



The **Zeiss OPMI Pentero** surgical microscope features apochromatic optics that deliver crystal-clear images, sharp details, and natural colors. The OPMI Pentero has 20% more light than previous models with spot illumination to precisely adjust the light cone. The Pentero has integrated high-speed autofocus that automatically delivers sharp images regardless of magnification. With the overhead design of this microscope, the suspensions system can be placed in any position, even behind the surgeon.

Features

- Automated functions such as AutoBalance and AutoDrape
- Image-guided surgery with MultiVision data injection
- Integrated digital visualization, optionally with integrated high-definition (HD) camera head
- DICOM networking capabilities
- Touchscreen operation



Specifications

Dimensions

Height: 81.1" (206 cm)

Width: 28.97" (73.6 cm)

Depth: 28.97" (73.6 cm)

Magnification System

Motorized zoom, apochromatic, 1:6 ratio

Magnification displayed on touchscreen and in the ocular (on demand)

User specific start position

Focusing System

Varioskop, apochromatic, 200–500 mm working range

Internal, motorized, continuous adjustment

Magnification linked adjustment of focus speed

High-speed laser autofocus, accurate to +/- 0.5 mm (Class II Laser)

Visual focusing aid with two converging laser spots

Working distance displayed on touchscreen and in the ocular (on demand)

User specific start position

MultiVision System

Integrated data display with shutter function

SVGA 800 x 600, color, 50-60 Hz

Color, binocular, injection and superimposition of contours and data

Supported external data signals

- Computer data (VGA Signal)
 - I.e. data from navigation systems
- Y/C video data (PAL / NTSC)
 - I.e. data from endoscopy systems

Superimposition of system information (focus, zoom, light)

Injection of the touchscreen user interface into the eyepiece for sterile control of the system

Tubes and Co-Observation

Main tube: 0–180° rotatable

Eyepieces 10x/21B, 12.5x/18B

Integrated beam splitter for lateral and face-to-face co-observation

Stereo co-observation tube remains fixed when tilting the OPMI

Spine adapter for symmetric face-to-face configurations

Integrated rotary tube adapters

AutoDrape Systems

Integrated vacuum system to remove air from sterile drape for fast and easy draping



Specifications

Illumination System

Superlux 330 light source with two 300 W Xenon daylight character lamps
Integrated light source and light guide
Integrated two-way illumination brightens shadows
Variable spot illumination, minimum diameter 10 mm
Semi-automatic lamp exchange
Display of remaining lamp life on Touchscreen
Brightness regulation via handgrips
Magnification dependant automatic brightness adjustment
Synchronized camera flash system

AutoBalance

AutoBalance of the microscope, suspension system or entire system by pushing a button
Microscope AutoBalance independent of position or accessories

Hospital Workflow Integration

Varioskop, apochromatic, 200–500 mm working range
Internal, motorized, continuous adjustment
Magnification linked adjustment of focus speed
High-speed laser autofocus, accurate to +/- 0.5 mm (Class II Laser)
Visual focusing aid with two converging laser spots
Working distance displayed on touchscreen and in the ocular (on demand)
User specific start position

MultiVision System

LAN interface and modem
Microphone and speaker
Patient data management allowing archival of image, video and audio data
Service file
Remote service interface

