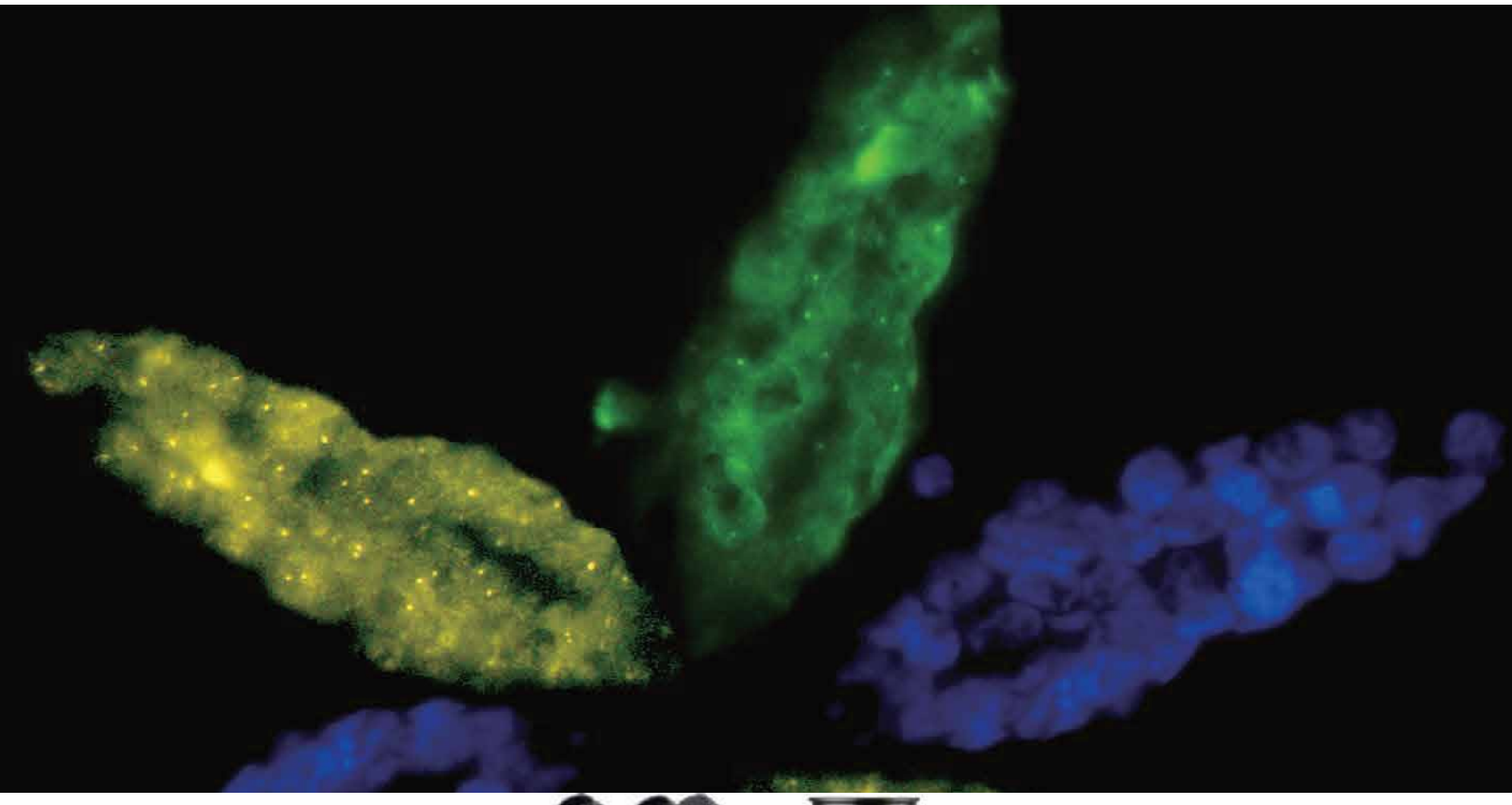
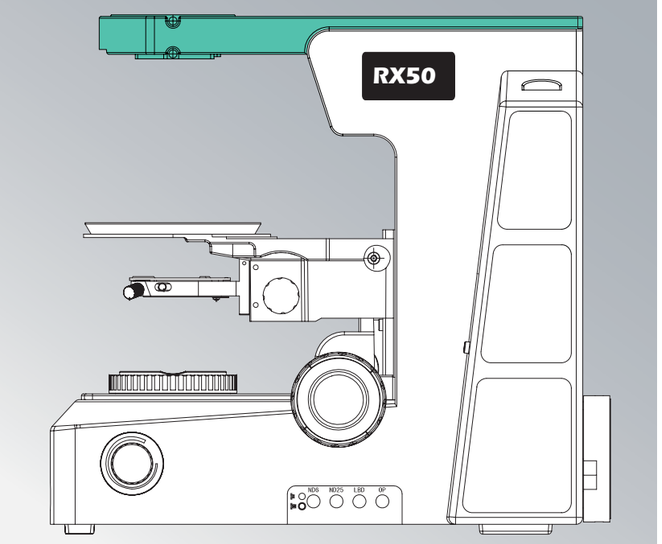
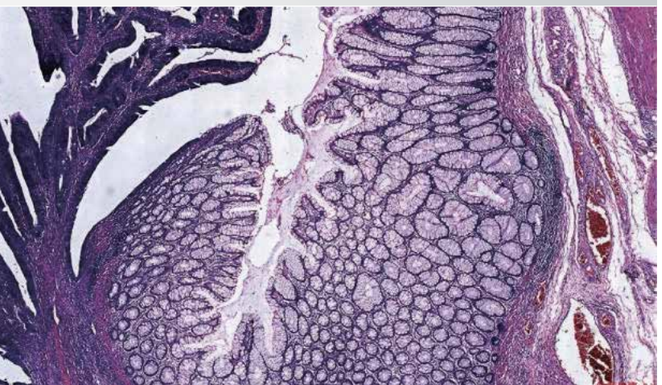
RX-50



