

Delphi-X Observer

fluorescence

HIGHLIGHTS

- Medical device class I – EU MDR 2017-745
- Trinocular model
- Ergonomic tilting head
- Standard super wide field SWF 10x/25mm, Ø 30 mm tubes
- Sextuple reversed nosepiece
- Enhanced infinity corrected EIS optical system
- 60 mm parafoveal Plan EIS objectives
- 60 mm parafoveal Plan Semi-Apochromatic EIS objectives
- M25 mm objective thread mounting
- 100 W HBO mercury vapor illumination
- 3 W NeoLED™ illumination
- 100 W halogen illumination



DX.3153-APLi ●

SPECIFICATIONS

EYEPIECES

- Standard super wide field SWF 10x/25 mm, Ø 30 mm tubes
- Extended wide Field EWF 10x/22 mm, Ø 30 mm tubes (on request)

STANDARD HEAD

Sidentopf trinocular head with 30° inclined tubes. Interpupillary distance adjustable between 47 and 78 mm. Three position beamsplitter (0:100/ 80:20 / 100:0). Diopter ± 5 adjustments on both eyepieces

ERGONOMIC TILTING HEAD

Optional ergonomic 0 to 35° tilting trinocular head supplied with SWF 10x/25 mm eyepieces, interpupillary distance 47-78 mm and photo tube with standard Ø 23.2 mm tube

NOSEPIECE

Revolving sextuple reversed nosepiece on ball-bearings

ENHANCED INFINITY SYSTEM (EIS)

The enhanced infinity system (EIS) of the Delphi-X Observer™ consists of Super wide field SFWF 10x25 mm eyepieces, high numerical aperture 60 mm parafoveal objectives and a 200 mm focal length tube lens. The 200 mm focal length tube lens reduces the angle of the light rays passing through the optics and as a direct result improving significantly the chromatic aberration corrections and contrast of the images produced. The objectives have a larger diameter enabling a much higher numerical aperture, thus improving the overall resolving power of the optical system

For all these reasons the Delphi-X Observer™ offers superior optical performance for the most demanding applications



Tilting head ●

OBJECTIVES

Plan PLi	2x/0.06 ⁽¹⁾	4x/0.10	10x/0.25	20x/0.40	S40x/0.65	S50x/0.95 oil ⁽¹⁾	S60x/0.80 ⁽¹⁾	S100x/1.25 oil	S100x/1.25 oil iris ⁽¹⁾
Plan Semi-Apo Fluarex		4x/0.13	10x/0.30	20x/0.50	S40x/0.75			S100x/1.30 oil	

All objectives are 60 mm parafocal and have a M25 mm mounting thread. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput.

All S40x, S50x, S60x and S100x objectives are spring loaded

⁽¹⁾ Optional

PLAN ACHROMATIC EIS OBJECTIVES

(clinical routine applications)

The Delphi-X Observer™ is standard supplied with Plan Achromatic 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 (oil immersion) infinity corrected EIS objectives

Available as an option:

2x/0.06, S50x/0.95 (oil immersion) and S60x/0.80

PLAN SEMI-APPOCHROMATIC FLUAREX OBJECTIVES

(anatomy- and histopathology applications)

The Delphi-X Observer™ can also be supplied with Plan Semi-Apochromatic 4x/0.13, 10x/0.30, 20x/0.50, S40x/0.75 and S100x/1.30 (oil immersion) infinity corrected EIS objectives

STAGE

190 x 152 mm stage with 78 x 32 mm integrated right-handed mechanical stage. Designed for 2 slides. Standard supplied with scratch-resistant Gorilla glass. Sapphire scratch-resistant glass is available on request. Left-handed mechanical stage is available on request

FOCUSING

Coaxial coarse and fine adjustment, 100 graduations, 1 µm precision, 100 µm per rotation, total travel range is approximately 35 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control. The focusing knobs can be switched from left to right according to the user's preference

CONDENSER FOR BRIGHTFIELD

In height adjustable N.A. 0.90/1.25 Abbe swing-out condenser with numerical aperture identification marks

ILLUMINATION FOR FLUORESCENCE

The attachment for fluorescence of the Delphi-X Observer™ is equipped with a rotating block which can contain up to 6 filter cubes and supplied with 100 W HBO mercury vapor light source for broad powerful light spectrum

Supplied with standard fluorescence filters sets for Blue excitation (EX460-490 DM500 EM520LP) and Green excitation (EX510-550 DM570 EM590LP), UV shield and external power supply

Other more specific and optimized application-related fluorescence filter sets are also available

DIASCOPIC ILLUMINATIONS

Two Köhler illuminations are available for the Delphi-X Observer™ microscope:

- Diascopic intensity adjustable 3 W NeoLED™ Köhler illumination with internal 100-240 V power supply
- Diascopic intensity adjustable 100 W halogen Köhler illumination with internal 100-240 V power supply

