

NE900 Series Research Upright Biological Microscope Specifications					
Project		NE910	NE920	NE930	NE950
Microscope frame	Optical system	NIS infinite optical system			
	Nosepieces	• Manual sextuple nosepiece	• Intelligent sextuple nosepiece	Motorized sextuple nosepiece	Motorized sextuple nosepiece
	Focusing	Low-hand coaxial focusing mechanism (with limit and elastic adjusting ring), focusing range is 35mm, and fine adjustment grid value is 1um.			Low-hand motorized focusing mechanism, independent operation of left and right handwheels, three-speed adjustment, focusing range of 30mm, repetitive positioning accuracy of 0.1μm, motorized escape and recovery mechanism.
	Transmitted illumination	•12V100W halogen lamp •3W LED light source			3WLED, Transmitted source brightness motorized control, light intensity management function.
	Monitor	-	Microscope use status display screen	-	Touch control screen
Eyepiece tube	Binocular tube	Depression angle: 30 degrees, pupillary distance adjustment range: 47-78 mm.			
	Trinocular tube	Eyepiece/port: 100/0, 20/80, 0/100, depression angle: 30 degrees, pupillary distance adjustment range: 47-78 mm.			
	Ergonomic trinocular tube	Eyepiece/port: 100/0, 20/80, 0/100, depression angle: 0-30 degrees, pupillary distance adjustment range: 47-78 mm.			
Eyepiece		• SW10X (25) • SW10X (22) • EW12.5X (17.5) • WF15X (16) • WF20X (12)			
Stage	Manual stage (Corning glass countertop)	Moving distance: 78(X)×32(Y)mm, 1mm/ grid, accuracy of 0.1mm, movable handle can be raised and lowered by 18mm, the tightness can be adjusted, and the bump guide mechanism is convenient, so it can be sliced with one hand.			-
	Manual stage (Sapphire glass countertop)				-
	Motorized stage	-			High-precision motorized XY stage (stroke: X axis, 125mm; Y-axis, 75mm), and the repeated positioning accuracy is ±1.5 μ m.
Condensing lens	Brightfield condenser	Manual swing condenser	Manual swing condenser	motorized swing condenser	Universal condenser (4X-100X)
	Rotating disc condenser	• quintuple phase contrast turntable condenser • quintuple DIC turntable condenser • Octagonal phase contrast DIC universal turntable condenser			
	Darkfield condenser	• Darkfield condenser dry • Darkfield condenser Oil			
FL-900 Epi-fluorescence illuminator	Epi-fluorescence illuminator	With field diaphragm and aperture diaphragm, density plate, kohler illumination system and ultraviolet eye protection screen can be used.			
	Filter cube turret	Sextuple epi-fluorescence cube turret (manual)			
	Epi-illumination light source	• Osram mercury lamp HBO 100W/2 • Metal halide light source 75W • Four-color LED fluorescent 5W			
FL-900C/D Epi-fluorescence illuminator	Epi-fluorescence illuminator	Recapture lighting with ultraviolet eye protection screen			
	Filter cube turret	Sextuple epi-fluorescence cube turret (manual/motorized), up to four fluorescent lens groups can be installed.			
	Epi-illumination light source	3WLED fluorescent source, up to 4 color fluorescent light sources can be installed, with adjustable brightness.			
Observation method		Brightfield,Epi-fluorescence, darkfield, phase contrast,Simple polarizing, DIC			



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SCIENTIFIC
RESEARCH
MICROSCOPE

NE900

Research Upright
Biological Microscope
NE900 Series



Nexcope NE900 series Research Upright Biological Microscope

Research microscope satisfying cutting-edge scientific exploration and clinical research

Nexcope constantly explores the research needs in the fields of pathology, cytology and virology, and constantly optimizes and upgrades the NE900 research upright microscope, so that it has nearly perfect optical performance and mechanical structure design. NIS Infinite Optical System has accurate imaging and strong chromatic aberration correction ability. With the illumination system with high color reproduction, high-quality optical components and fully functional accessories, this microscope is especially suitable for cutting-edge life science research that needs darkfield, differential interference contrast or high-performance fluorescence. In addition, a variety of motorized and intelligent components and powerful imaging software can meet the needs of quick overview and detailed inspection of samples, easily complete repetitive work, greatly increase the simplicity of operation, increase operational comfort and maximize work efficiency. Nexcope NE900 can provide an ideal microscopic imaging solution for both clinical laboratory and scientific research laboratory.



NE950
Motorized
microscope



NE930
Semi-motorized
microscope



**NE910
NE920**
Manual
microscope

NE910/NE920

Nexcope®

Excellent optical performance Comfortable operating experience

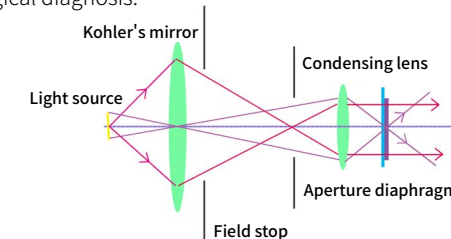


Using NIS infinite optical system and advanced optical component manufacturing technology, it is possible to realize various observation methods. And the perfect kohler illumination provides a bright and uniform field of view for the microscope. On this basis, Nexcope continuously optimizes the customer's product experience, and NE900 is ergonomically designed, so that both observation and operation can maintain a comfortable posture.

