

Axioskop 2 plus **Axioskop 2 FS plus**



Microscopes
For The Life Sciences



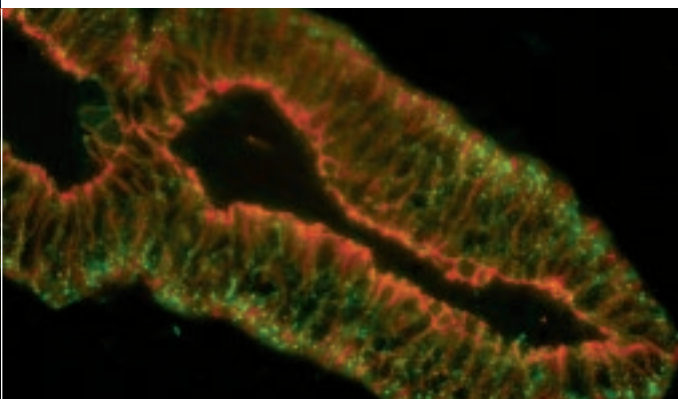
Axioskop 2 plus

A Class Of Its Own

If you expect your next microscope to meet particularly high standards, the **Axioskop 2 plus** will not disappoint you. Its performance establishes a new state of the art in light microscopy, with merits that become effective in everyday clinical diagnostics as well as in complex investigations in biological and medical research.

Axioskop 2 plus is conceived to be flexible and adaptable to every requirement, down to the last detail – and with economy in mind, too. You can be sure that **Axioskop 2 plus** leaves nothing to be desired. Your studies will be backed by images of unparalleled brilliance, especially in fluorescence.

*Human endometrium.
Cytokeratin, Alexa 568; E-Cadherin, Alexa 488.
Specimen prepared by Anette Mayer,
Institute of Anthropology and Human Genetics,
University of Frankfurt*



Among the many other merits of the **Axioskop 2 plus** are its exceptional stability, the outstanding precision with which it reproduces learned settings, and its ergonomic concept: Controls within easy reach, adjustable viewing height and viewing angle. Allowing you to work with certainty and ease, **Axioskop 2 plus** makes microscopy more enjoyable, whether in everyday routines or demanding research work such as chromosome analysis.

Fluorescence.

More than exciting

What counts in successful fluorescence work in research today is extras: Extra brightness, extra contrast, extra method combinations.

Axioskop 2 plus offers these extras. All optical elements in the reflected light path are designed to conduct a maximum of light energy. Aperture and field diaphragms are furnished with easy adjustment facilities. Five reflector modules, interchangeable in no time with an ingenious Push&Click mechanism, provide utmost flexibility in the combination of transmitted and reflected light methods. On the excitation side, they are optimally supplemented by a six-place filter slider. Exact registration of multichannel fluorescence images is guaranteed. Last but not least: The Light Trap (patent applied for) minimizes disturbing stray light, providing an unprecedented improvement in the signal-to-noise ratio, and a resulting lower detection limit.

*Quintuple reflector turret
with Push&Click modules*

Axioskop 2 plus

Superb Everyday Performance

If advanced capabilities and ease of operation are what makes a microscope excellent, the **Axioskop 2 plus** is a model of excellence.

The stand: Fluorescence without intermediate tube

The **Axioskop 2 plus** stand allows for easy integration of the highly optimized fluorescence light train. The 5x FL turret provides ideal flexibility for fluorescence filters, Optovar lenses or DIC components. The stage carrier's dual guidance system guarantees maximum stability during long-term observation studies (e.g., 5D imaging). You can choose between quintuple or sextuple nosepieces. Standard interfaces allow you to equip your **Axioskop 2 plus** with all Zeiss microscope accessories you need for your specific requirements.

The optics: Excellent in every respect.

With Zeiss ICS optics, you can be sure of getting brilliant, high-contrast images. From the wide range of objectives you can select what is best for your specific application, both by efficiency and economy. A-Plan objectives for routine jobs, the Plan-Neofluar series for demanding techniques, Fluair and water immersion objectives for sophisticated scientific methods.

Condenser turrets with up to seven places, and condensers with various apertures to match objective powers from 1.25x to 100x give you full flexibility for every illuminating and contrasting method.

Enjoy the optimum illumination provided by the easily changeable 12V/100W halogen lamp for transmitted light, or the extremely powerful, but easily adjustable HBO 103 for fluorescence work.

