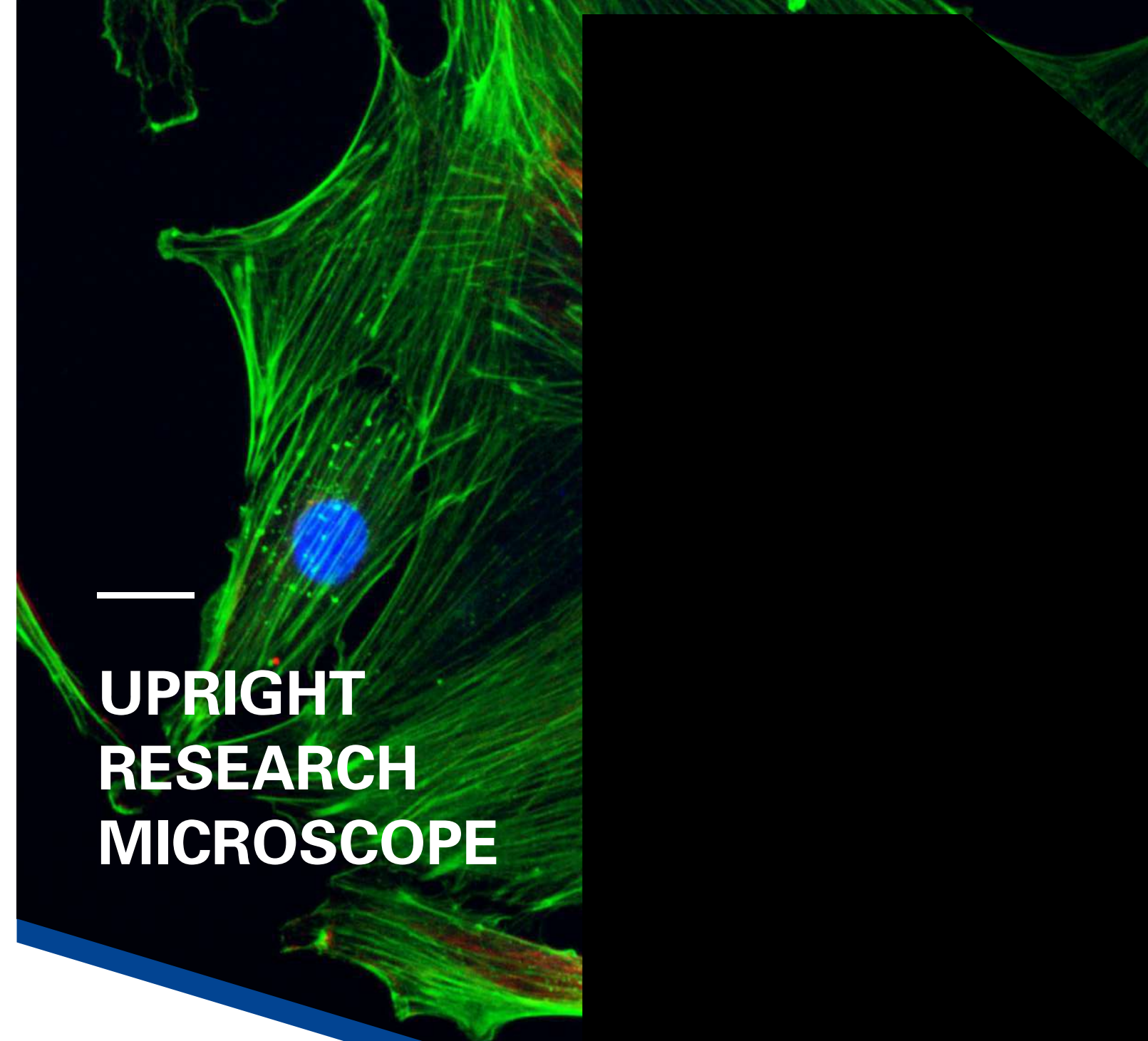




iOX 900 (NE) Series Specifications

	iOX 910(NE)	iOX 930(NE)	iOX 950(NE)
Main Body	Optical System		
	Universal Infinity colour corrected Optical System with 40x -1000x having anti fungus and anti-reflection properties.		
	Stand		
	Ergonomically designed Aluminum Die cast body with powder coated finish, sturdy stand. Extended base with hand rest for enhanced comfort and stability.		
	Viewing Head		
	Seidentopf Binocular Viewing Head; (Optional) Seidentopf Trinocular Viewing Head, Eyepiece/Port: 100/0, 20/80, 0/100 (Optional) Inclined at 30°, Interpupillary Distance 47-78mm (Optional) Adjustable tilting Trinocular head from 5° to 35° lengthening upto 40mm Interpupillary Distance 47-78mm Eyepiece/Port (100/0,50/50,0/100) Three-way light Distribution (Standard)		
	Eyepiece		
	High Eyepoint WF 10X/25 mm eyepieces pair with Diopter Adjustment +-5 on both Eyepieces, having anti-fungus, anti-reflection properties. (Standard) SW10x/22, EW12.5x/17.5, WF15x/16, WF20x/12 (Optional)		
Extra Viewing Head and Eyepiece (Penta Head)			
4-Binocular Seidentopf 30°, IPD 50mm-75mm, Both eyepieces Diopter Adjustment +-5 4 of Extra Eyepieces with FOV-22 mm Diopter system with Penta Head Microscope.			
Extra Viewing Head and Eyepiece (Deca Head)			
9-Binocular Seidentopf 30°, IDP 50mm-75mm, Both eyepieces Diopter Adjustment +-5 9 of Extra Eyepieces with FOV-22 mm Diopter system with Deca Head Microscope.			
Focusing System			
Torque adjustable coaxial coarse and fine adjustment by both sided large knobs, Fine stroke 0.2mm per rotation, Fine Division 0.001mm/1µm., Moving Range 35mm.			
Illumination			
High Reproductively in Built 14W S-LED lamp illumination with intensity control regulator with Life Span 50,000.00 Hours with Intensity Controller.			
Objectives	iOX series Plan apochromatic objectives 2x/0.08 WD: 6.0mm, 4x/0.16 WD: 13mm, Achromat Phase Plan 10x/0.25, WD: 7mm, plan apochromatic 10x/0.45 WD:4.0 mm, plan apochromatic (SL)20x/0.80 WD: 0.6mm, 40x/0.95 WD: 0.18mm (SL) correction collar, plan apochromatic (SL) 60x/0.9 dry WD:0.2mm correction collar, 100x /1.45 WD: 0.13mm with Antifungal, anti-reflection Properties and having high transmittance of 550nm.		
Nosepiece	Septuple revolving Nosepiece with slot of analyzer.	Motorized Septuple Nosepiece	
Stage	Ceramic coated Mechanical stage with size of 230mm X150mm.Moving range 78(X)x32(Y)mm ,1mm/grid, having double specimen holder clip for evaluation purpose. Coaxial Low drive right hand movement control pre-set upper limit Stopper with anti-scratch properties Vernier scale Division 0.1mm (precision) equipped with stage Control Knobs which can be adjusted up and down by 15mm.		
Condenser	Universal Condenser NA/0.9 compatible with BF, DF, phase Contrast, 5 position turret (4x-100x), One swing out Condenser.	Motorized Condenser	
Pointer	Green and Red LED Pointers, provided with arrow rotational stick, arrow rotational dial, colour selection dials. (In Multi Viewing Microscope) .		
Epi-Fluorescent Attachment			FL-VI Epi-Fluorescent Attachment (Optional)
Fluorescent Illumination			Osram Mercury Lamp HBO 100W - Metal halide illumination 75W - LED FL (Optional)
Upgradability	Dark field, Stepwise Motorization, DIC, Desired Additional heads Fluorescence, Polarization		