Outstanding Basic Performance Design

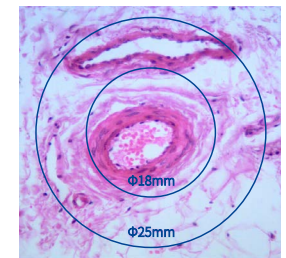
Lighting system with high color reproduction ability

Through Kohler system and sunlight simulation light source (halogen source and sunlight LED source are optional), the color temperature is stable and the brightness is uniform, which can easily restore the true color of the sample and distinguish similar colors, which is very important for pathological diagnosis.



Large field of view eyepiece

The eyepiece with a large field of view of 25mm is adopted, which has a larger field of view, more comprehensive observation content and faster sample observation. For samples that need panoramic view, a microscope with a large field of view is a more correct choice.



User-friendly design

A variety of user-defined layouts and ergonomic designs allow users to operate and observe in the most comfortable posture, especially in pathology laboratories and medical examination rooms where microscopes are used for a long time.

Adjustable operating handle

The movable handle can be raised and lowered by 18mm, and the tightness is adjustable, making it easy to move the stage. Low-hand focusing mechanism design, you can put your hand on the table to operate the microscope, which conforms to ergonomic design and gives you maximum comfort.

Lift 18mm



Left/right hand operation interchange mechanism

In order to better adapt to users with different operating habits, the focusing and stage can be easily adjusted to the left or right hand position for operation.



Stage low regulator

The height of the stage can be reduced by 1" from the standard position through the objective lens nosepiece gasket, so that the specimen can be easily replaced while maintaining a comfortable posture.

Reduce by 1"



One-handed up/down slicing

The stage bump guiding mechanism is convenient for slicing with one hand and slicing with one hand, freeing hands during microscopic observation operation and improving working speed.

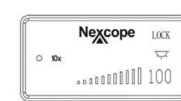


Microscope use status display screen (for NE920)

The LCD screen at the front of the microscope can display the use status of the microscope, including magnification, light intensity and standby status. It can remember the illumination brightness when each objective lens is used, and automatically adjust the light intensity when different objective lenses are converted to each other, thus reducing visual fatigue and improving work efficiency.



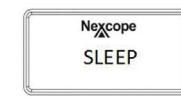
Start-up & working mode



Locking mode



People walk in the light-off mode



Standby mode



NE930

Convenient operation
Higher working
efficiency

Nexcope®

Improving the Flexibility of Use and the Comfort of Operation



On the basis of ensuring excellent optical performance and exquisite ergonomic design, various convenient and humanized designs are added to make microscopic observation more comfortable, magnification conversion more convenient and image shooting faster. Simplify repetitive operation, improve work efficiency, and make microscope observation easier.



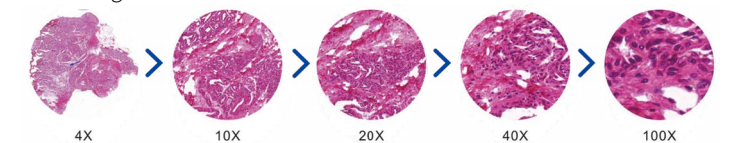
Oblique viewing head and eyepiece are more comfortable to observe.

The eyepiece tube is adjustable in height, pupil distance and visibility, which can conveniently adjust the observation tube to the height suitable for the current user, and can observe in a comfortable posture whether sitting or standing. The optical path switching rod can be installed on any side of the observation tube according to the operator's habit, so as to truly create a microscope suitable for everyone.



Light intensity management function to reduce visual fatigue

When switching objective lenses with different magnifications, it is necessary to adjust the illumination intensity to ensure the same illumination brightness in the field of view under different magnifications. NE900 series with coded objective turntable can intelligently remember the appropriate illumination intensity under different magnification, and automatically adjust with the change of objective magnification to reduce visual fatigue.



Microscopic image shooting button, image acquisition is easier.

Just press the shooting button on the base of the microscope, and the Nexcope T series cameras can complete the image shooting.



The magnification of the objective lens can be switched motorizedly, making it more convenient to change the magnification.

Built-in control panel, set specific buttons to correspond to specific objective lens, and easily change the magnification with a single press. In addition, you can customize two commonly used magnifications, and you can switch between these two objective lenses with one button. According to the change of objective lens, the top lens can be automatically put out, which improves work efficiency and is convenient for you to use.

NE950

All-motorized intelligence
So fast and efficient

Nexcope®

High Accuracy and Easy Operation

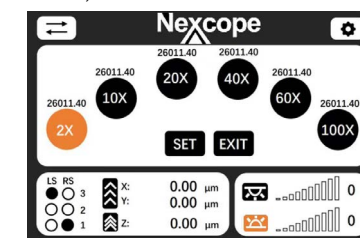
The motorized stage provides control movement in X, Y and Z directions.