After years of research and development in optical technology field, RX50 biologicalmicroscope is designed to present a safe, comfortable and efficiency observation experience for users. With perfectly performed structure, high-definition optical image and simple operating system, RX50 realizes professional analysis, and meets all the needs of research in scientific, medical and other fields.





Large stage with adjustment in either hand

- In order to correct the shortcoming of horizon guide rail, new stage is designed with double-way linear driving mechanism. This change protects the stage from overload at the end of both rails, improves the rigidity and performance of the stage.

- The handle of the stage can be set at each side based on users' preference. The X, Y biaxial adjustments are designed with low position for comfortable operation.
- Two slices can be hold on the stage by using damping-type double clips, easy for comparative study. Moving range: 80mm X55mm; precision: 0.1mm.
- Processed with special craft, the surface of the stage is anti-corrosive and anti-friction. The platform with an arc transition design reduces the stress concentration and damage from impact.
- Light barrier, which can effectively reduce the stray light, improves the image contrast in fluorescence observation.

Modular frame, improving the system compatibility

RX50 with modularization design, separated cross arm and main body, improves the system compatibility of biological and fluorescence frame.

Highly sensitive coaxial coarse and fine adjustment

Coaxial adjustment adopts double-stage driving, with adjustable tension tightness and upper limit stop, coarse range is 25mm and fine precision is 1μm. Not only accurately focus but also precision measurement is available.

Viewing head with multi-splitting ratio

RX50 viewing head is designed of multiple options for splitting ratio. with wide beam imaging system, 26.5mm super wide filed of view is available.
Trinocular head with inverted image, splitting ratio Binocular: Trinocular=100:0 or 20:80 or 0:100. Except for concentrating 100% light to eyepiece tube or camera tube, there is another option with 20% light to eyepiece tube and 80% to camera tube, so that eyepiece observation and image output can be available at the same time.
Trinocular head with erect image, splitting ratio Binocular:Trinocular= 100:0 or 0:100. The moving

Quintuple/sextuple/septuple nosepiece for option.
12V100W halogen lamp house provides transmitted light. Illuminator center is preset, without adjustment after replacing the lamp.
N.A.0.9/1.25 swing-out type achromatic condenser,with iris diaphragm and aperture scale, provides sufficient and uniform light for full-field observation in different magnifications.

Condenser top 0,17 coverglass fits objectives from 1.25 to 100x magnification in dry or immersion techenics. Superb resolustion.

DIC - Differential Interference Contrast

Polarizer and Analiser inserted on the top of the revolving nosepiece made easy the DIC technik.

Special condenser disc with BF/PH/DF empty space with 3 extra espaces for the DIC prims covering all magnification objectives.
Wallostom/Normasky prisms for the condenser:
A - Prism for the lower magnification range 4 ~20
B - Prism for the medium magnificatio range 25 ~ 60x.
C - Prism for the high magnification range 80 - 100x.