Optional observation model	Phase contrast, DIC , Fluorescence, Polarization.		



UPRIGHT RESEARCH MICROSCOPE

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iOX 900 (NE)

UPRIGHT RESEARCH MICROSCOPE

Series

i7 Opto Electronics Inc.

www.infinityoptic.com www.infinitymicroscopes.com





Intelligent / Comfort / Accuracy

iOX 910 (NE) Multi Viewing
Manual Microscope

Multi-viewing System

The multi-viewing microscope system is widely used in the teaching, experimental training and pathological diagnosis of the university. The INFINITY 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. Cooperate with teaching head and built-in indicator needle to facilitate learning and diagnosis.



iOX 950 (NE)
Automatic Fluorescent Microscope



2-Head Multi-Viewing (Face to Face)
iOX 910(NE) Dual Head



2-Head Multi-Viewing (Side by Side)
iOX 910(NE) tri Head



iOX 910 (NE)
Manual Microscope



iOX 930 (NE)
Automatic Microscope



5-Head Multi-viewing
iOX 910(NE) Penta Head



10-Head Multi-viewing
iOX 910(NE) Deca Head

Accurate Imaging, High Color Reduction

iOX 900(NE) series upright biological microscopy adopts infinite for optical system, which has been studied for many years and constantly improved. It has excellent optical quality, such as long working distance, strong color difference correction ability and so on.

Ergonomic Design, Comfortable Operation

Laboratory & Inspection and screening work means that microscopes need to be used for a long time. Nexcope NE900 series microscope adopts ergonomic design and man-machine design to reduce muscle tension and visual fatigue caused by long-time operation, and to make boring work easier and easier.

Modular Design to Realize the Diversity of the Observation Method

iOX 900(NE) series microscope adopts modular design, which can realize the observation methods of field, dark field, DIC, fluorescence, polarized light and so on. It is a perfect tool for experimental teaching, scientific research and medical examination.

Energy Conservation and Environment Protection, Increasing Service Life

The transmitted light would be off automatically after 30 minutes from operators leave. It can not only save energy, but also keep the lamp life.

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Automatic Design

iOX 930 (NE)

On the basis of iOX 910(NE), a variety of electric components are added, which simplifies the repetitive operation, improves the working efficiency and makes the scientific research work easier. Nexcope series microscope, intelligent product, is designed to bring revolutionary breakthrough for laboratory and clinical microscope operation and application. The iOX 930(NE), on the basis of ensuring excellent optical performance and exquisite human engineering design, adds a plurality of convenient and humanized designs so that the microscopic observation is more comfortable, the magnification conversion is more convenient, and the image shooting is more rapid.



Microscopic observation is more comfortable

Ergo Tilting Trinocular Head

Eye tube can be adjustable from 5 ° to 35 °, Trinocular tube can be connected to SLR camera and digital camera, having a 3-position beam splitter (0.100, 100: 0, 80:20), the splitter bar can be assembled on the either side according to user's requirement.



