

Catalyst Biotech



CS-U9000 Series

CatScope

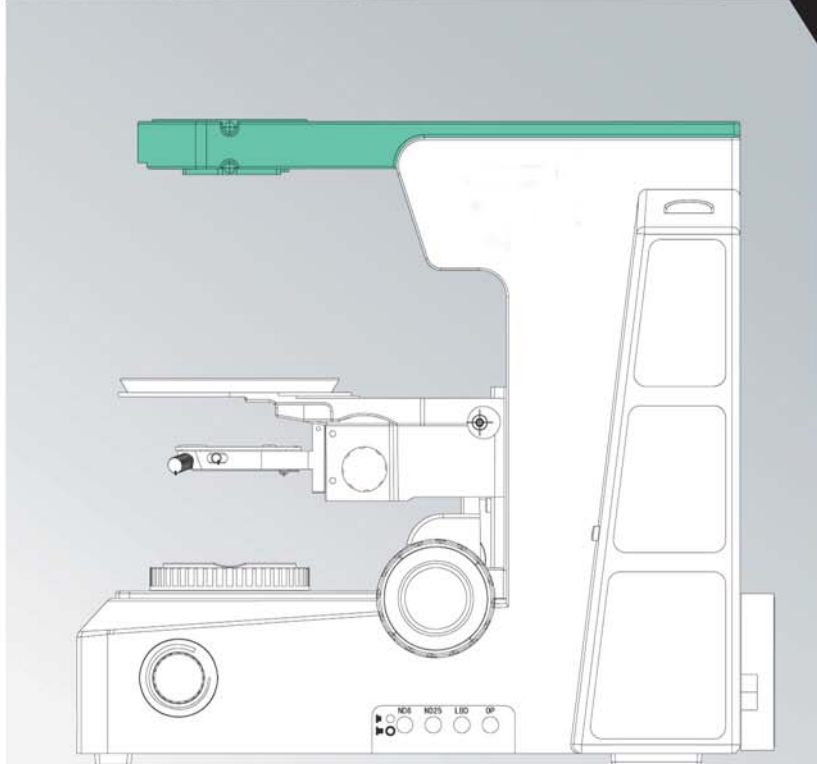




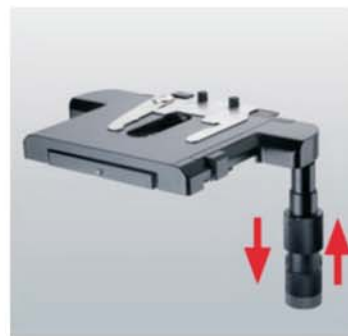
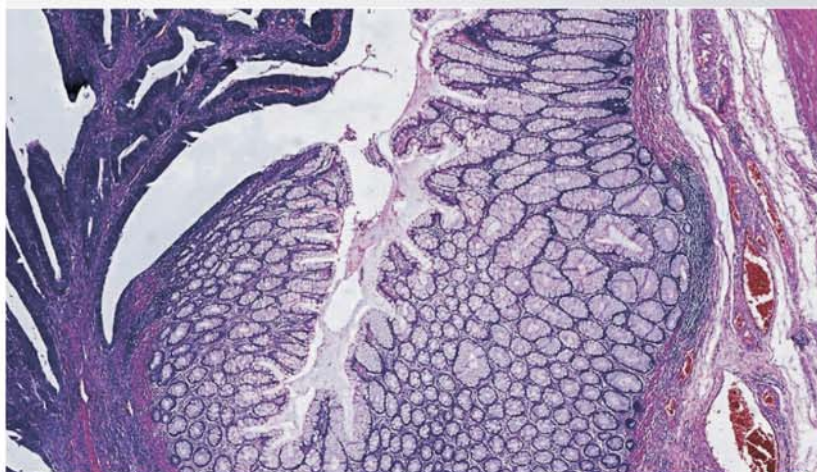
After years of research and development in optical technology field, CS-U9000 a modular biological microscope has been ergonomically designed to present a safe, comfortable and stress-free observation experience for users. With robust structure, high-definition optical image and user-friendly operating system, CS-U9000 helps in professional analysis, and meets all the needs of microscopic research in scientific, medical and other fields.