The options: Tailored to specific needs

With a comprehensive range of accessories available you can equip your **Axioskop 2 plus** so that it exactly matches your applications: Trinocular tubes for documentation. Ceramic-coated stages for everyday routine. Motorized stages and position readout for reproducible specimen positioning and automatic indexing. Objectives and condensers. Modules for reflected and transmitted light techniques. Co-observation bridges, coded and motorized components, linking with your PC ...

Whatever you need, **Axioskop 2 plus** provides it.

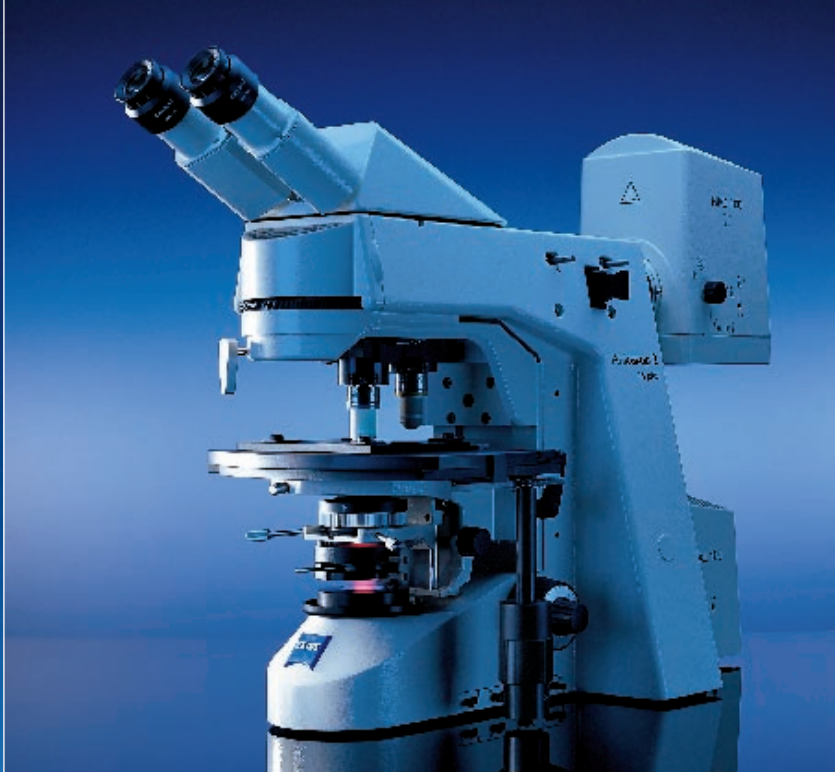
*Fig. 1A
Viewing height adjustable via
intermediate tube*

*Fig. 1B
Viewing angle adjustable via
ergonomic tube*

*Fig. 2
Neuron of the cerebral cortex;
fluorescence.
Bert Sakmann, Max-Planck-Institut,
Heidelberg.*

*Fig. 3
Special accessory for electrophysiology:
"Lift'n Shift" dual linear objective
changer*





Ergonomically mature

Axioskop 2 plus and **Axioskop 2 FS plus** have been designed with your comfort in mind: Stand controls are within easy reach. Stage controls remain stationary while you move the stage along X and Y. Viewing angles and viewing heights are variable. To avoid eye fatigue, the field of view is large, but not oversized.

So you can use your **Axioskop 2 plus** or **Axioskop 2 FS plus** in a relaxed posture for low-fatigue microscopy.

Abb. 1A

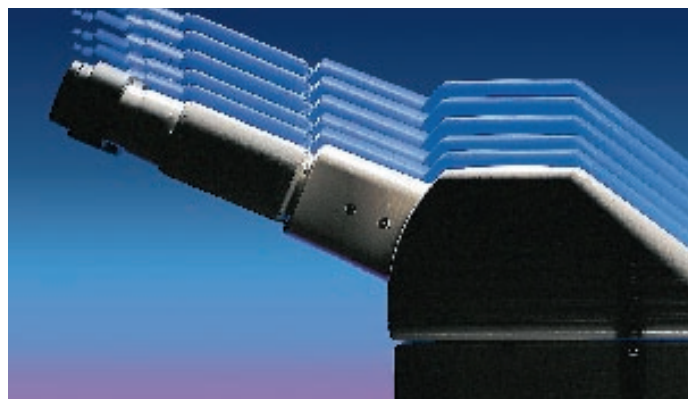


Abb. 1B



Axioskop 2 FS plus

First Choice In Physiology

In addition to the merits of the **Axioskop 2 plus**, the **Axioskop 2 FS plus** offers special advantages to researchers in physiology.

