

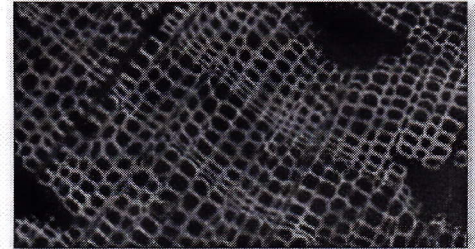
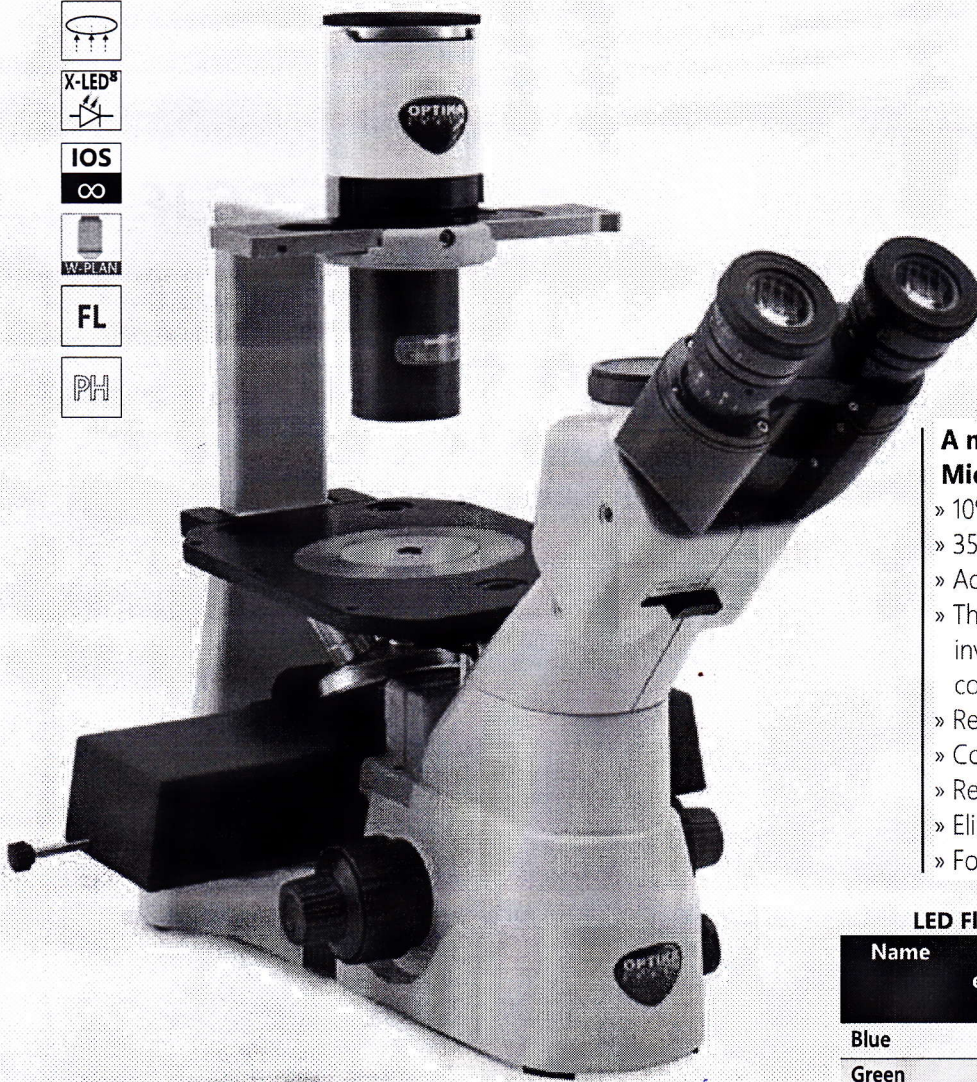
IM-3LD2 - LED Fluorescence Microscope

2

Laboratory

Routine inverted fluorescence microscope for transmitted brightfield, phase contrast and fluorescence observations with IOS LWD W-PLAN PH objectives.

The LED fluorescence illuminators are combined with blue and green excitation filter set for the visualization of the following fluorochromes: Acridine Yellow, Acridine Orange, Auramine, DIO, DTAF, FITC, GFP, YFP, etc. (blue) plus Rhodamine, Texas Red and TRITC (green). LED fluorescence ensures unparalleled convenience eliminating warm-up/cool-down times and all the inconveniences related lamp replacement and adjustment. Transmitted light through the exclusive **X-LED[®]** to ensure great-looking, rich and high-quality specimen view.



A new milestone achieved in Fluorescence Microscopy

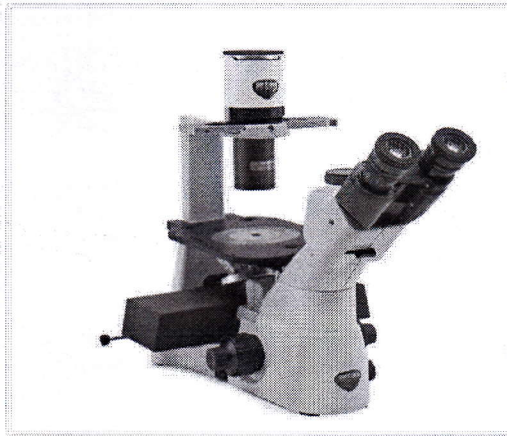
- » 10% higher light intensity than HBO
- » 35% higher light intensity than Metal-Halide
- » Adjustable light intensity
- » The selection of filtersets automatically involves the switching on of the corresponding LEDs
- » Recommended for routine applications
- » Cost-effective, money saving technology
- » Ready for immediate operation
- » Eliminate warm-up/cool-down times
- » Forget lamp replacement & centering