CS-U9000

CatScope



Large stage with adjustment on either side
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 on either side, based on user's preference. The X, Y biaxial adjustments are designed with low position for comfortable operation. Two slides can be mounted on the stage by using clamping-type double clips, making it easy for comparative study. Moving range : 80mm x 55mm, precision : 0.1mm. Specially processed, 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.



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High eye-point ultra wide field plan eyepieces

Breaking through 22mm conventional field of view, reaching to 25mm and 26.5mm, much smoother and wide 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 turned up to avoid external stray light. Spectacle-wearers should turn down the cup to protect both spectacles and eyepieces.

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.



Series	Magnification	N.A.	W.D. (mm)	Cover Glass Thickness (mm)	Immersion	Spring
Plan Semi-Apochromatic Objectives	4X	0.13	16.43	0.17	-	-
	10X	0.30	8.13	0.17	-	-
	20X	0.50	2.03	0.17	-	-
	40X	0.75	0.74	0.17	-	Spring
	100X	1.28	0.18	0.17	Oil	Spring

Viewing head with multi-splitting ratio

CS-U9000 viewing head is designed with multiple options for splitting ratio, with wide beam imaging system and 26.5mm super wide field 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.

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 1 μ m. Not only accurate focus but also precision measurement is available.

Nosepiece

Quintuple / Sextuple / Septuple nosepiece for option.

Illumination

12V/100W halogen lamp house provides transmitted light. Illuminator center is preset, hence no adjustment needed after replacing the lamp.

Condenser

N.A. 0.9 swing-out type achromatic condenser, with iris diaphragm and aperture scale, provides sufficient and uniform light for full-field observation in different magnifications.

CS-U9000F

CatScope





Disc switching mechanism for filters

High-precision disc switching mechanism is easy to change filters and guarantees the exact position of the selected filter. It can be equipped with a maximum of six fluorescence filters. Filters are placed in a rotary table for convenient switch. High precision and stable rotary table and high-performance filter ensures a drift-free image. High transmittance of spectrum without a cross color but a high S/N ratio, promotes dramatically fluorescence imaging contrast.

Illumination system

There is a light shutter in front of the reflected illuminator, which is used to shut the fluorescence light to prevent fluorescence quenching of the slide. The light barrier protects the user from the harmful effects of UV light.

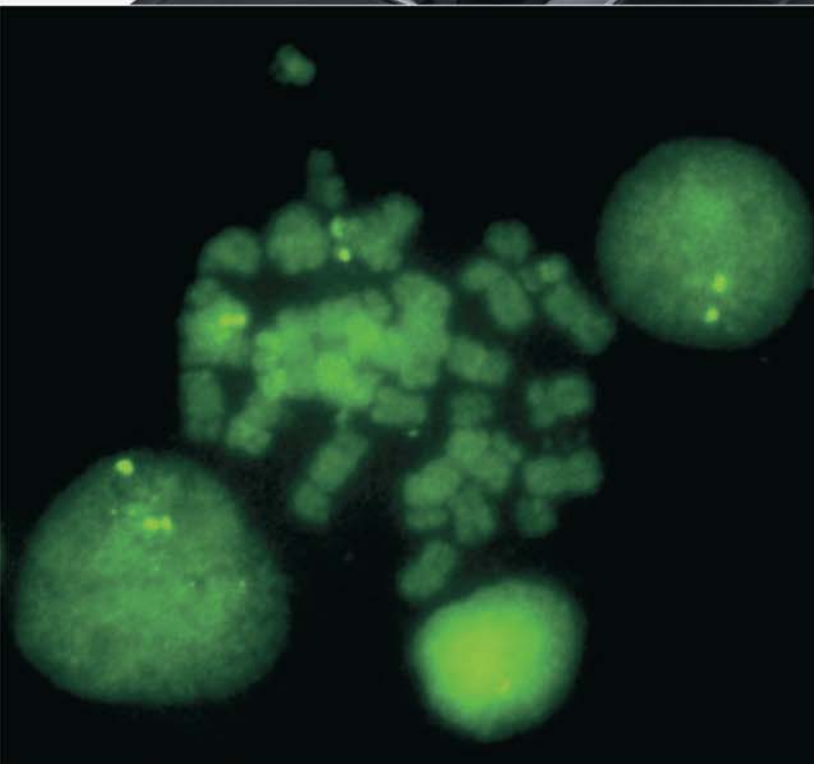
The use of ND attenuation filter or aperture and field diaphragm can efficiently reduce the intensity of exciting light to protect the slide.