The diascopic halogen illumination comes with 2 push-in/push-out neutral density filters for smooth attenuation of the light intensity for all kind of samples. The diascopic NeoLED™ illumination comes with 1 neutral density filter

NEOLED™

The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain three main benefits:

- More oblique light from the LED light source can be captured, which increases the light output significantly
- Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics

ICARE SENSOR

The unique iCare Sensor is developed to avoid unnecessary loss of energy. The illumination of the microscope automatically switches off shortly after microscopists step away from their position

CARRYING GRIP

The carrying grip at the back of the microscope ensures safe transportation of the microscope and the integrated tool & holder makes sure the right tool is always available

PACKAGE CONTENT

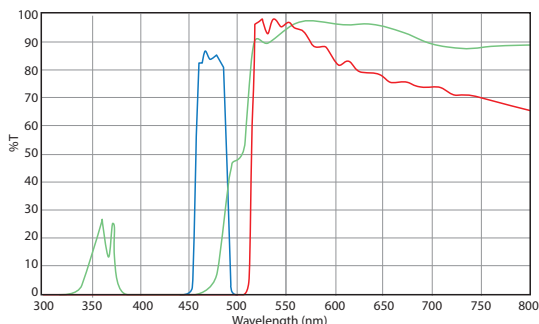
Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil



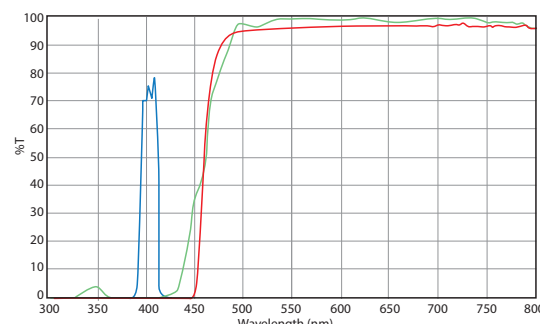
iCare sensor ●

STANDARD GENERAL PURPOSE FLUORESCENCE FILTER SETS

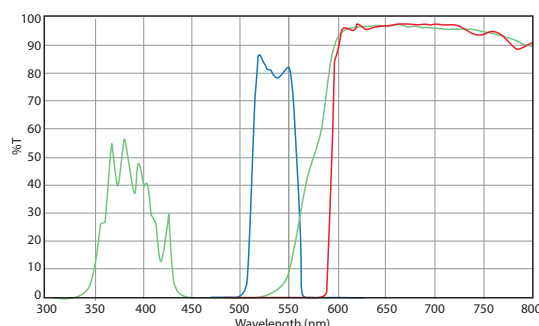
FILTER SET FOR BLUE EXCITATION (DX.9745)



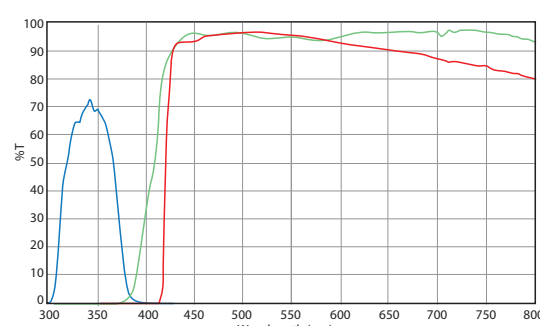
FILTER SET FOR VIOLET EXCITATION (DX.9747)



FILTER SET FOR GREEN EXCITATION (DX.9746)



FILTER SET FOR ULTRA-VIOLET EXCITATION (DX.9748)



DELPHI-X OBSERVER FOR FLUORESCENCE WITH TRINOCULAR (ERGONOMIC TILTING) HEAD

MODELS	Standard trinocular	Ergonomic tilting head	SWF 10x/25 mm eyepieces	Plan 4/10/20/S40/S100x oil EIS objectives	Plan Semi-Apo Fluarex 4/10/20/S40/ S100x oil EIS objectives	3 W NeoLED™ Köhler illumination	100 W Halogen Köhler illumination
DX.3153-PLi	•		•	•		•	
DX.3158-PLi		•	•	•		•	
DX.3153-APLi	•		•		•	•	
DX.3158-APLi		•	•		•	•	
DX.3153-PLi/HAL	•		•	•			•
DX.3158-PLi/HAL		•	•	•			•
DX.3153-APLi/HAL	•		•		•	•	•
DX.3158-APLi/HAL		•	•		•	•	•