Wallostom/Normasky prisms for the revolving nosepiece:
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Multifunctional reflection illumination

In RX50 reflection fluorescent illumination, maximum 6 fluorescence filters can be assembled at the same time. Filters are placed in a rotary table for convenient switch. High precision and stable rotary table and high-performance imported filter ensures a drift-free image.
There is a light shutter in front of the reflected illuminator. It is used to shut the fluorescent light to prevent fluorescence quenching of the slice.
The light barrier can protect users from the harm of UV light.
The use of ND attenuation filter, or aperture and field diaphragm rod can efficiently reduce the intensity of exciting light to protect the slice.
After replacing the lamp, the centering objective helps users in adjusting the filament center to make sure a sufficient and uniform fluorescent illumination.

Power control system for mercury lamp

New digital power control system with operating time and current value, clearly shows the working state of the mercury lamp.

Two power supply systems, providing multiple choices of high quality illumination

New developed 100W EHV DC mercury lamp house with improved thermal cycle greatly reduces the surface temperature of the lamp house and avoids the scald risk during operation. The filament center is easily adjustable.
75W xenon lamp for option.

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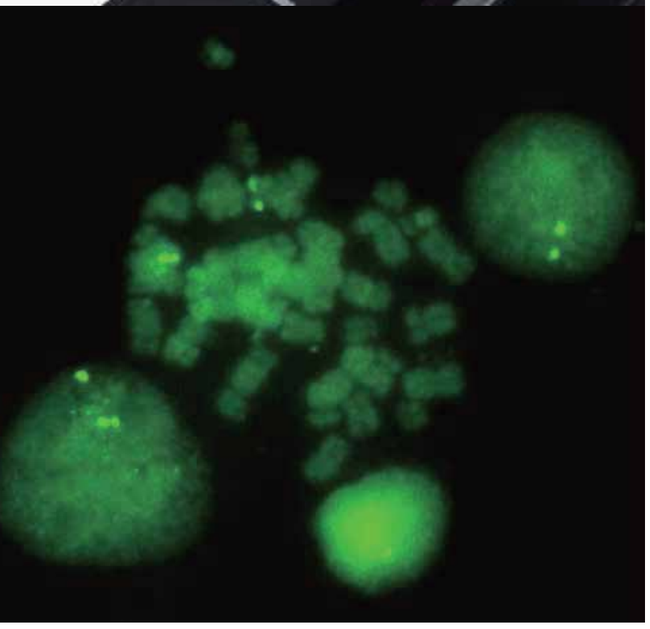

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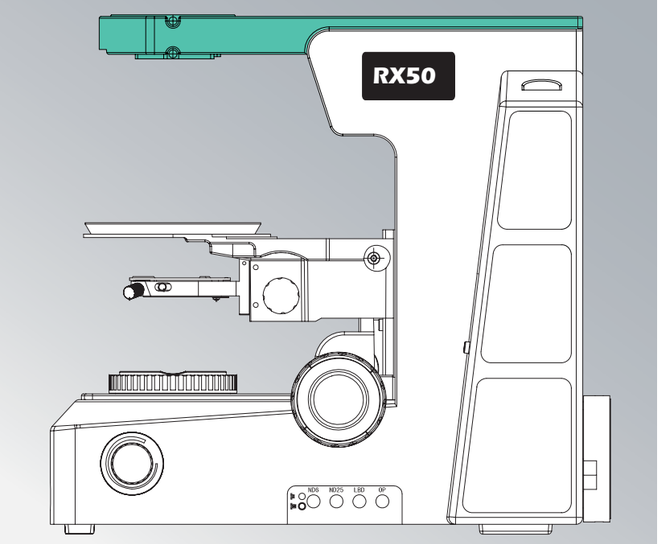