New developed 100W 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 centering is easily adjustable.

Power supply for mercury lamp

Digital power control system, displays operating time and current value.



Technical Specifications of CS-U9000

Optical System	Infinity Color Corrected Optical System
Head	Seidentopf Trinocular Head with inverted image, Inclined at 30° and 360° rotatable Interpupillary Distance adjustment range: 50 - 76mm Diopter Adjustment: -8° to +5°
Eyepiece	High Eye-point WF PL10X/25mm
Nosepiece	Sextuple with DIC slot, Backward tilted, Click-stop Revolving mechanism with multiple ball bearing
Objectives	Infinity Plan Semi-Apochromatic Fluorescence Objectives Anti-fungal, Parfocal, Parcentric, color-coded 4X, 10X, 20X, 40X (Spring), 100X (Spring, Oil)
Stage	Anti-corrosive & Anti-friction Double Layer Mechanical Stage Double Slide holder Stage size: 187 x 166mm Movement range: 88mm (x-axis) x 55mm (y-axis), Precision: 0.1mm controlled with a long right hand stage handle
Condenser	N.A. 0.9 Swing-out type achromatic Condenser with Aperture Iris diaphragm
Focusing	Coaxial focus system with upper limit and tension adjustment Focusing Adjustment by Rack & Pinion Mechanism. Coarse range : 25mm, Fine focusing interval: 0.001mm
Illumination	Built-in transmitted Koehler Illumination system, pre-centered Halogen Illumination 12-100W, with digital light control
Power supply	100V-240V Universal Power Supply
Transmission Filters	LBD, ND6, ND25



Options in-lieu of mentioned standard specification:

- » Seidentopf Trinocular Head with erect image
- » Eye piece WF PL10X/26.5mm
- » Quintuple nose-piece
- » Septuple Nosepiece
- » Ceramic Stage

CS-U9000 can be upgraded for the following application:

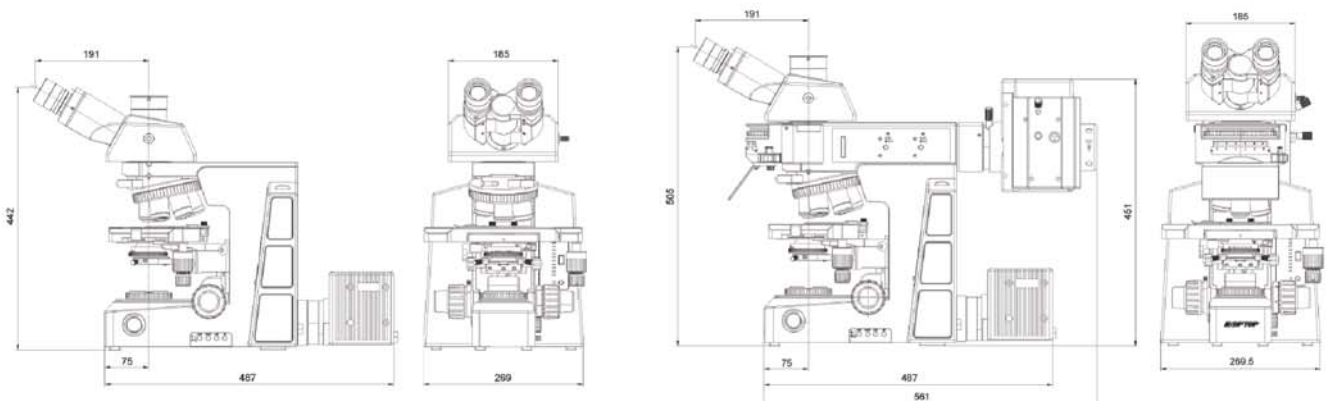
- » Micro-Photography
- » Phase Contrast Application
- » Dark Field Application
- » Fluorescence Application (Mercury / Xenon Illumination)