Only one USB cable is needed to connect the computer with the controller built in the fuselage to integrated motorized control; Built-in Z-axis adopts high-precision motor screw structure to ensure no Z-axis slice scanning; Imported screw rod adopts extrusion process, which has the characteristics of consistency and eliminating reverse gap error. Flexible stage control program can meet a variety of sports needs. The supporting control rocker is powerful and easy to operate.

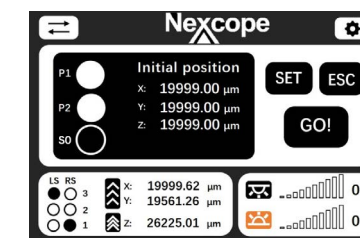


Touch the control screen help to save space and control flexibly.

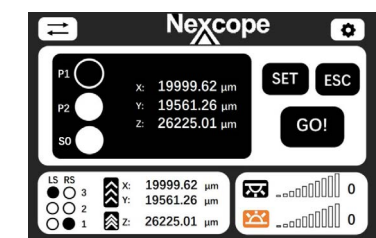
The front touch control screen integrated with the microscope does not occupy the desktop position. The interface is simple, the operation is simple, and the programmable control simplifies the repeated observation and imaging process. Powerful: Three-axis coordinate display, speed gear display, objective lens motorized switching, objective lens dual-hole orientation switching, position memory and return, relative coordinate display, objective lens focus compensation, temporary upper limit setting, stage escape and recovery, display screen day/night mode, etc.



Focus compensation of objective lens: remember the focal plane position of objective lens at each hole position. When the objective lens is switched, Z axis will automatically compensate the focus position of each objective lens.



Location memory and return: two location memory points and one initial location point can be set to mark the key observation locations.



Stage escape and return: it can be switched between the current position and the relative coordinate zero point with one key, which provides a convenient and fast stage movement mode for changing slices during use.

NOMIS Plus Motorized Microscopic Imaging Software

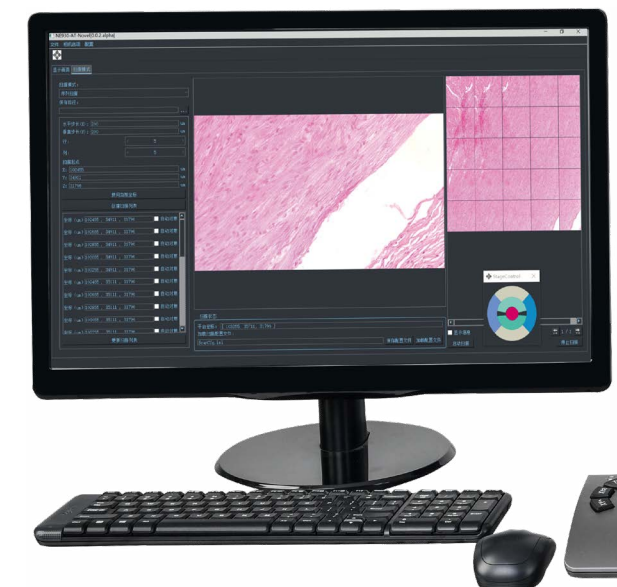
It provides integrated control for microscope, camera, motorized stage and various components, and provides functions such as motorized control, automatic focusing, sequential scanning, fixed-point scanning, curved surface fitting scanning, and full-field focusing scanning. Intuitive and simple interactive interface, fast and flexible data acquisition method, and NOMIS basic imaging analysis software are used to realize the functions of measurement, synthesis and data recording.



Full-field focused scanning



Full-field scanning imaging



Equipped with motorized stage, automatic focusing, motorized objective lens conversion, touch screen controller and powerful imaging software; Through the precise connection between each part, the functions of microscope observation, image acquisition and image processing are realized, and repetitive operation is reduced. In addition, the microscope settings and parameter settings of the last operation can be restored, and the stability and accuracy of microscope imaging can be improved. Microscope operation can be so fast and efficient.

Epi-fluorescence attachment

Suitable for various fluorescent dyes
High signal-to-noise ratio (S/N)

Nexcope®

Fluorescent images with bright and dark backgrounds

Rotating disc excitation module device

The fluorescent turntable can be equipped with six color filter groups, which can image multi-stained specimens. At the same time, it is convenient and quick to switch the excitation module only by gently dialing, which improves the work efficiency and effectively reduces dye quenching.