Fixed stage position

Focusing acts on the objective – a prerequisite for successful work with live specimens.

Long working distances

Thanks to the stand design, the configuration of the optical axis and the adjustable stage height, the specimen is readily accessible for manipulation and placement of multiple electrodes.

Reproducible focusing with unrivaled mechanical stability

This is a must when you examine living tissue sections. Repositioning in X, Y and Z is within extremely close mechanical tolerances. The Dual Rail Guidance system of the focusing mechanism assures maximum stability over long periods of study.

Special optics

Carl Zeiss Achroplan water immersion objectives set new standards: Long working distances, high NAs, optimized transmission from the near UV to well into the infrared.

The IR versions open up further capabilities: You can use the 2-photon technology, or the "optical trap" method for micromanipulation.

With the VIS/IR filter set you can easily switch back and forth between white light and infrared.

The N.A. 0.8 condenser for brightfield and DIC with its 7mm working distance is watertight, and the field diaphragm is protected by a cover against physiological spills.

Quick-switch linear objective changer

Two-place changer with "lift'n shift" mechanism for fast and reproducible switching between overview and detail magnifications, or for the easy change of objectives and specimens.

Abb. 2

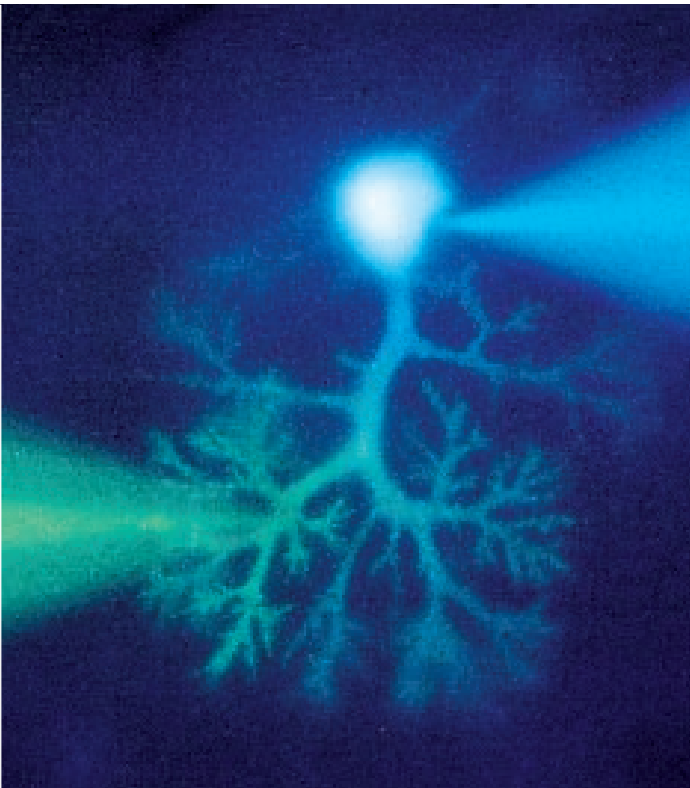
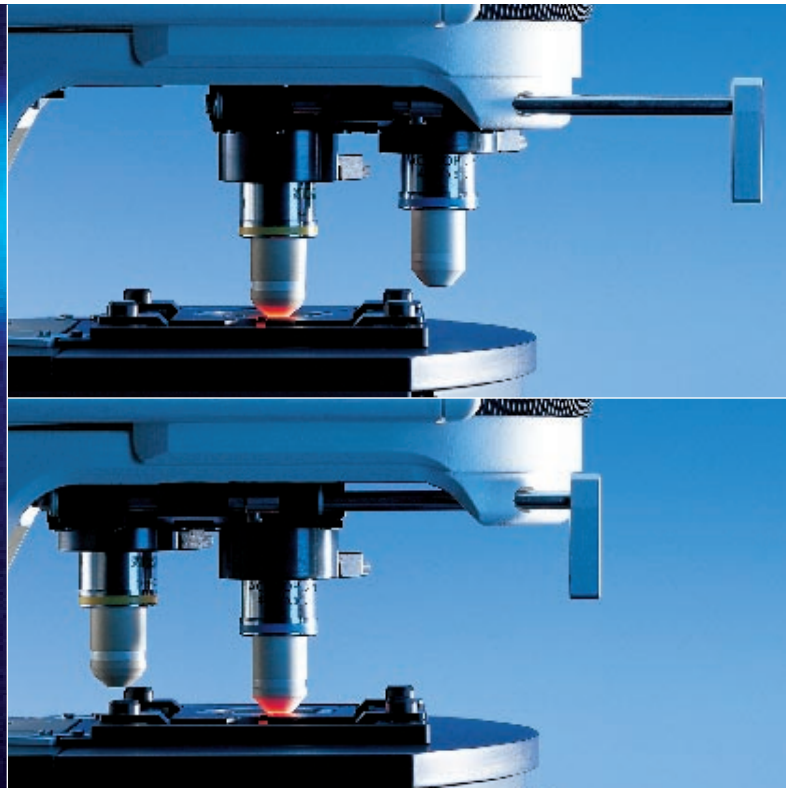