Technical Specifications of CS-U9000F

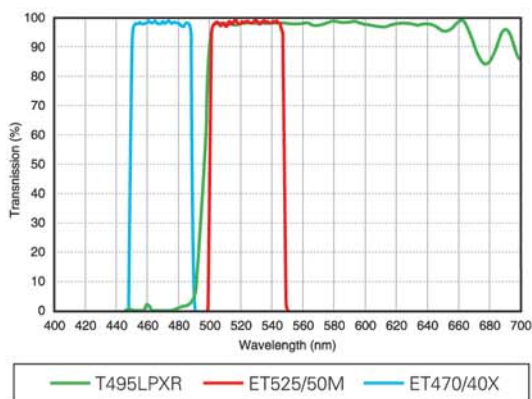
Same as CS-U9000

Fluorescence Unit:

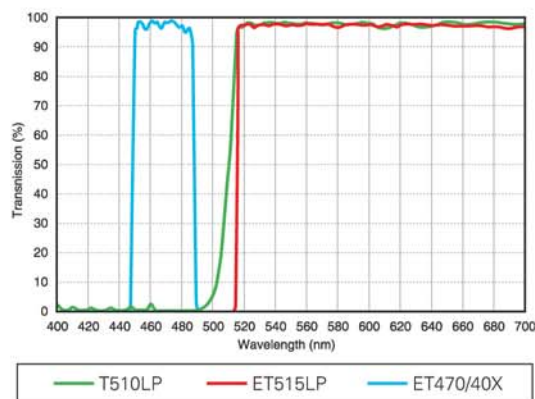
Reflected Fluorescence Illumination unit with iris field diaphragm and aperture diaphragm, center adjustable, with filter slot and polarizing slot with fluorescence Excitation Filters - B, G, V and UV (Turret Type with Six Slots for Filters)
100W Mercury Lamp House, Filament center and focus adjustable, with reflected mirror, mirror center and focus adjustable.
100W Mercury Power Source - Digital power controller
(75W Xenon lamp house, 75W xenon lamp and power controller - available for option)



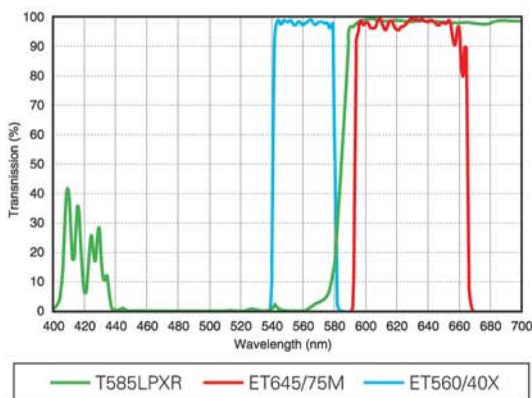
Standard parameters of fluorescent filters, substantially meet the needs of conventional scientific research. For some special requirements, specific filters also can be provided corresponding to fluorescent probes.