Light Intensity Management Function

When converting objective lenses with different magnification, the illumination intensity needs to be adjusted to ensure the same illumination brightness in the field under different magnification. iox 930 NE can intelligently remember the appropriate light intensity under different magnification, and automatically adjust with the change of objective lens magnification, it can reducing fatigue.



Efficiency in Operation

Easier to Get Image



Image Capture Button

The digital camera could capture images just by pressing the black "capture" button at the side of the bottom of the microscope body.

The Conversion Rate is More Convenient

Remote Control Pad

Objectives could be switched by simply pressing the rotating buttons. Users could also self-define two of the most commonly used objectives. User could swap between these two objectives by pressing the green button.



Nosepiece Rotating Buttons

This microscope has the function of automatically rotating nosepieces and adjusting the light intensity.



Motorized Swing-out Condenser

Automatically swing-out and swing-in the top-lens element according to the objective lens that is selected via the intelligent linking.



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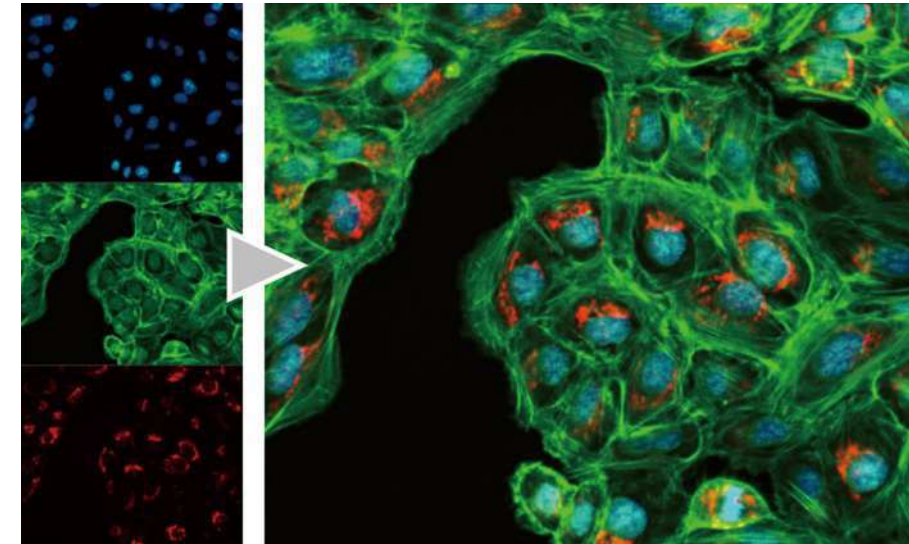
Fluorescent Image with Bright Color and Dark Background

iOX 950 (NE)

On the basis of iOX 930 (NE), a selective fluorescent vertical illuminator is added. At the same time, high numerical aperture, high definition semi-complex achromatic fluorescent objective lens and high cutoff and high transmittance fluorescent filter group are used to produce fluorescent images with bright color and dark background.



A Fluorescent Image of A Bright Color and Dark Background



Clearer and Brighter Image

We have devoted many years to the study of fluorescence imaging. The infinite S-APO fluorescent objective is used in iOX 950 (NE) to ensure the sharpness, clarity and color reduction of the image. At the same time, the latest advanced sub-corrugation elimination coating technology is adopted, so the apparent fluorescence transmittance is higher, the cutoff is more acute and the testing efficiency is higher. It is the correct choice for visible to ultraviolet fluorescence imaging.

Microscopic Observation is More Comfortable

Turret Filter Module

The fluorescent turntable can install 6 color filter groups and can image the specimens with multiple staining at the same time. At the same time, the conversion excitation module only needs a small dial, which is convenient and fast, improves the working efficiency and effectively reduces the dye quenching.



Epi-Fluorescent Attachment

Standard osram 100W HBO ultra-high pressure spherical mercury lamp, high fluorescence brightness, uniform field of view.



Metal Halide Illumination

Optional 75W metal halide illumination, bulb life up to 2000 hours. The intensity of light is greater and the field of view is brighter and more uniform.



Focus on Detail and Extend Service Life

Sapphire Glass Stage Insert

Mechanical stage with a gorilla glass insert is durable and allows operators to easily clear the stage. We have sapphire glass for your optional choice.



Intelligent Fluorescent Power Supplier

Automatic memory time and shutdown time, when misoperated, effectively protect the service life of mercury lamp

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INFINITY

Fluorescent Filter: High Accuracy and Easy to Use

In order to make the fluorescence transmittance higher, the cut-off more acute, and the detection effect better, we adopted the excellent secondary ripples elimination coating technology on the fluorescent filter group. High sensitivity fluorescence detection makes cells less exposed to excited light, and higher signal-to-noise ratio (S / N) produces fluorescent images with bright colors and dark background.



i 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 Objectives

These plan objectives can provide flat image through the light from visible light to NIRS. They are usually used for bright-field viewing as the high signal-to-noise, high resolution and high contrast image result.



N-PLFN Series Plan Fluorescent Objectives

Owe to the multilayer coating technology, these S-APO objective can compensate the spherical aberration and the chromatic aberration from ultraviolet to infrared. High-sensitive fluorescence ensure the acuity, articulation and color reduction of image, to provide the digital image of high-quality and high-function.



N-PLM PH Series Plan PH Objectives

They are the good choice for clinic and scientific research. These high-quality plan objective can provide advanced plan image of 25mm FOV under bright field & transmitted light. iox series plan phase contrast objectives are specially designed for phase contrast viewing.