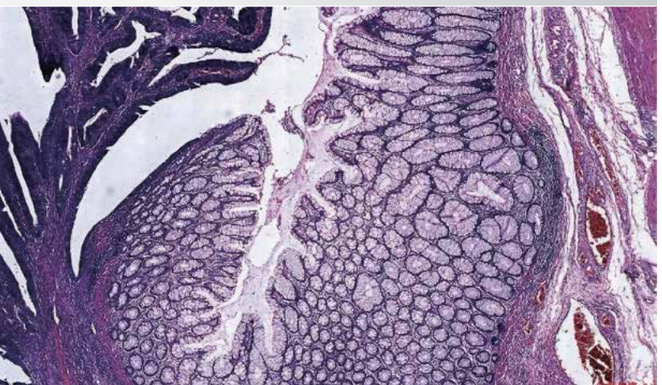

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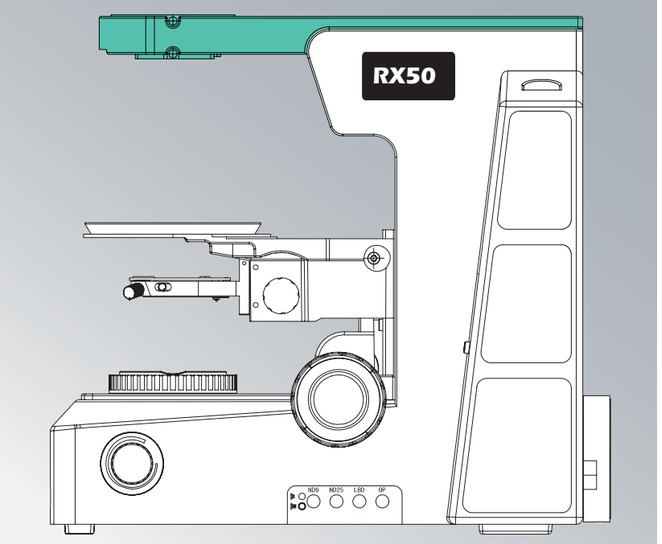

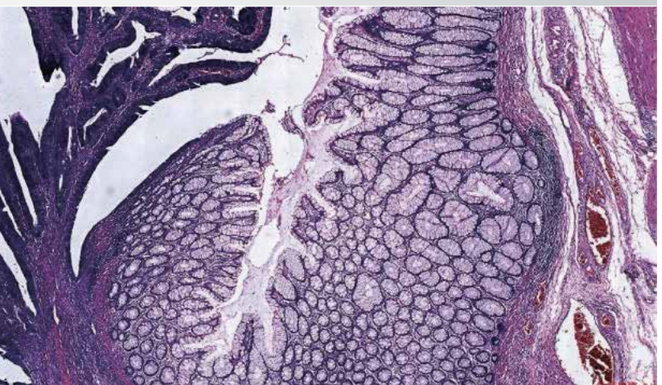

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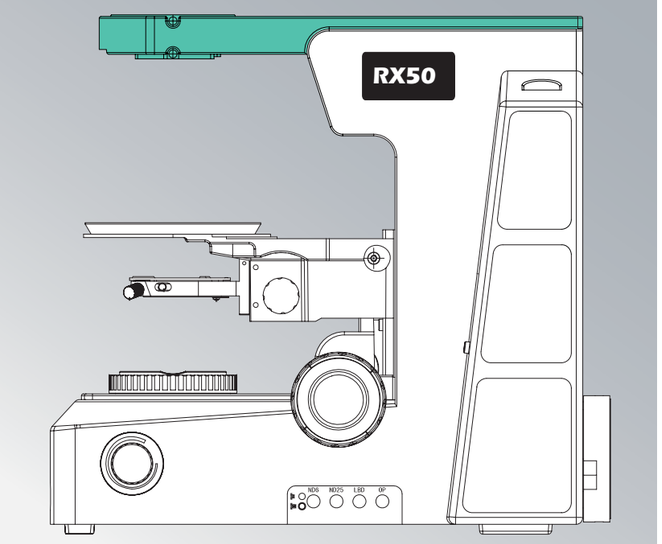