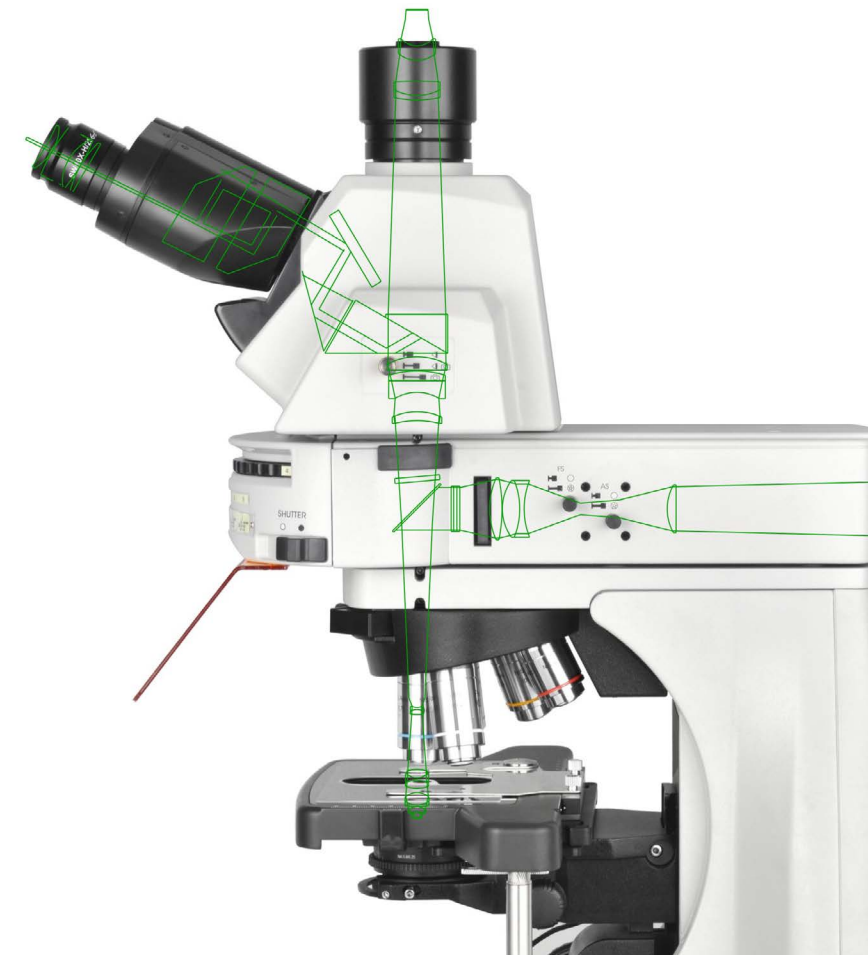
Epi-fluorescence illuminator

A variety of manual or motorized epi-fluorescence illuminators can be selected, and mercury lamp light source (only manual epi-fluorescence illuminators are available) or LED light source can realize bright fluorescent imaging, which can be selected according to observation requirements.



Intelligent fluorescent power supply

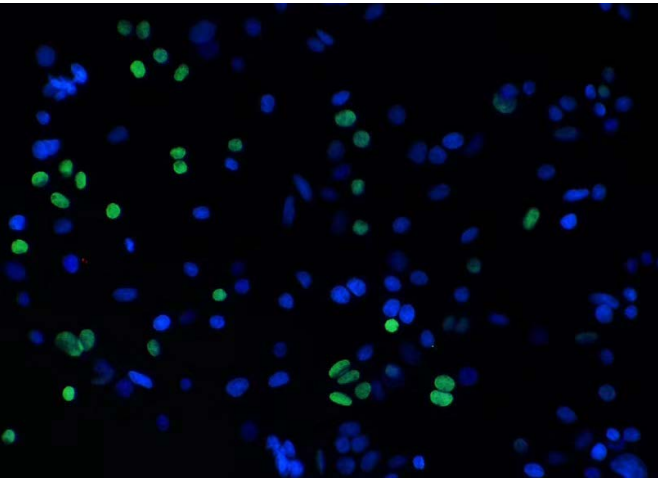
Aiming at the problems of short life and complicated operation and maintenance of mercury source, it is specially used with intelligent fluorescent power box. Automatically remember the service time and shutdown time, and effectively protect the service life of mercury lamp when it is mishandled.



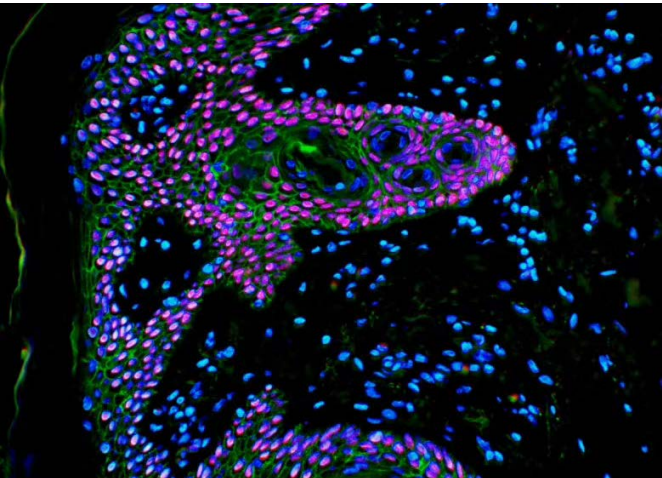
The whole series of NE900 can be equipped with FL-900 series epi-fluorescence illuminator to realize fluorescent observation. Using high-performance fluorescent filter, high NA objective lens with excellent color reproduction ability can realize high brightness, high efficiency and dark background fluorescent images.