Abb. 3



Axioskop 2 plus

Ideal For Imaging

Documentation and analysis are the essence of research microscopy. With trinocular tubes accommodating SLR, video or digital cameras, **Axioskop 2 plus** and **Axioskop 2 FS plus** make the recording and presentation of your specimen images simple and easy.

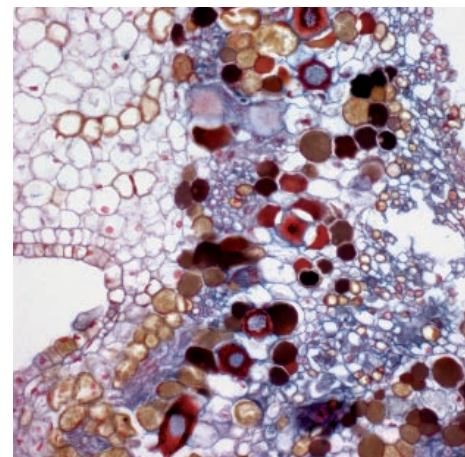
But for the ultimate in simplicity and performance, think **AxioCam**, the digital microscope camera. Designed by the microscope experts, with the microscopist in mind. A truly multi-talented digital camera.

Documentation is supported by the application-oriented Carl Zeiss **AxioVision** software package, which handles everything from image acquisition to simple image processing and annotation to archiving.