ACCESSORIES AND SPARE PARTS

DX.6010	Super wide field SWF 10x/25 mm eyepiece for Ø 30 mm tube	DX.9105	Abbe condensor with 0.9/1.25 swing-out front lens
DX.6010-CM	Super wide field SWF 10x/25 mm eyepiece with micrometer and cross hairs for Ø 30 mm tube	DX.9110	Dry darkfield condenser
DX.6210	Super wide field SWF 10x/22 mm eyepiece for Ø 30 mm tube	DX.9112	Oil immersion darkfield condenser
DX.6210-CM	Super wide field SWF 10x/22 mm eyepiece with micrometer and cross hairs for Ø 30 mm tube	DX.9660	Simple polarization kit
DX.6012	Wide field WF 12.5x/17.5 mm eyepiece for Ø 30 mm tube	DX.9662	Special polarization kit for gout
DX.6015	Wide field WF 15x/16 mm eyepiece for Ø 30 mm tube	DX.9704	Yellow filter for lamphouse, diameter 45 mm
DX.6020	Wide field WF 20x/12 mm eyepiece for Ø 30 mm tube	DX.9810	C-mount with 1 magnification for C-mount camera
DX.6099-L	Eyecup for eyepieces	DX.9835	C-mount with high resolution relay 0.35x objective for 1/3 inch C-mount camera
DX.7202	Infinity EIS 60 mm Plan PLi 2x/0.06 objective. WD 7.5 mm	DX.9850	C-mount with high resolution relay 0.50x objective for 1/2 inch C-mount camera
DX.7204	Infinity EIS 60 mm Plan PLi 4x/0.10 objective. WD 30 mm	DX.9863	C-mount with high resolution relay 0.63x objective for 2/3 inch C-mount camera
DX.7210	Infinity EIS 60 mm Plan PLi 10x/0.25 objective. WD 10.2 mm	DX.9960	100 W 24 V halogen bulb (revision 1 models)
DX.7220	Infinity EIS 60 mm Plan PLi 20x/0.40 objective. WD 12 mm	DX.9961	100 W 12 V halogen bulb (revision 2 models)
DX.7240	Infinity EIS 60 mm Plan PLi S40x/0.65 objective. WD 0.7 mm	DX.9993	3 Watt LED replacement
DX.7250	Infinity EIS 60 mm Plan PLi S50x/0.95 oil objective. WD 0.19 mm	AE.5214	500 mA 250 V fuses for LED models, 10pcs
DX.7260	Infinity EIS 60 mm Plan PLi S60x/0.80 objectives. WD 0.3 mm	AE.5216	5 A 250 V fuses for Halogen models, 10pcs
DX.7200	Infinity EIS 60 mm Plan PLi S100x/1.25 oil immersion objective. WD 0.2 mm	AE.5130	Universal SLR adapter with built-in 2x lens for standard 23.2 mm tube. Needs T2 adapter
DX.7200-I	Infinity EIS 60 mm Plan PLi S100x/1.25 oil immersion objective with built-in iris diaphragm. WD 0.2 mm	AE.5025	T2 ring for Nikon D SLR digital camera
DX.7304	Infinity EIS 60 mm Plan Semi-Apochromatic PLi-Apo Fluarex 4x/0.13 objective. WD 16.5 mm	AE.5040	T2 ring for Canon EOS SLR digital camera
DX.7310	Infinity EIS 60 mm Plan Semi-Apochromatic PLi-Apo Fluarex 10x/0.30 objective. WD 8.1 mm	PB.5155	Microscope slides 76 x 26 mm, ground edges, 50 pieces per pack
DX.7320	Infinity EIS 60 mm Plan Semi-Apochromatic PLi-Apo Fluarex 20x/0.50 objective. WD 2.1 mm	PB.5165	Cover glasses 18 x 18 mm, 0.13-0.17 mm, 100 pieces
DX.7340	Infinity EIS 60 mm Plan Semi-Apochromatic PLi-Apo Fluarex S40x/0.75 objective. WD 0.7 mm	PB.5168	Cover glasses 22 x 22 mm, 0.13-0.17 mm, 100 pieces
DX.7300	Infinity EIS 60 mm Plan Semi-Apochromatic PLi-Apo Fluarex S100x/1.30 oil immersion objective. WD 0.15 mm	PB.5245	Lens cleaning paper, 100 sheets per pack
DX.9501-R	Stage with Gorilla glass. Right handed	PB.5255	Immersion oil, 25 ml. Refraction index n = 1.482
DX.9501-L	Stage with Gorilla glass. Left handed	PB.5274	Iso propyl alcohol 99%, 200 ml
DX.9504-R	Stage with Sapphire glass. Right handed	PB.5275	Cleaning kit: lens fluid, lint free lens tissue/paper, brush, air blower, cotton swabs
DX.9504-L	Stage with Sapphire glass. Left handed		
DX.9501-LG	Option for left handed stage with Gorilla glass ⁽¹⁾		
DX.9504-RS	Option for right handed stage with Sapphire glass ⁽¹⁾		
DX.9504-LS	Option for left handed stage with Sapphire glass ⁽¹⁾		

⁽¹⁾ Only with new Delphi-X Observer microscopes

(resp. DX.xx5x-xxx/RS and DX.xx5x-xxx/LS)