Various Observation Methods

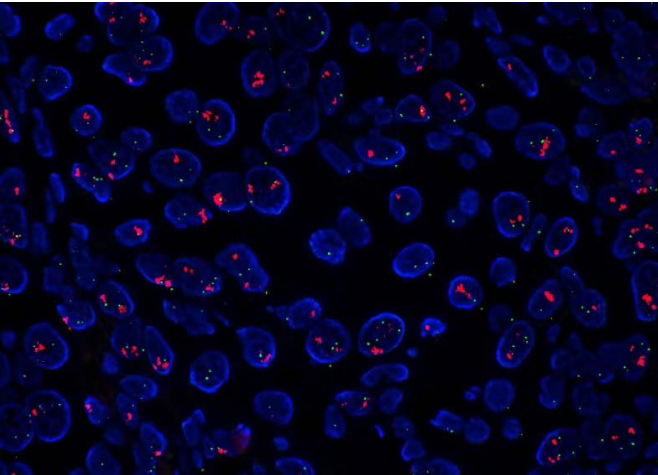
Epi-fluorescence



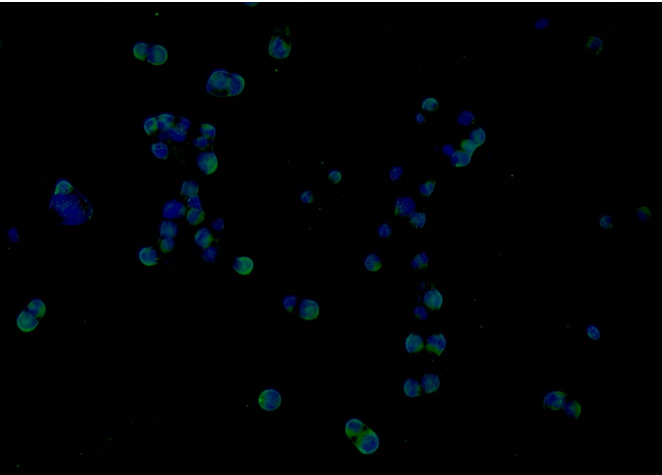
TUNEL observed apoptosis.



Immunohistochemical double staining of p63 and E-Cad in skin tissue



HER2 FISH detection



DAPI and GFP staining in cell transfection experiment

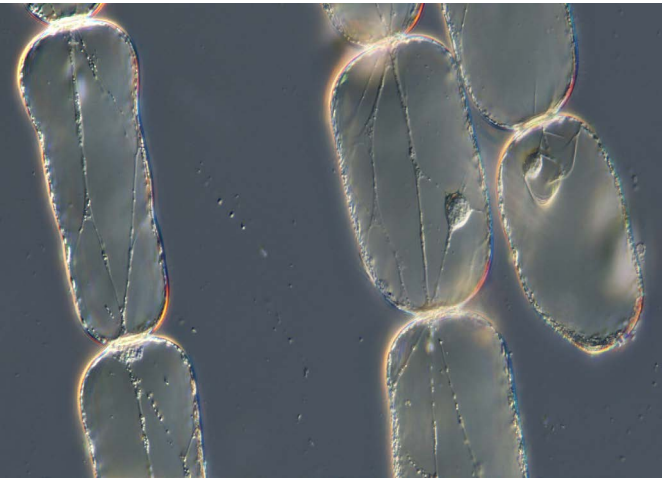
Fluorescent filter: high accuracy and easy to use.

Nexcope fluorescent filter adopts secondary ripple elimination coating technology, which provides unparalleled process control accuracy and reliable batch consistency, and can produce various filters with complex spectral characteristics. It has the characteristics of high transmittance, high cut-off depth and high steepness, and has excellent environmental tolerance and service life. The latest multi-band fluorescent filter can reduce the time of imaging and synthesizing multiple images, and avoid image offset, which meets the demand of high-speed multi-color fluorescent imaging.

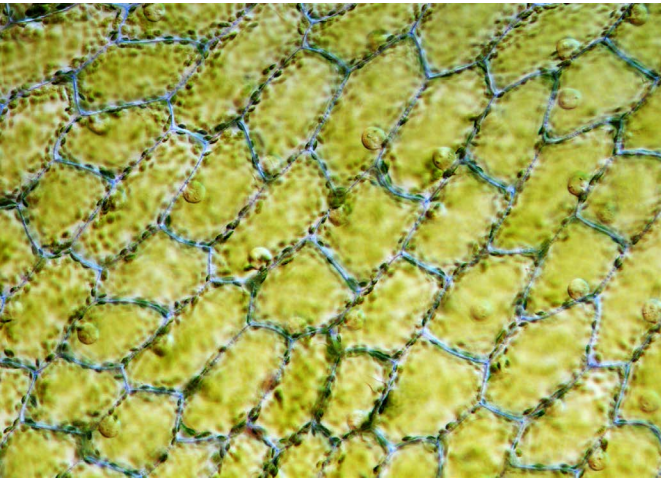
Epi-fluorescence filter cube	Specifications
FL-B	BP460-495, DM505, BA510;
FL-G	BP510-550, DM570, BA575;
FL-U	BP330-385, DM410, BA420;
FL-V	BP400-410, DM455, BA460;
FL-R	BP620-650, DM660, BA670-750;
FL-FITC	BP460-495, DM505, BA510-550;
FL-DAPI	BP360-390, DM415, BA435-485;
FL-TRITC	BP528-553, DM565, BA578-633;
FL-Auramine	BP470, DM480, BA485;
FL-mCherry	BP540-580, DM600, BA610;
FL-mCherry	BP540-580, 分色 DM600, BA605-665;
FL-BG	BP453-490/533-588; DM495-548/595-705; BA500-540/600-664;



