



The **Zeiss OPMI Neuro NC-4 Surgical Microscopes** is one of the most successful neurosurgical systems by Zeiss. It has been established as one of the best integrated imaging systems. With its legendary optics and ergonomically innovations, making it the idea microscope for most neurological suites. The NC-4 is one of the first Zeiss Surgical microscopes to integrate a Heads-UP Display and AutoFocus. This scope will accommodate most neuro-navigational systems. The immediate pre-cursor to Zeiss' latest Opmi Pentero, this was a Zeiss standard for many years. When Zeiss engineered this system, they had in mind easy balancing as well as seamless integration of the optics, mechanics, and electronics. This microscope doesn't stray too far from the bells and whistles of the Pentero, while cutting the pricetag by more than half.

Features

- Microscope produces razor-sharp images with an unprecedented level of detail for improved surgical workflow.
- Entire optical system now features apochromatic coatings, ensuring outstanding color fidelity free of distortions.
- One microscope for every image guided platform: BrainLAB, CBYON, Medtronic SNT, Radionics, Visualization Technology, and more.
- Unique AutoFocus technology allows clinicians to quickly produce perfect images every time.
- Versatile microscope was designed to accommodate virtually any neurological surgery setup.
- Ergonomic controls were designed with the user in mind.
- Handgrips can be used to control every major microscope function without the need of a surgical assistant.
- Unobtrusive handgrips are mounted below the OPMI, allowing clinicians to easily pass instruments in and out of the surgical field.
- The entire handgrip can be adjusted under the surgical drape and can be rotated 180 degrees for easy access.
- Both binoculars can be easily rotated for cross-table procedures.
- Optional — multi-function foot-control panel permits ergonomic control of all of the microscope's functions, (i.e. zoom, focus, and AutoFocus) with one foot.



Specifications

Tube/Eyepieces

Removable tiltable tube
Tilt range 180°
Focal length $f = 170$ mm
10x screw-type widefield eyepieces with integrated eyecups. This equipment provides full illumination of the field of view.

Objective Lens

Varioskop objective lens
Working distance: approx. 195 ... 420 mm
Motorized, adjustable speed. Manual adjustment possible (emergency mode).
Sensor for working distance for neuronavigation.

Magnification

Focusing range: approx. 195 ... 420 mm
motorized autofocus, manual triggering,
motorized autofocus, automatic triggering, or
manual focusing with knob on microscope body

Overall optical system with 10x widefield eyepieces

Total Magnification
Beta min.(f_{min} / f_{max}) 2.2 / 1.3
Beta max.(f_{min} / f_{max}) 13.4 / 7.6
Field-of-view diameter
Beta min.(f_{min} / f_{max}) 93 / 163 mm
Beta max.(f_{min} / f_{max}) 15 / 27 mm

Depth of Field

Double iris diaphragm for adjusting the depth of field. Image brightness decreases as depth of field increases.
The brightness of data injection remains unaffected.

Video Port

Integrated video port for
1-chip 1/2" cameras
3-chip 1/2" cameras.
Focal length $f = 67$ mm Zeiss camera system (C-mount interface)
3D option with additional 3-CCD camera

Weight

aprox. 8 kg