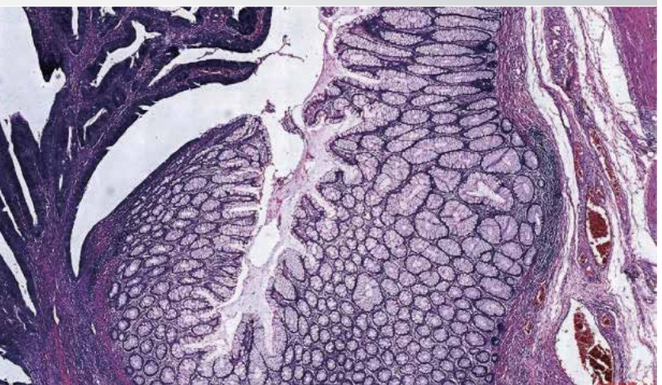

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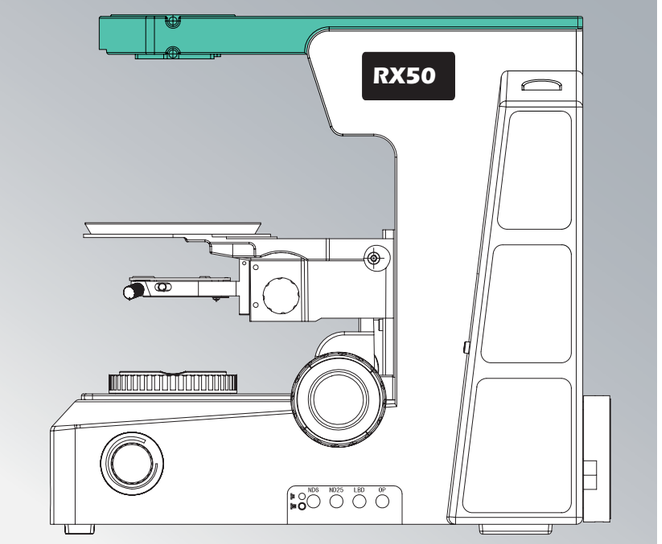

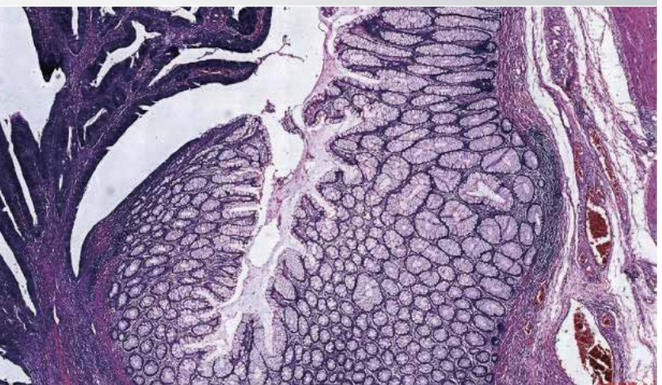

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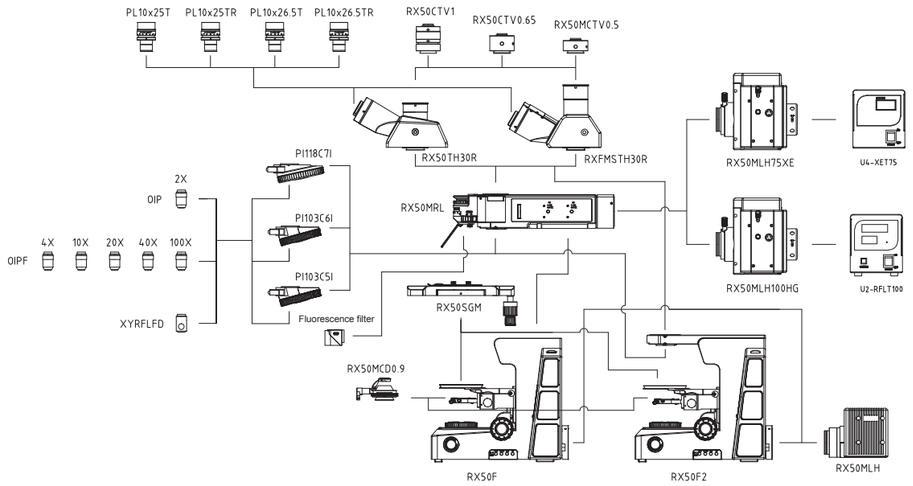
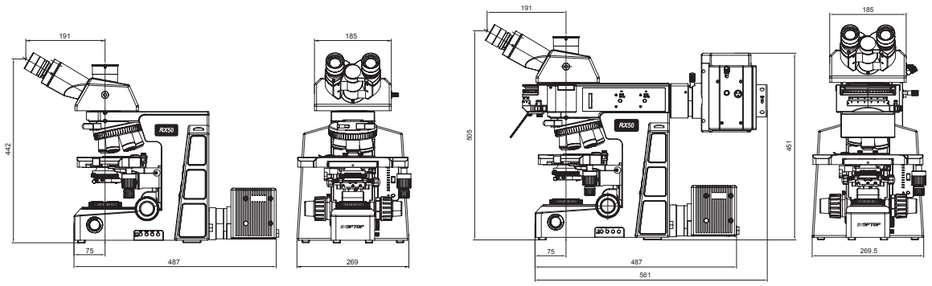
Leipzig® Adavanced Research Microscope

MICROSCOPY & IMAGES DATA

RX50 System diagram: mm



RX50 Dimension: mm



Local Dealer

Leipzig-gerat GmbH - The Instrument Company

Design Change: The manufacturer reserves the right to make changes in instrument design in accordance with scientific and mechanical progress, without notice and without obligation.