Differential interference contrast (DIC)



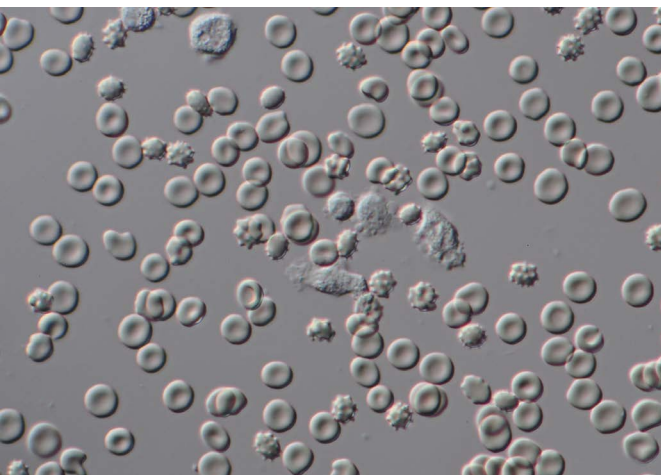
Plant cell



Pteridophyte



Ciliates



Red blood cells and white blood cells

Differential interference contrast module: optimizing the image of unstained specimen

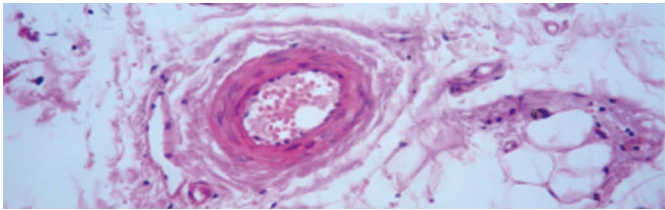
In order to obtain ideal imaging effect of unstained specimens, differential interference module can be selected for Nexcope NE900 series.

- Semi-apochromatic objective
- turret condenser (optional five-station DIC condenser or eight-station phase contrast DIC universal condenser)
- Polarizer
- DIC board

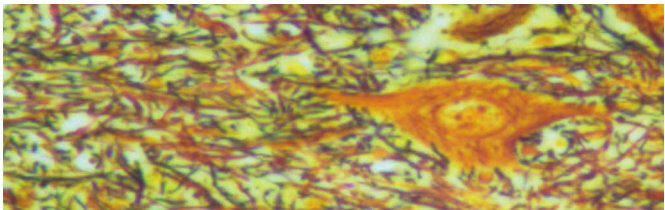


Brightfield

The light source is bright and uniform, and the color is true and reliable. At the same time, the high numerical aperture objective lens and NIS optical system are perfectly combined to provide clear and flat images.



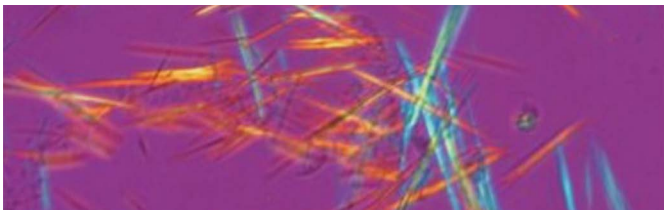
Spinal cord Silver plating dyeing



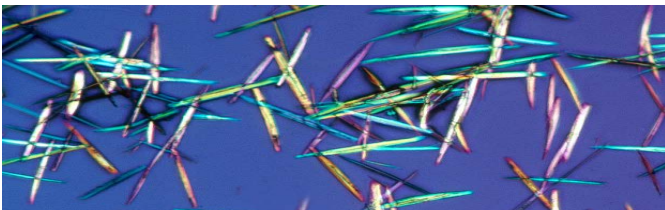
Aorta H.E staining

Simple polarizing

Special polarizing observation condenser, polarizing objective lens, polarizing turntable condenser, simple polarizing accessories and various optical path compensators can be selected.



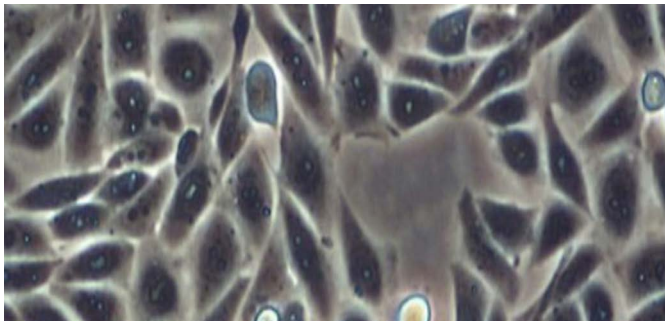
Uric acid crystal



Aspirin

Phase contrast

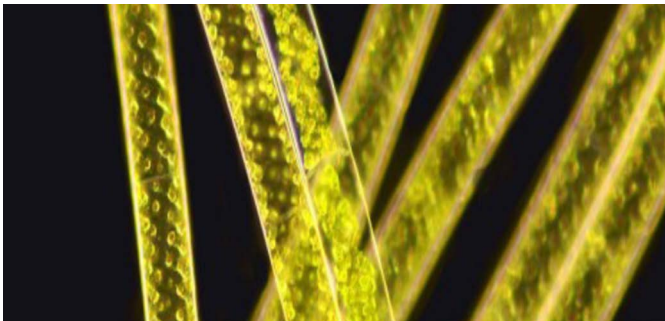
This observation is suitable for unstained cells.



