1 CCD video camera.

- **Trio 610**
  - External 3 CCD HD camera.
Optics and illumination

Orange filter
Prevents premature curing of composite materials.

Xenon or halogen illumination
Complete with integrated backup lamp module.

Double iris diaphragm
Increases depth of field.

Stereo co-observation tube
Your assistant can follow the procedure live.

1.

Autofocus and SpeedFokus
Fast, automatic focusing.

Free Float Magnetic System
Smooth movement at the push of a button.

Sterilizable caps and handgrip drapes
Conduce asepsis.

VisionGuard® Drape
Helps ensure sterile work environment.

SLR camera adapter.

FlexioStill
Adapter for digital cameras.

FlexioMotion
Adapter for digital camcorders.
# OPMI PROergo by the numbers

## OPMI PROergo microscope system

<table>
<thead>
<tr>
<th>Magnification system</th>
<th>Motorized zoom system; with apochromatic 1:6 ratio; magnification factor Y = 0.4x–2.4x</th>
</tr>
</thead>
</table>
| **Tube**             | - Foldable Tube f170/f260, including PROMAG® function for additional 50% magnification and integrated rotate function (optional)  
- 0°–180° tiltable binocular tube |
| **Eyepieces**        | 12.5x and 10x wide-field eyepieces |
| **Magnification range** | Example with AA 300 mm and 12.5x eyepiece  
Magnification: 2.3x up to 14x  
Field-of-view diameter: 75 to 16 mm |
| **Focusing system**  | - Continuous motorized focusing via Varioskop; focusing range of 200–415 mm  
- SpeedFokus (optional) |
| **Additional optics**| - Angled optics with tube dovetail (optional)  
- Double iris diaphragm to increase the depth of field (optional) |
| **Operating concept**| - Free Float Magnetic System  
- LCD display with user guidance  
- Handgrip buttons for zoom and focus and freely programmable function keys  
- Foot control panel for zoom and focus (optional) |

## Camera systems (optional)

### Integrated MediLive Primo 1 CD video camera

- Functioning and ready to use at any time  
- Freeze function for still shots  
- Continuous image rotation  
- Specific user settings  
- Video standard: PAL/NTSC  
- Ports: Y/C (S-Video), VBS (composite)

### Accessories to attach external cameras

| Splitter: Angled optics documentation port, optional with tube dovetail |
| Beam splitter 20 with documentation port |
| Beam splitter 50 with documentation port |
| Adapters:  
- Video lenses with C-mount interface for the attachment of external video cameras  
- Lenses to attach external digital still cameras |
### Illumination system

- Integrated coaxial cold-light illumination
- Adjust brightness via the handgrip buttons
- Swing-in illumination diaphragms
- Orange filter for composite materials
- Integrated 12 V 100 W halogen illumination with 2 halogen reflector lamps in the quick-change module
- Integrated 12 V 180 W xenon illumination with daylight characteristic including 2 xenon lamps in the quick-change module (optional)

### Accessories

**Splash protection for the objective lens**
- High-quality cover lens with good optical quality, easy to change
- Reflection-free vision through slanted arrangement of the lens

**VisionGuard drapes for sterile work**

### Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rated voltage</strong></td>
<td>115 V ~ (100...125 V ~ ± 10%)</td>
</tr>
<tr>
<td></td>
<td>230 V ~ (220...240 V ~ ± 10%)</td>
</tr>
<tr>
<td><strong>Current consumption</strong></td>
<td>115 V ~ max. 10 A</td>
</tr>
<tr>
<td></td>
<td>230 V ~ max. 8 A</td>
</tr>
<tr>
<td><strong>Rated frequency</strong></td>
<td>50...60 Hz</td>
</tr>
<tr>
<td><strong>Fuses</strong></td>
<td>Automatic circuit breaker</td>
</tr>
<tr>
<td><strong>Electrical outlets</strong></td>
<td>- Surgical microscope</td>
</tr>
<tr>
<td></td>
<td>- Remote socket for an external signal of a maximum of 24 V/0.5 A</td>
</tr>
</tbody>
</table>
**OPMI PROergo technical data**

**Suspension system**

57 carrier system for user-friendly operation of OPMI PROergo
- Max. capacity 14 kg

57 floor stand
- Mobile solutions for the practice
- Dimensions: 640 x 640 mm
- Weight: approx. 177 kg

57 wall mount
- The space-saving alternative for small rooms
- Weight
  - Short arm: approx. 68 kg
  - Long arm: approx. 69 kg

57 ceiling mount
- Creates free space around the treatment chair
- Weight: approx. 80 kg

57 Centro mount for support system KaVo CENTRO
- For space-saving integration into the office
- Weight: approx. 53 kg