N-PLM Series APO Objective

The new APO objective has a high-level chromatic aberration correction capability and a high resolution, and ensures the high-level wave phase difference correction function of the whole field of view, which is an ideal choice for routine laboratory observation and digital imaging objective.



Bright / Clear / Practical

Multi-viewing System

The multi-viewing microscope system is widely used in the teaching, experimental training and pathological diagnosis of the university. The INFINITY 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. 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

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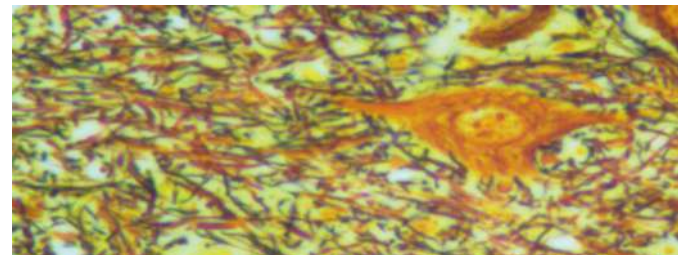


Building Block Design

INFINITY scientific microscope can achieve a variety of observation methods through modular combination: bright field, dark field, phase contrast, fluorescence, polarization, DIC and so on.

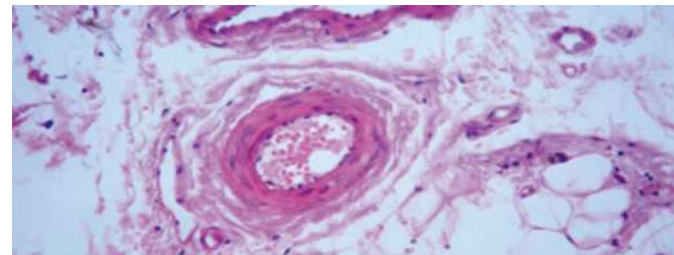
Bright Field Observation

INFINITY adopts scientific research grade optical system in scientific research grade microscope. Infinite optical system, which provides a reliable guarantee for optical quality. At the same time, the flat field achromatic objective lens with high numerical aperture is used to provide a clear and flat image.



Spinal cord Silver-plated dyeing 20 ×

Brown filamentous nerve fibrils were found in the cell bodies and processes of multipolar neurons, and synapses were seen around the cell bodies.

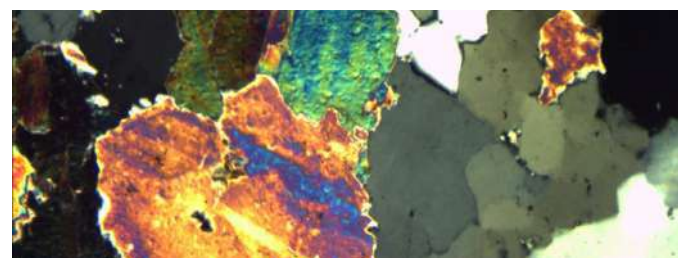


Artery H.E. Staining 20 ×

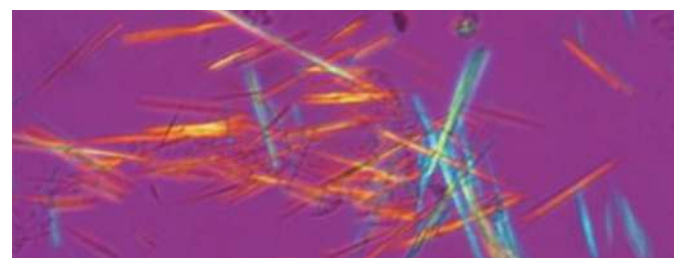
In the connective tissue of the outer membrane of the aorta, a small artery, a small vein and a capillary are seen.

Polarizing Observation

It is very suitable for observing birefringent specimens, such as collagen, starch protein, crystal, liquid crystal or plastic glass.



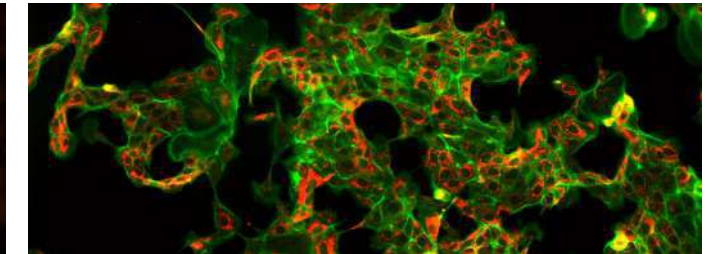
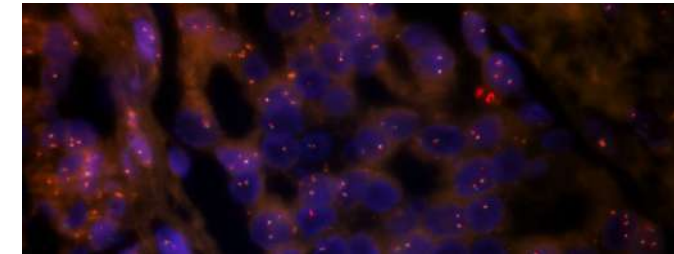
Crystal



Uric Acid Crystal

Fluorescent Observation

The noise elimination device is used in the drop-out fluorescent attachment, and the captured fluorescence image is bright, the contrast and the signal-to-noise ratio (S/N) are high. The series of fluorescent light sources of the microscope are available for selection, and the light source of the mercury lamp has high cost performance. The metal halide lamp has long service life and wide application range. The LED light source has little damage to the sample, and the service life can be more than 10,000 hours.