Mouse ovarian cells

Darkfield

The fine structure of blood or flagella can be clearly observed.



Pond scum

Multi-viewing System

The multi-viewing microscope system is widely used in the teaching, experimental training and pathological diagnosis of the university. The Nexcope series of accessories can be expanded by 1 -10 people, and the microscopic image can not be distorted and the brightness of the image can not be lost. Multi-head attachment with joystick to move LED illuminated pointer in two-color selection across the entire field of view. Cooperate with teaching head and built-in indicator needle to facilitate learning and diagnosis.



2-Head Multi-Viewing (Face to Face)



2-Head Multi-Viewing (Side by Side)



5-Head Multi-viewing



10-Head Multi-viewing

NIS Series Objective :with Excellent Optical Performance.

After many years of efforts, a number of optical objective lenses with excellent optical properties have been developed. Which has high numerical aperture, long working distance and excellent chromatic aberration correction capability. Meanwhile, the multi-layer coating technology is adopted, so that the sharpness, the definition and the color reducibility of the image are ensured, and a high-quality and high-performance solution is provided for digital imaging.

N-PLN series plan achromatic objective

These plan objective lenses can provide flat images with high transmittance in the spectral range from visible light to near infrared. Because of their high signal-to-noise ratio, high resolution and Gao Fancha imaging effect, these objective lenses are especially suitable for brightfield observation.

N-PLFN series plan semi-apochromatic objective

Thanks to multilayer coating technology, these super semi-apochromatic objective lenses can compensate for chromatic aberration and chromatic aberration from ultraviolet to near infrared. The ultra-sensitive fluorescence performance ensures the sharpness, clarity and color reduction of the collected images, and provides a high-quality and high-performance solution for digital imaging.

N-PLFN PH series plan phase contrast objective

Ideal for clinical and scientific research applications, these high-quality plan objective lenses can provide a perfect plan effect with a field of view of 25mm when observing the brightfield (phase difference). NIS series phase contrast objective lens is specially designed for phase contrast observation.

N-PLPN series plan apochromatic objective

The newly introduced advanced apochromatic objective lens has a high level of chromatic aberration correction ability and high resolution, which ensures a high level of wave phase difference correction function in the whole field of view. It is an ideal choice for routine laboratory observation and digital imaging objective lens.



Nexcam-T series high performance cameras

High resolution, high sensitivity and low noise color CMOS camera head -T9

9 million camera resolution; With ultra-high sensitivity and ultra-low noise; Ultra-Fine color engine ensures accurate color reproduction; The frame rate can reach up to 60fps. Suitable for brightfield, fluorescence and pathological scanning.



High-speed color CMOS camera head -T16

16 million camera resolution; 4/3 "large target imaging can achieve smooth and high-quality dynamic images and faithfully restore the color of specimens.



High sensitivity, low noise and high performance color CCD camera head -T6CCD

6 million camera resolution; High photosensitive sensitivity, the imaging spectrum is extended to near infrared light; Support up to 1 minute long exposure, ensuring the capture of weak fluorescence images.



High signal-to-noise ratio two-stage circulating thermomotorized refrigeration color CCD camera head -TC6CCD

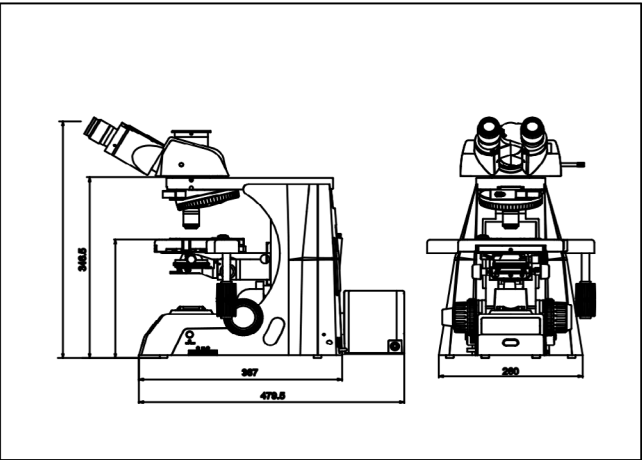
6 million camera resolution; High-performance semiconductor refrigeration, high-efficiency heat dissipation and anti-fogging function, effectively improve image signal-to-noise ratio and reduce image noise; Support exposure for up to 12 hours to ensure the capture of weak fluorescence images;