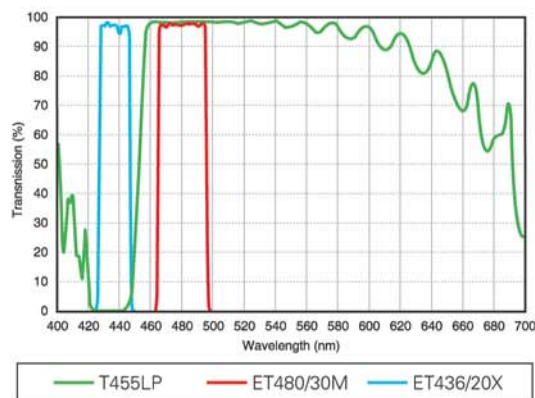
B1



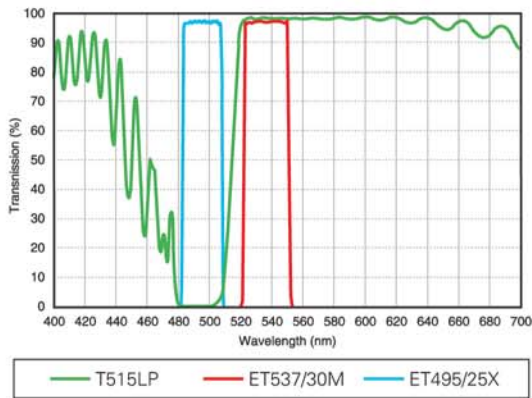
B2



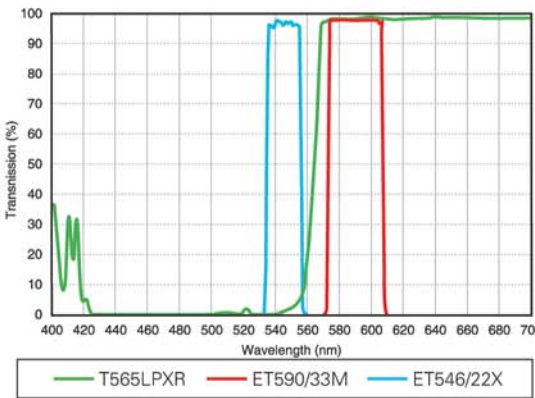
G1



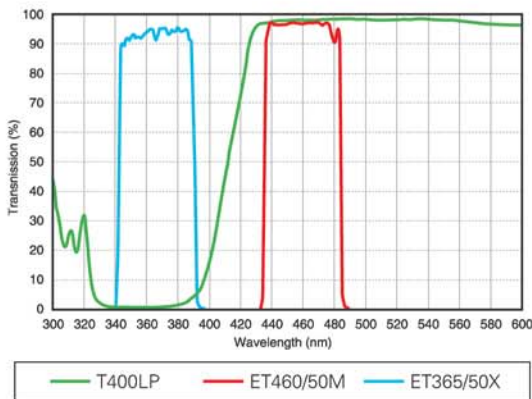
Spectrum Aqua



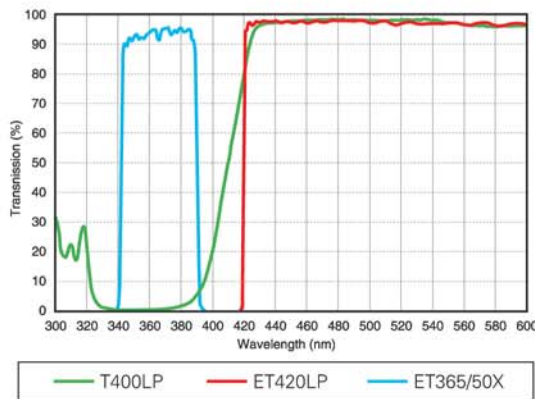
Spectrum Green



Spectrum Orange



UV1



UV2



CS-U9000MV

CatScope

CS-U9000MV is specially designed for group discussion.



CS-U9000MV3

A main head with 2 sub-heads, can have a maximum of 3 people observing at the same time



CS-U9000MV5

A main head with 4 sub-heads can have a maximum of 5 people observing at the same time

Technical Specifications of CS-U9000MV3

Same as CS-U9000 with following replacements/add-ons:

Head :

Seidentopf Type Infinity Trinocular Head with three splitting ratio position,0:100,20:80,100:0 – 01pc.

Seidentopf Type Infinity Binocular Head – 02pcs.

Eyepiece :

High-Eyepoint Plan Eyepiece PL10X/22mm, Diopter adjustable – 06pcs

Middle Module Block:

Middle Module with LED cursor, which can be switched with Red/Green/Blue colors. Intensity adjustable.