Diagnostic analysis of breast cancer, using Alexa 488\Spectrun Green\Spectrun Orange dye, images taken with NE950 fluorescence microscope 40X lens

Phase Contrast Observation

This observation is suitable for viable cells without staining.



Rat Ovarian Cell

Dark-field Observation

It can be used for clearly viewing of blood or flagellum etc. fine structure.



Spirogyra

DIC Observation

DIC increases the contrast of the sample and makes the nucleus and larger organelle such as mitochondria have a strong stereoscopic sense, which is more suitable for micromanipulation. The present invention is mainly used for micro-operation of gene injection, nuclear transfer, transgenic animal and other biological engineering.



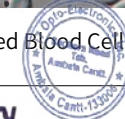
Red Blood Cells and White Blood Cells



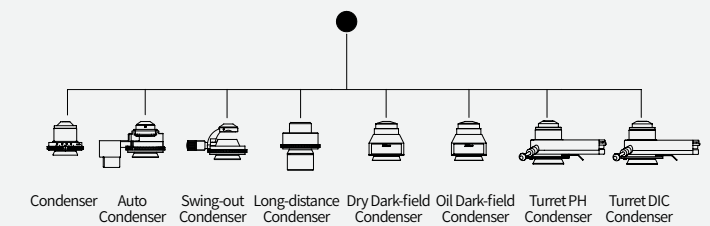
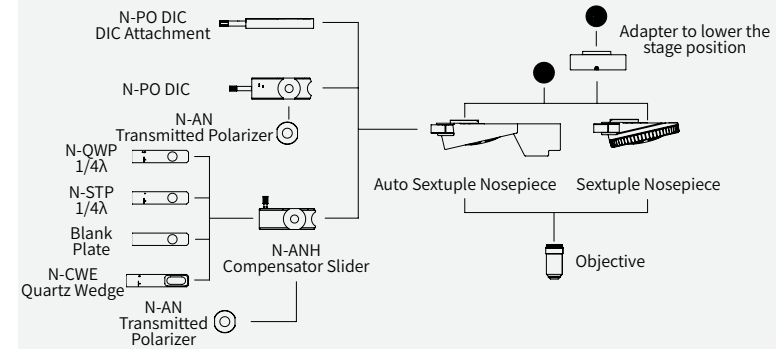
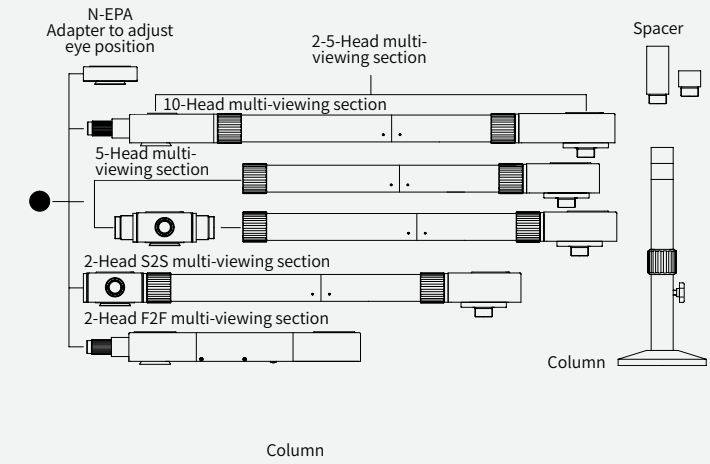
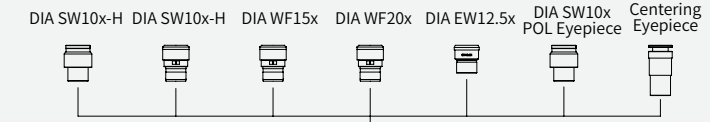
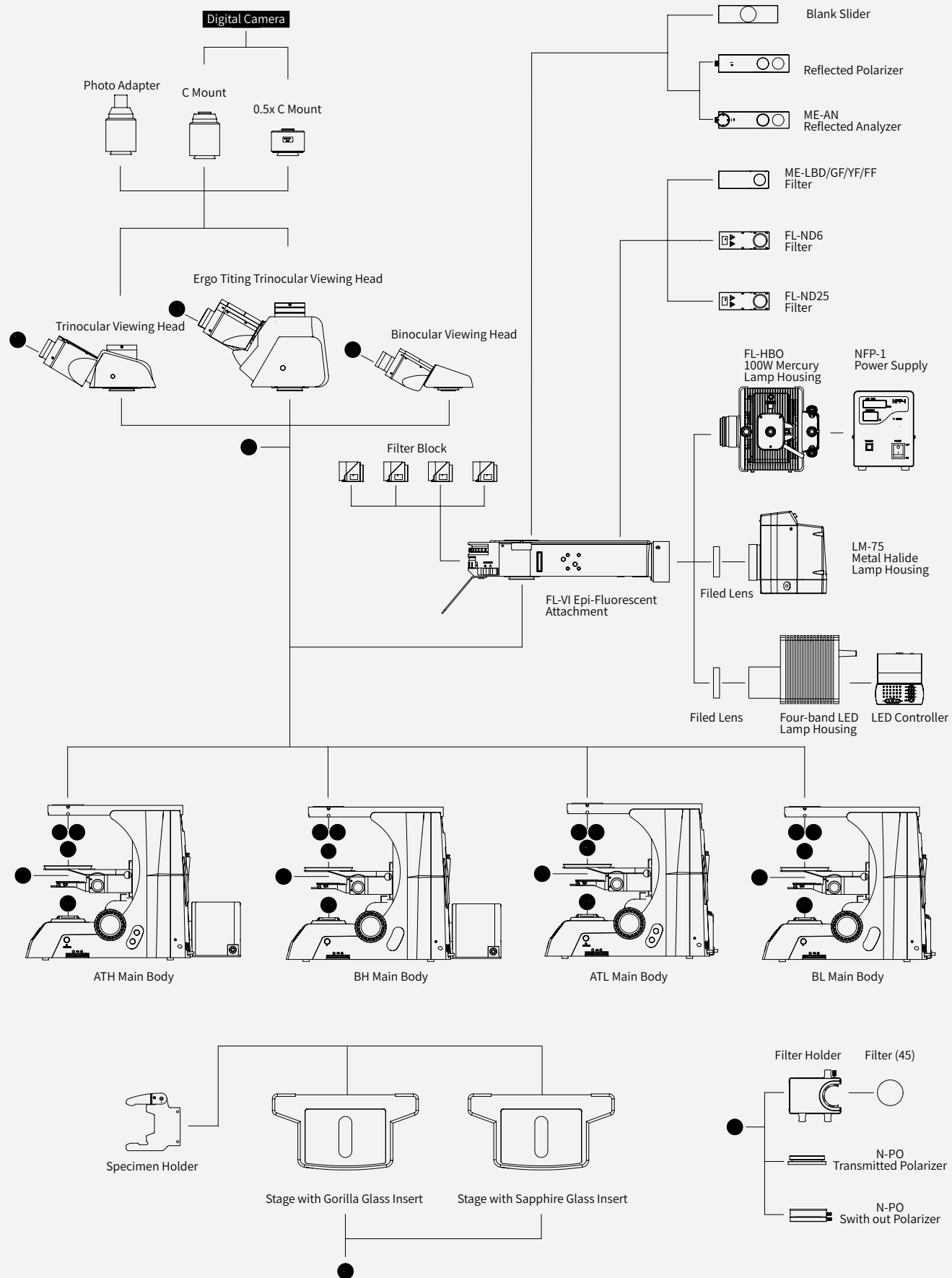
Saccharomyces Cerevisiae