LED Fluorescence Cubes (LED + Filterset) included

Name	LED emission (nm)	Excitation filter (nm)	Dichroic mirror cut-off (nm)	Emission filter (nm)
Blue	460	455 - 495	500	510LP
Green	523	510 - 550	570	575LP

Part	Description
Observation mode:	Brightfield, phase contrast, LED fluorescence.
Epi-illumination and filter:	High-power LED with brightness control. 3-position filter holder; blue and green filtersets included.
Head:	Trinocular (2-position 100/0, 0/100), 45° inclined.
Interpupillary distance:	Adjustable between 50 and 75 mm.
Dioptric adjustment:	On the left eyepiece tube.
Eyepieces:	WF10x/22 mm, high eye-point and with rubber cups.
Nosepiece:	Quintuple revolving nosepiece, rotation on ball bearings.
Objectives:	IOS LWD W-PLAN PH 10x/0.25 IOS LWD W-PLAN PH 20x/0.40 IOS LWD W-PLAN PH 40x/0.65 All with anti-fungus treatment.

Part	Description
Specimen stage:	Fixed stage, 250x160 mm, with glass and metal stage inserts. Mechanical stage as option.
Focusing:	Coaxial coarse (adjustable tension) and fine focusing mechanism with limit stop to prevent the contact between objective and specimen.
Condenser:	LWD pre-centered condenser, N.A. 0.30, W.D. 72 mm. With 4x/10x, 20x/40x phase contrast slider and brightfield. Removable to extend the working distance up to 150 mm.
Transmitted illumination:	X-LED [®] with white 8.W LED (6,300K) with brightness control. With aperture diaphragm. 100-240Vac/12Vdc external power supply.



Inverted trinocular LED fluorescence microscope, B & G LED Fluorescence Cubes, IOS LWD W-PLAN PH objectives

Observation Method - Transmitted Light	Brightfield	Yes
	Phase contrast (Positive type)	Yes
Observation Method - Incident Light	Fluorescence	Yes
Main Body	Type	Inverted
	Construction material	Aluminum die-cast
Head	Type	Trinocular (Siedentopf)
	Split ratio	100/0 - 0/100
	Inclination	45°
	Interpupillary distance (mm)	50-75
	Dioptric adjustment	On left tube
	Tube inner diameter (mm)	30
Eyepieces	Field number (mm)	22
	Magnification	10x
	Planar type	Yes
	Micrometric scale	As optional
	Diameter of micrometer glass (mm)	26
	High eyepoint (for glass wearers)	Yes
	Rubber cup	Yes
	Retractable protections	Yes
Nosepiece	Positions	Quintuple
	Reversed	Yes
	Bi-directional	Yes
	Rotation on ball bearings	Yes
	Objective thread	RMS
Objectives	Optical system	∞
	Anti-fungus treatment	Yes
	Parfocal distance (mm)	45
	Standard magnifications	100x-400x
	Type	IOS LWD W-PLAN PH
		IOS LWD W-PLAN PH 10x/0.25, W.D. 7.3 mm
		IOS LWD W-PLAN PH 20x/0.40, W.D. 6.8 mm
	IOS LWD W-PLAN PH 40x/0.65, W.D. 3.0 mm	
Stage	Type	Fixed
	Dimensions (mm)	250x160
	Material	Anti-scratch painting
	Glass round insert	Yes
	Metal round insert	Yes



Condenser - Single Position	Type	Abbe
	Removable	Yes
	Numerical aperture (N.A.)	0.30
	Diaphragms	Iris
	Slider for phase contrast	BF, 4x/10x, 20x/40x positions
	Long working distance	Yes
	Working distance (for LWD) (mm)	72
	Extendable working distance (for LWD) (mm)	up to 150
Focusing System	Type	Coaxial coarse & fine
	Fine total travel (per single rotation) (mm)	0.2
	Fine graduations	100
	Fine resolution (µm)	2
	Upper stop to prevent contact	Yes
	Adjustable tension	Yes
Transmitted Illumination	Type	X-LED
	X-LED type	X-LED8
	Light source power (W)	8
	Brightness control	Manual
	Lifetime (hours)	> 65,000
	Temperature (K)	6,300
	Max. required power (W)	13
Power Supply for Transmitted Illumination	Type	External
	Microscope connector	Jack, 2.1 mm
	Power plug type	Schuko
	Input voltage	100/240 Vac, 50/60 Hz
	Output voltage	12 Vdc 7 A
	LED indicator	Yes
Accessories Included	Dust cover	Yes
	Allen wrench	Yes
	Centering telescope	Yes
	Green filter	Yes
	User Manual	Digital version (downloadable)
Additional Information		Mechanical stage dimension 250x230 mm, X-Y translation range 120x80 mm (as optional). Metallic interchangeable inserts for slides, Petri dishes, Terasaki, multi-Well plates (as optional).
Product Dimensions	Height (mm)	495
	Width (mm)	230
	Depth (mm)	540
Product Weight	(kg)	10.5
Fluorescence Attachment	Number of positions	3
	Blue LED Cube (included)	LED Emission: 460 nm. Excitation: 455 - 495 nm; Dichroic: 500 nm; Emission: 510LP nm
	Green LED Cube (included)	LED Emission: 523 nm. Excitation: 510 - 550 nm; Dichroic: 570 nm; Emission: 575LP nm
	Filter set selection	Manual
	LED source insertion	Manual
Fluorescence Light Source	Light source	LED Fluorescence Cube
	Light source power (W)	3.5
	LED wavelength	see LED Fluorescence Cube specs
	Lifetime (hours)	> 65,000
	Brightness control	Yes