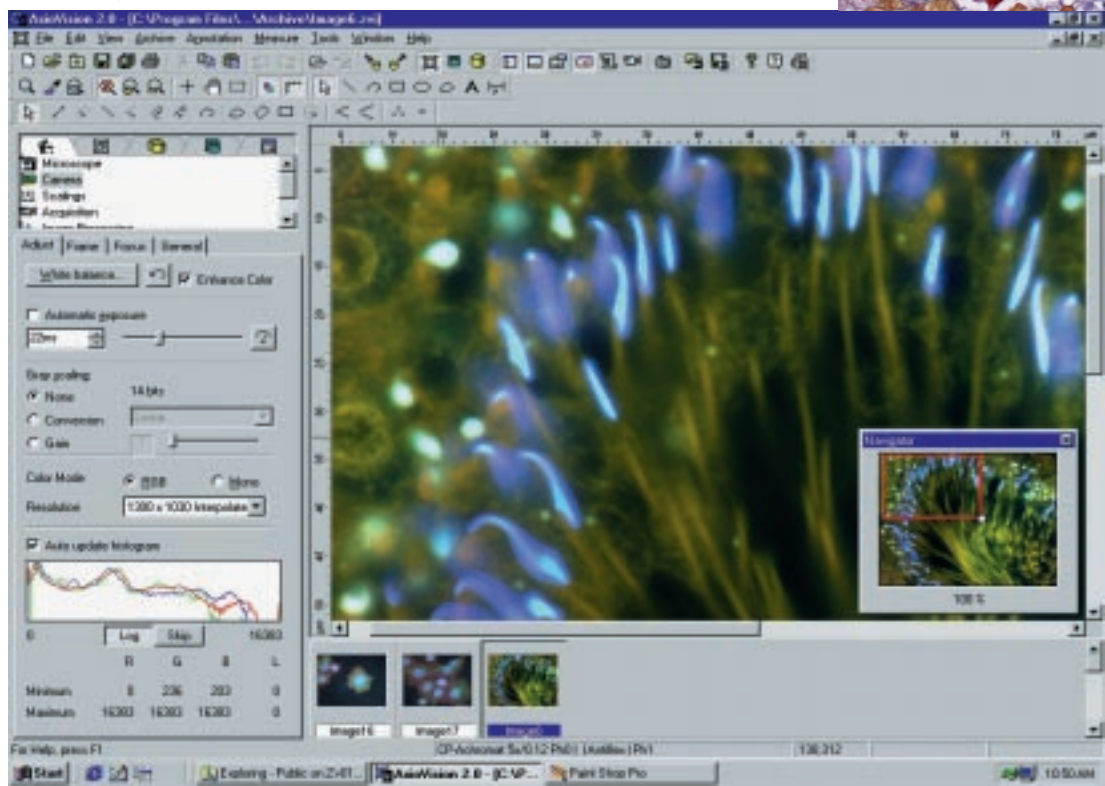


*AxioCam,
the digital microscope camera*

*Plant stalk,
cross section*

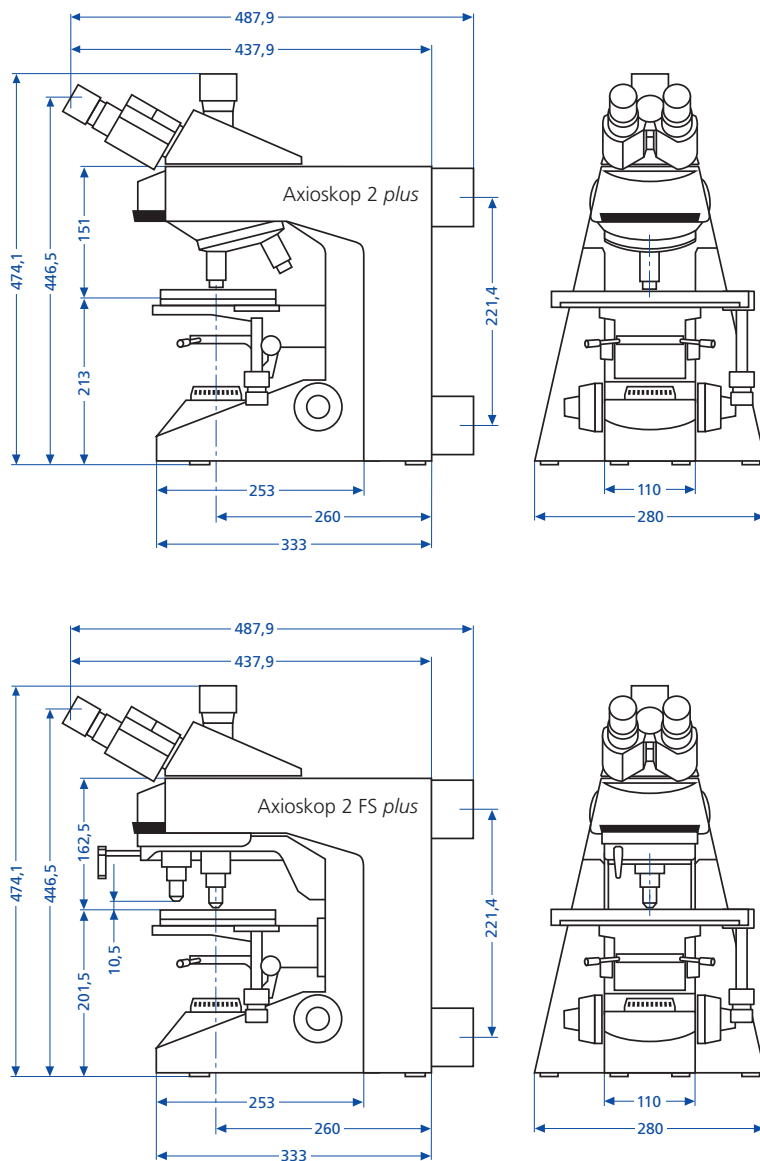


*Image acquisition with the
AxioVision software*



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For further details, please contact:

Carl Zeiss Microscopy

D-07740 Jena

Phone: ++49-36 41/64-16 16

Telefax: ++49-36 41/64-31 44

E-mail: micro@zeiss.de

Internet: www.zeiss.de/micro