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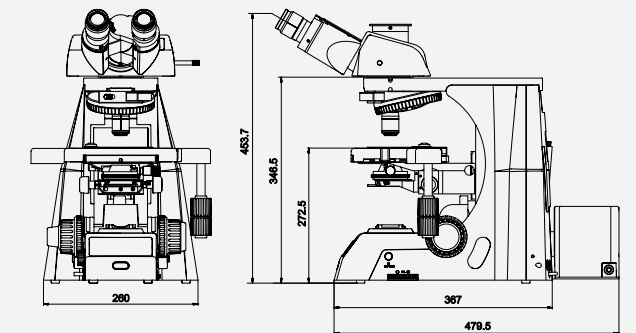
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iOX 900(NE) Series System Diagram



iOX 910(NE) Dimensions Unit: mm



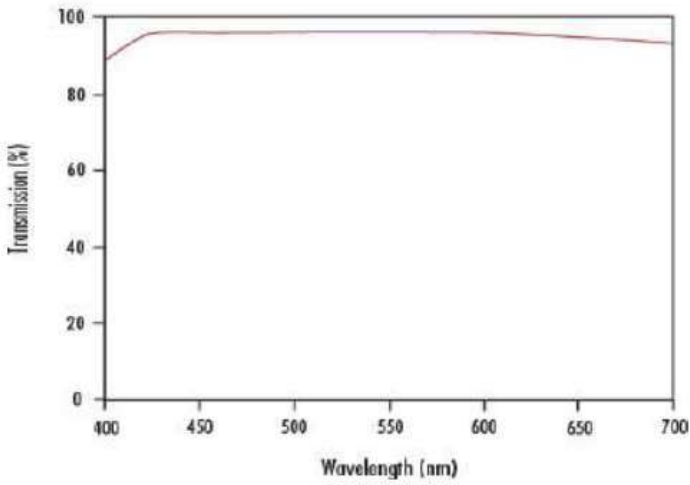
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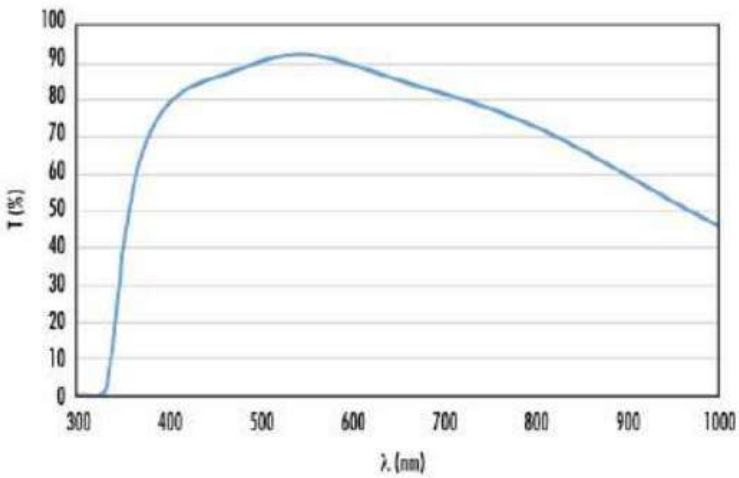
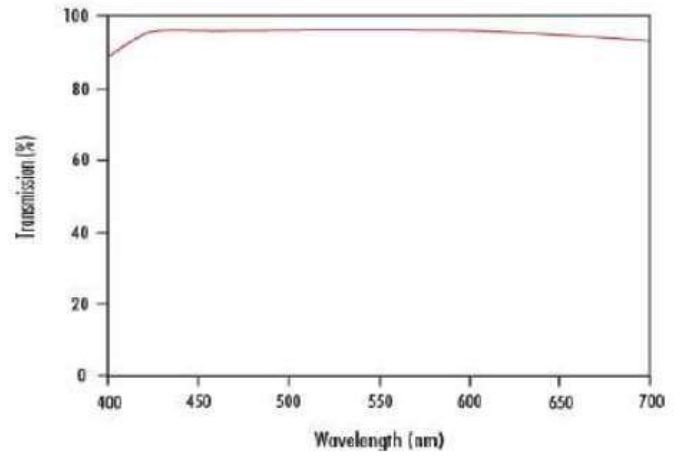