Technical Specifications of CS-U9000MV5

Same as CS-U9000MV3 with following replacements/add-ons:

Head :

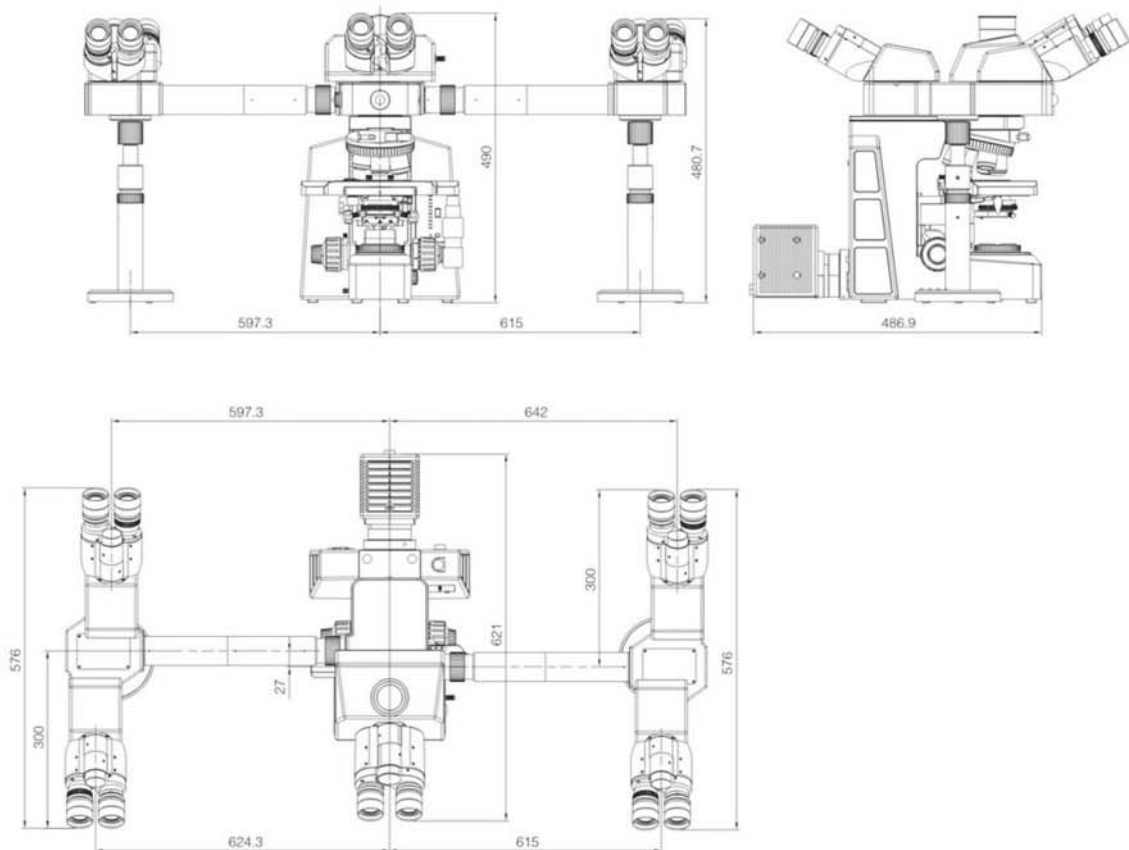
Seidentopf Type Infinity Trinocular Head with three splitting ratio position,0:100,20:80,100:0 – 01pc.