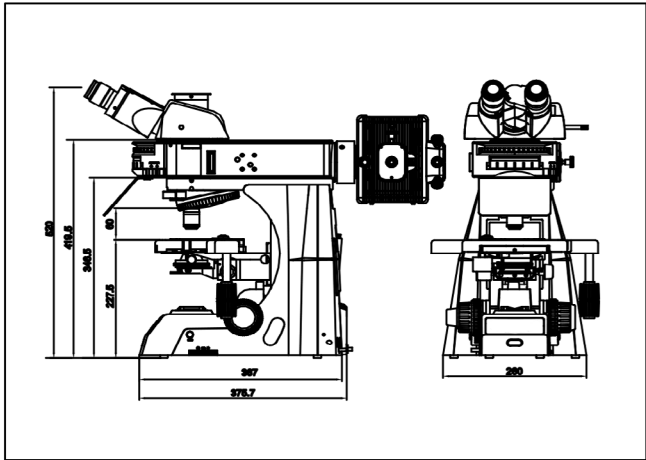
DIMENSION

Unit: mm

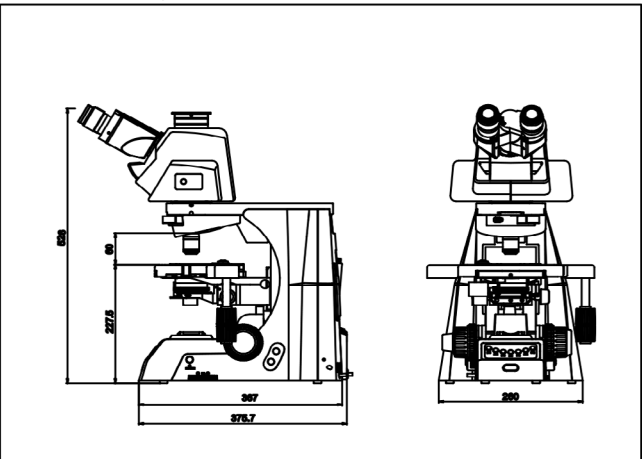
NE910/NE920



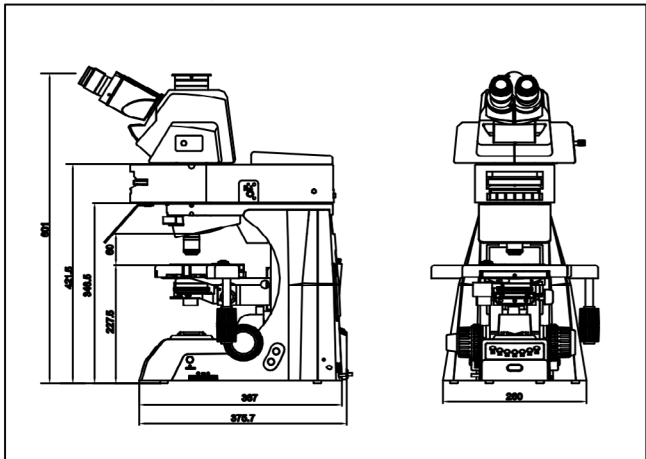
NE910-FL/NE920-FL



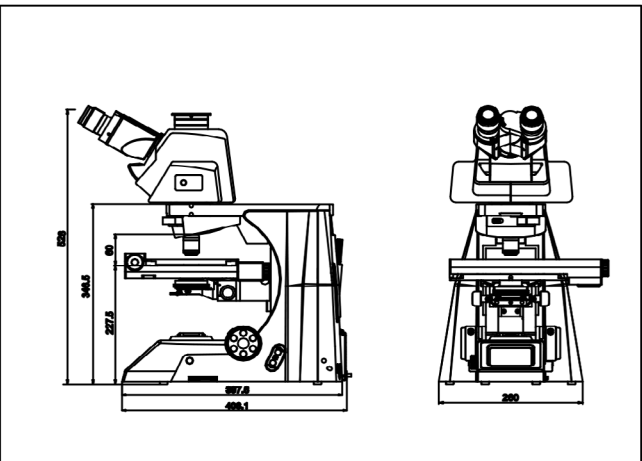
NE930



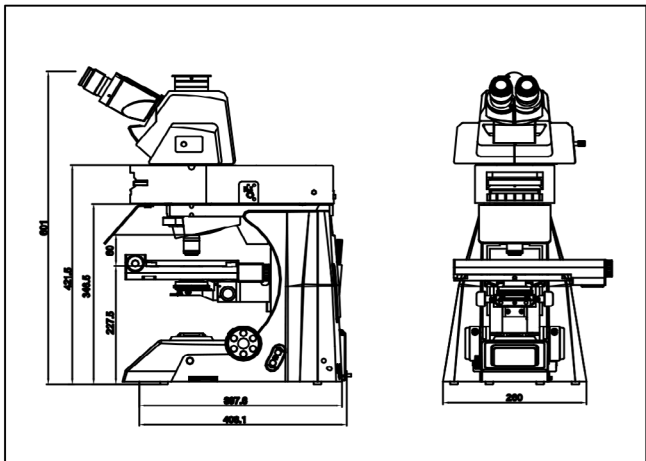
NE930-FL



NE950



NE950-FL



SYSTEM LAYOUT

Used in Nexcope NE900 series microscope