VDE UL SP® CE

Certified ISO 9001
Certified ISO 14001

Code No: SP010773E

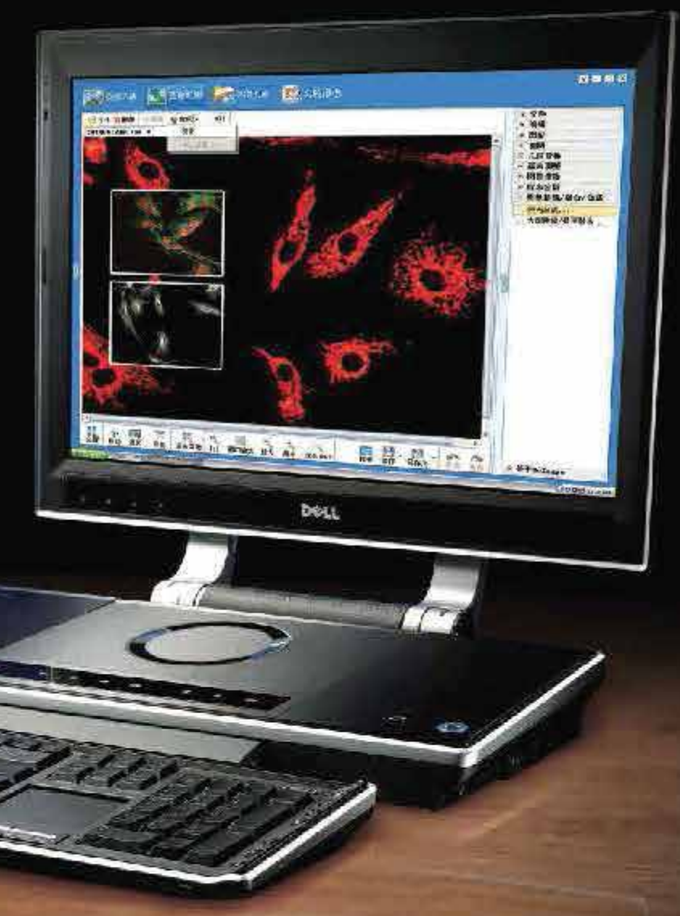
RX-50
ADVANCED MICROSCOPY

Leipzig digital camera: OD140BC, OD140B, OD140RC, OD140R, OD500SC, and OD500S, equipped with professional SONY CCD. With the characteristics of fast & smooth display, high sensitivity and low noise, clear and stable fluorescent image is achievable.

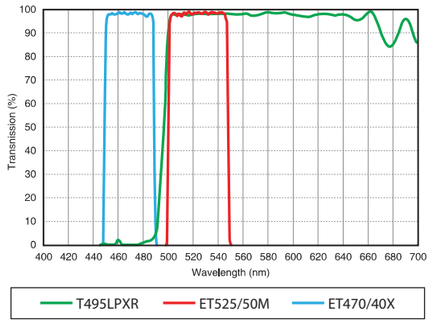
Image Sensor	SONY ICX285AQ CCD(color)
Max. Resolution	1360 X 1024 (about 1.4 mega pixels)
Sensor Size	2/3"(diagonal 11mm)
Effective Pixels	6.45μmx 6.45μm
Imaging Region	10.20mm(H) x 8.30mm(V)
Spectral Response Range	380~650mm (with IRCF)
Video Format & Frame Rate	15fps @ 1360 X1024, multiframe adjustment
Exposure Range & Mode	0.12ms~240s, ROI Auto/Manual
White Balance	ROI white balance/Manual Temp-Tint adjustment
Quantum Efficiency	N/A
Cooling System	Single cycle thermoelectric refrigeration system, 20° lower tha n the ambient temperature
Power Supply	Power supply from USB interface, external power supply for refr igeration system, DV3V, 5A

Professional fluorescent analysis software' MvImage Flu' can set fluorescence probe. Users can color the sample according to the specific probe and take photos to compose multi-color fluorescence images. The specific colored images can be adjusted and acted on composition images in real time.' MvImage Flu' is also capable of white balance / photography of selected area.