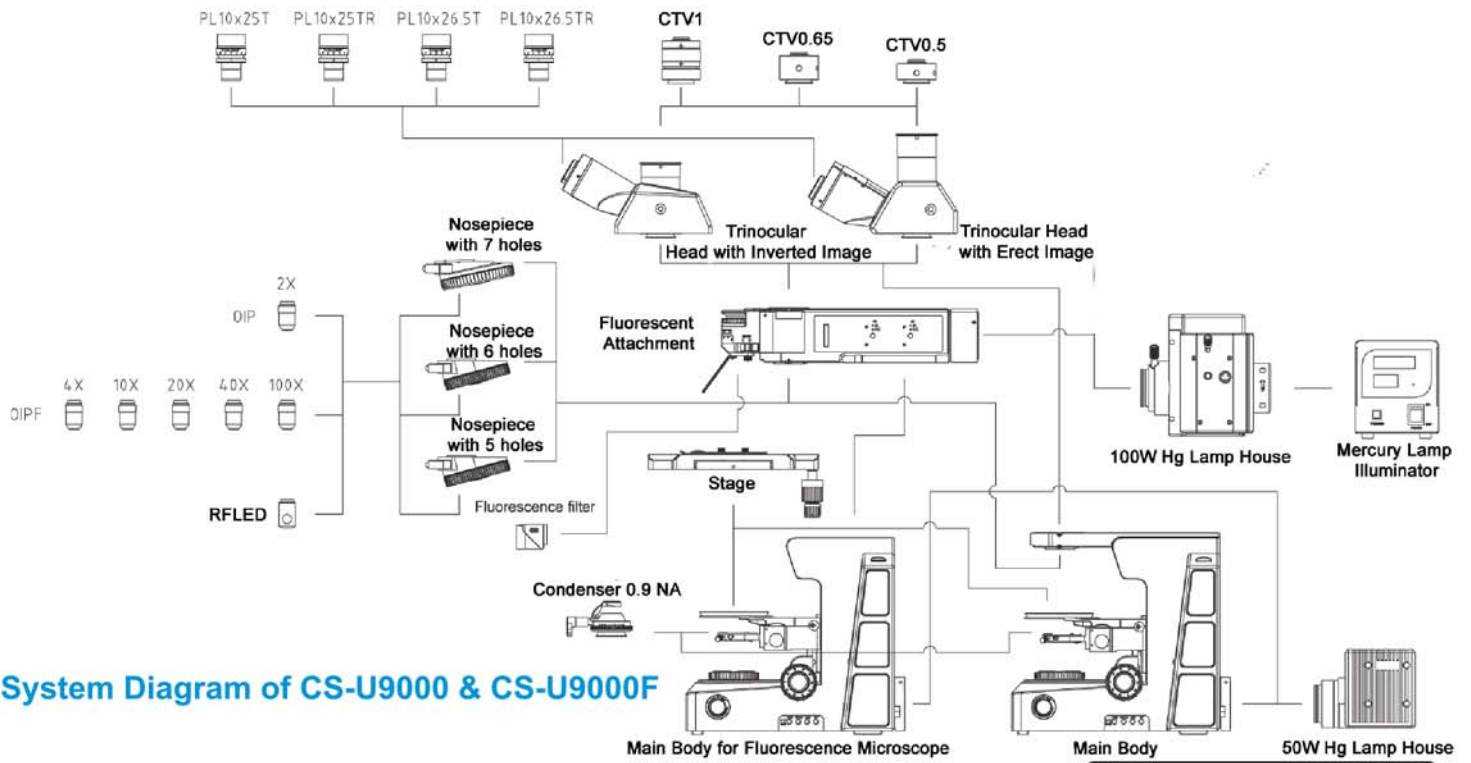
Seidentopf Type Infinity Binocular Head – 04pcs.

Eyepiece :

High-Eyepoint Plan Eyepiece PL10X/22mm, Diopter adjustable – 10pcs

System Diagram of CS-U9000MV (dimensions in mm)





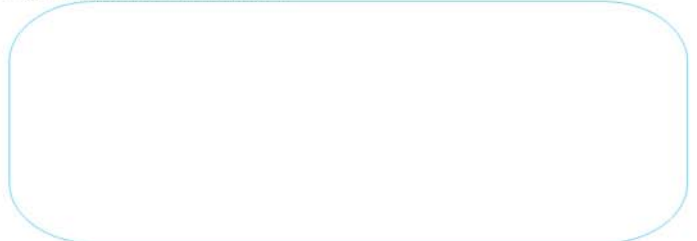
System Diagram of CS-U9000 & CS-U9000F

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer.
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