Transmittance Curve

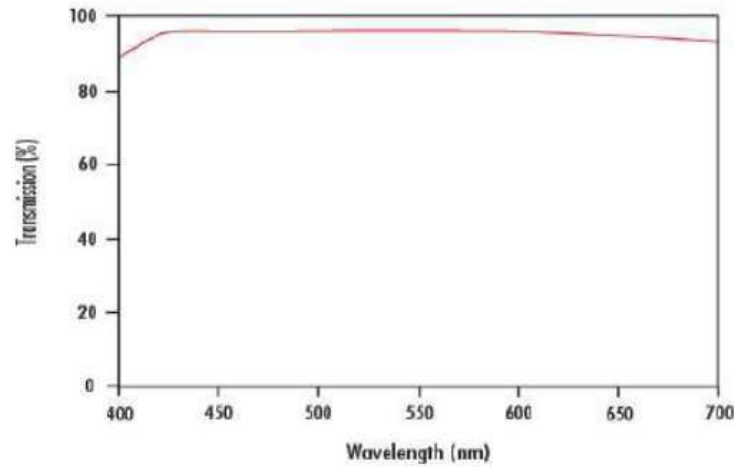
Typical Transmission



Typical Transmission



Typical Transmission



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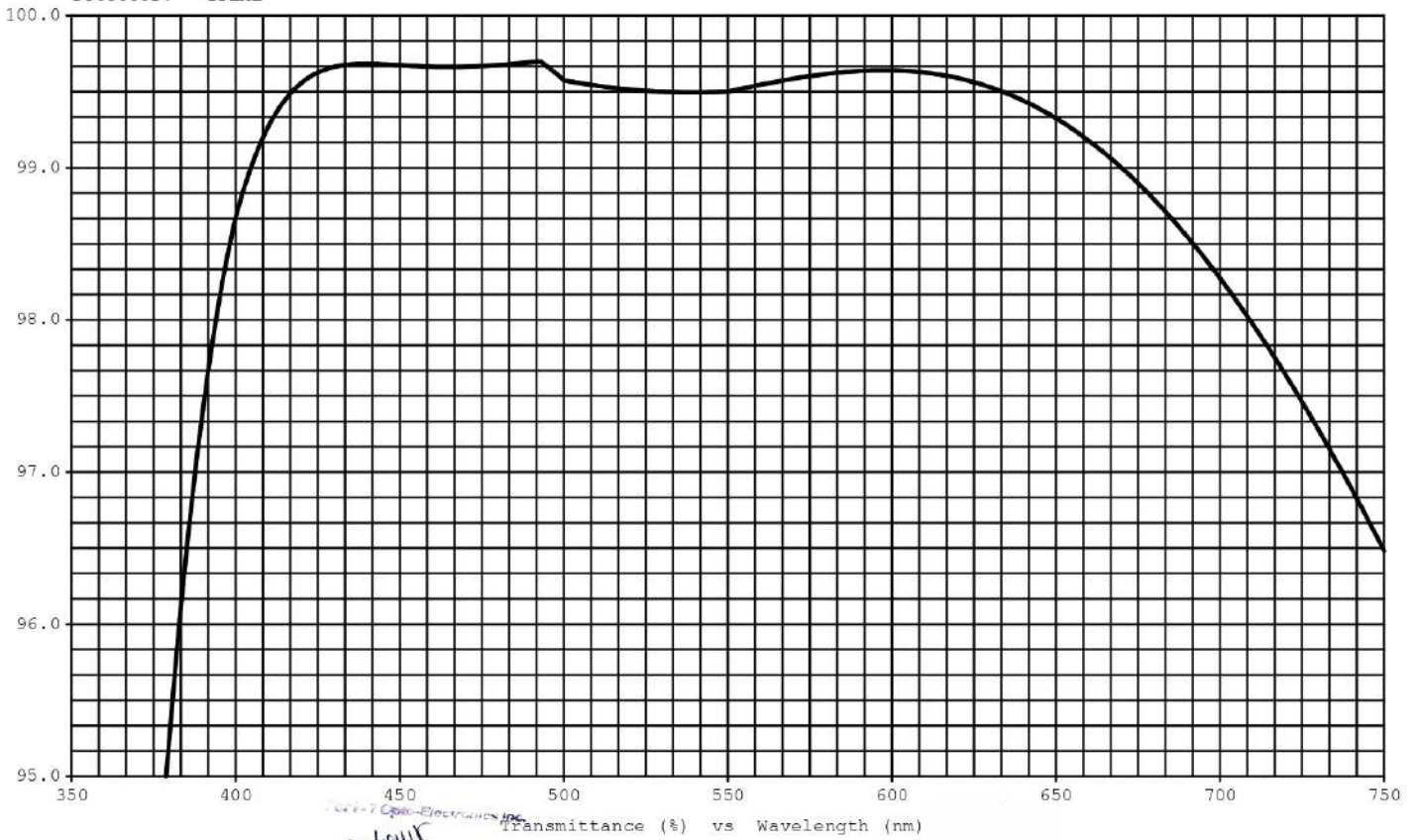
alc35.EXE