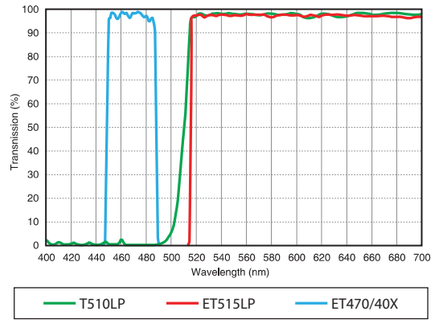
'MvImage Flu' supports 15 formats of photo acquisition to suit for different application conditions; supports AVI broadcast to LAN to monitor remotely. More than 20 kinds of camera equipment are connectable, including build-in camera of a laptop; with fast 'position' function, the software improves the work efficiency; the original image can be recomposed by default setting. Besides, common image processing functions are available, such as color adjustment, brightness / contrast adjustment.



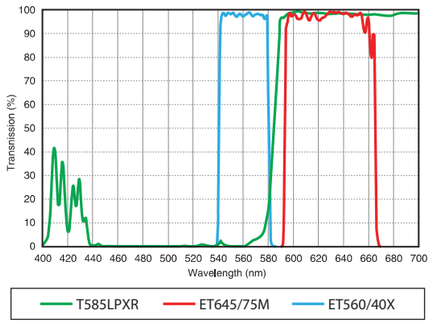
Standard parameters of fluorescent filters, substantially meet the needs of conventional scientific research. For some special requirements, specific filters also can be provided corresponding to fluorescent probes.