400_700_98P_COATING with HML

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Illuminant: WHITE
Medium: AIR
Substrate: H-K9L
Exit: AIR
Detector: IDEAL

Angle: 0.0 (deg)
Reference: 550.0 (nm)
Polarization: Ave
First Surface: Front



Optical
Anti-Reflection

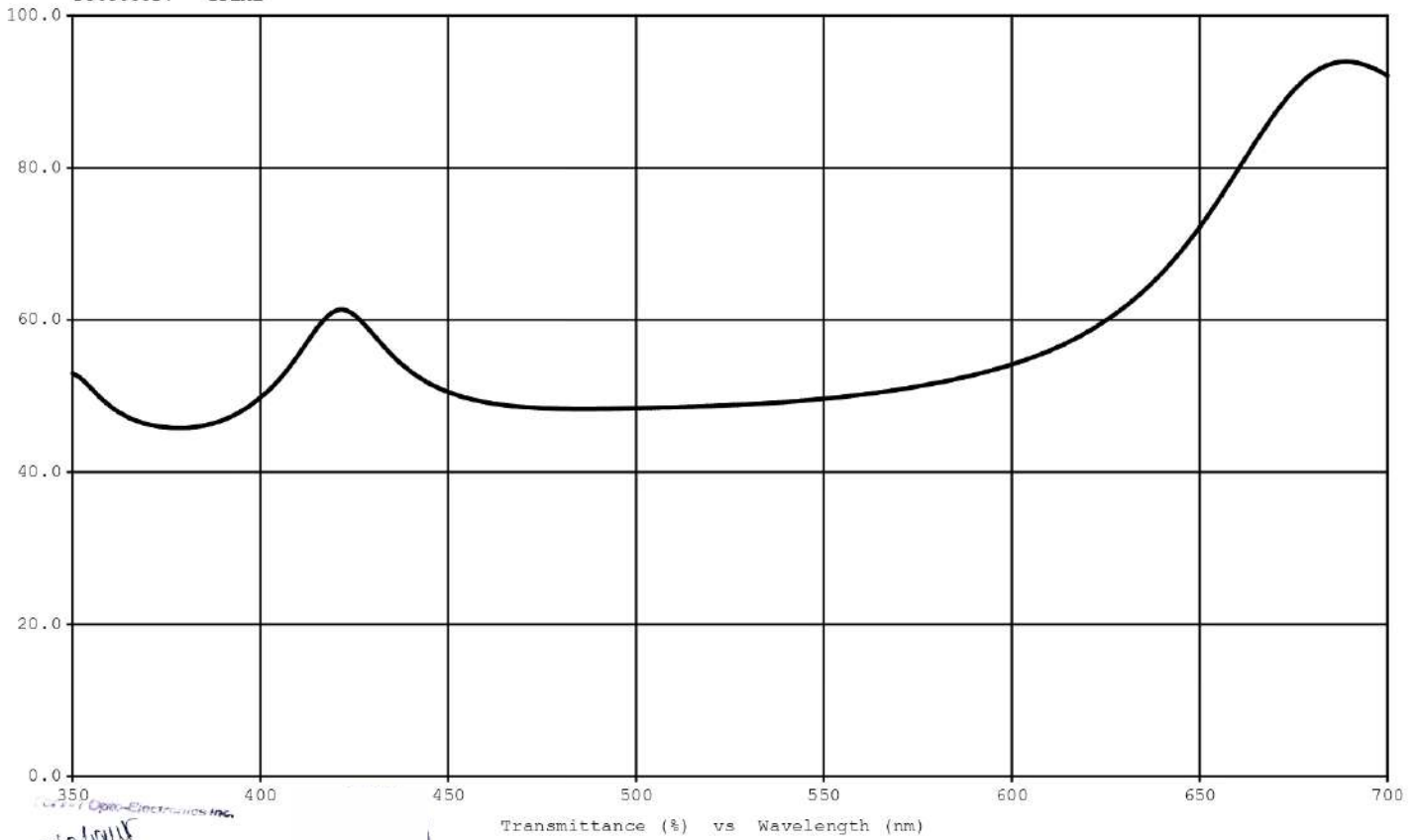
alc35.EXE

9 LAYERS_BS_Revised

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Illuminant: WHITE
Medium: BK7
Substrate: BK7
Exit: BK7
Detector: IDEAL

Angle: 45.0 (deg)
Reference: 550.0 (nm)
Polarization: Ave
First Surface: Front



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R&D, Singapore

Transmittance (%) vs Wavelength (nm)