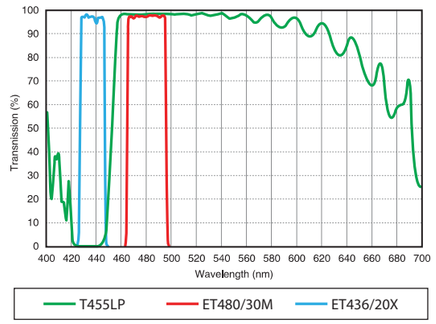
B1



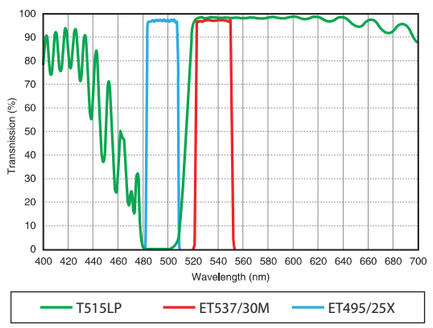
B2



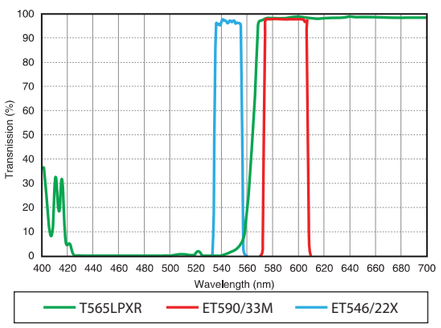
G1



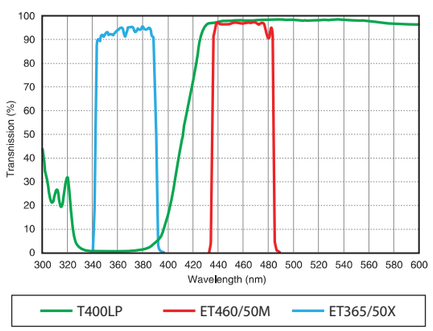
Spectrum Aqua



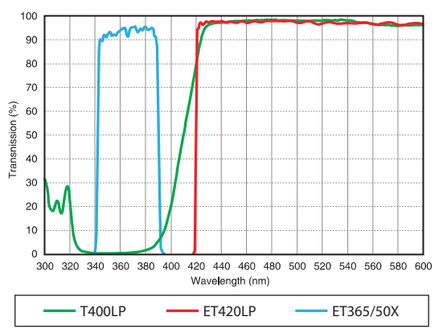
Spectrum Green



Spectrum Orange



UV1



UV2

RX50 Specifications

Optical system	Infinity color corrected optical system
Viewing head	Inverted image, 30° inclined gemel trinocular head, interpupillary distance: 50mm~76mm; splitting ratio R:T=100:0 or 20:80 or 0:100
	Erect image, 30° inclined gemel trinocular head, interpupillary distance: 50mm~76mm; splitting ratio R: T=100:0 or 0:100
Eyepiece	High eyepoint wide field plan eyepiece PL10X25mm, diopter adjustable
	High eyepoint wide field plan eyepiece PL10X25mm, with reticle, diopter adjustable
	High eyepoint wide field plan eyepiece PL10X26.5mm, diopter adjustable
	High eyepoint wide field plan eyepiece PL10X26.5mm, with reticle, diopter adjustable
Objective	Plan semi-apochromatic/achromats fluorescence objectives (4X/10X/20X/40X/50X/60X/100X)
Nosepiece (with DIC slot)	Quintuple nosepiece
	Sextuple nosepiece
	Septuple nosepiece
Frame	Biological frame (transmitted), low-position coaxial coarse and fine adjustment, coarse adjustment distance: 25mm; fine precision: 0.001mm. With coarse adjustment stop and tightness adjustment.Built-in 100-240V_AC50/60Hz wide voltage transformer, intensity adjustable by digital set and reset; built-in transmitted filters LBD/ND6/ND25).
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Stage	Double layers mechanical stage, size: 195mm X168mm; moving range: 80mm X55mm; precision: 0.1mm; two-way linear drive, tension adjustable
Condenser	Swing-out type achromatic condenser (N.A.0.9)
Reflected fluorescence illuminator	Sextuple reflected fluorescence illuminator with iris field diaphragm and aperture diaphragm, central adjustable; with filter slot and polarizing slot; with fluorescence filters (UV/B/G for option).
	100W mercury lamp house, filament center and focus adjustable; with reflected mirror, mirror center and focus adjustable. (75W xenon lamp house for option)
	Digital power controller, wide voltage 100-240VAC
	Imported OSRAM 100W mercury lamp.(OSRAM 75W xenon lamp for option) - Optional Ultra LED eco illumination
lamp house	12V/100W halogen lamp house for transmitted light, center pre-set, intensity adjustable / or LED high power
Other accessories	Camera adapter: 0.5X/0.65X/1X focusing C-mount
	Cooled CCD camera, SONY2/31.4M ICX285AQ COLOR CCD
	Centering objective for fluorescence observation
	Professional software for fluorescence analysis
	High precision micrometer, scale value 0.01mm

For full range of objectives, including N Plans and Apochromats see Optics Leaflet for Leipzig Infinity Séries - All objectives fits all Leipzg RMS series.

Professional plan fluorite objectives

PLAN-FLUOR series infinity plan semi-apochromatic objectives, is the best choice for fluorescence observation. Adopting crystal optics materials, perfectly corrects all kinds of chromatic aberrations. Large numerical aperture design presents high resolution, high contrast micro-images. In fluorescence observation, the image is clear and bright while the background is pure black, prominent for ultraviolet fluorescence.

Model	Magnification	Numerical Aperture	Working Distance	Cover-glass Thickness	Oil	Spring
Plan semi-apochromatic objectives Phase Constrast as optional set.	4X	0.13	16.43	0.17	/	/
	10X (BF/PH)	0.30	8.13	0.17	/	/
	20X (BF/PH)	0.50	2.03	0.17	/	/
	40 X (BF/PH)	0.75	0.74	0.17	/	Spring
	100X (BF/PH)	1.28	0.18	0.17	Oil	Spring

High eye-point ultra wide field plan eyepieces

- Breaking through 22mm conventional field of view, reaching to 25mm and 26.5mm, much smoother and wider field of view, is helpful to improve the work efficiency.
- Locating pin on eyepiece inserts into the eyepiece tube, fixing the eyepiece for easy focusing. Larger adjustable range of diopter from -8 to +5, meets more demands of different users.
- Eyepiece cup can be turn up to avoid external stray light. Spectacle-wearers should turn down the cup to protect both spectacles and eyepieces.

Model	Magnification	Field Number (F.N.)	Diopter Adjustment	Reticle
High eye-point wide field plan eyepiece	10X	25	-5 ~ +5	-

Model	Magnification	Field Number (F.N.)	Diopter Adjustment	Reticle
High eye-point wide field plan eyepiece	10X	26.5	-8 ~ +5	-