

**OPTIKA IM-5** produces brilliant images for the examination of living cells, organisms and several other specimens in large flasks, combining brightfield, darkfield and phase contrast techniques. This inverted research microscope drives to new horizons providing Köhler condenser, ergonomic handy controls and significant unique features, such as the highest F.O.V. available on an inverted microscope.

IM-5

Exclusive, state-of-the-art X-LED<sup>5</sup> illumination system

Plan extra wide field eyepieces PL 10x with F.N. 24 mm

Rotatable Köhler condenser including slider with pre-centered 4x/10x and 20x/40x phase rings

Sturdy, stable and wide-dimensioned body

Choice among 4 series of objectives with anti-fungus treatment

Slider for phase contrast and darkfield

Coaxial coarse and fine focusing mechanism (graduated, 0.002 mm)

X-LED5

Exclusive, state-of-the-art illumination system (transmitted light)

Achieve unmatched colour fidelity and brightness of your specimen with daylight white colour temperature (5,000 K)

Cut electricity bills by 90% saving money and energy with low power consumptions and long lifetime (60,000 hours = > 23 years at 8 hours/day usage)

Fixed stage (215 x 250 mm) with the possibility to install the mechanical stage (290 x 250 mm) and side extensions included. Sample holders as optional accessories.

Right-handed, X/Y controls in ergonomic position

Light intensity control

Panel with LED illumination indicators and ECO function

In Polo Out

Trinocular port for a camera,

with 100/0 and 0/100 light

Rubber cups, retractable protections for a higher comfort

45° inclined Siedentopf tube with interpupillary distance from 50 to 75 mm

+/- 5 dioptric compensation, on both eyepieces

Eyepieces with fixing screw



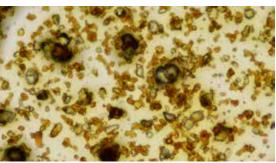
Köhler condenser, N.A. 0.50, W.D. 28 mm

Field and aperture diaphragms, centrable

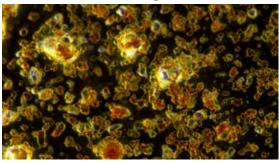
Can be rotated out of the optical path, extending the working distance

Darkfield stop for dry objectives

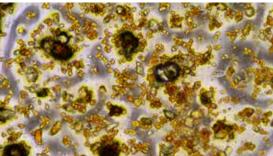
Slider with 4x/10x and 20x/40x precentered phase rings



Vitamin C, Brightfield



Vitamin C, Darkfield



Vitamin C, Phase Contrast





## **IM-5 - Technical Datasheet**

Observation Methods	Brightfield, phase contrast, darkfield
Head	Trinocular, 45° inclined, splitting ratios eyepieces/photo tube: 100% - 0% / 0% - 100%
Eyepieces	Plan Extra Wide Field, PL 10x/24 (Ø 30 mm), high eyepoint, with dioptric adjustment
Nosepiece	Quintuple, reversed
Objectives	Fully modular (see options in the accessories chart)
Stage	Fixed, 215x250 mm can be equipped with mechanical (included), 290x250 mm, 120x80 mm movement range
Focusing	Coaxial coarse & fine (200 µm/turn), upper stop, adjustable tension
Transmitted Illumination	X-LED <sup>5</sup> (5 W), manual brightness control
Transmitted Light Diaphragms	Field and aperture diaphragms
Condenser	N.A. 0.50 Köhler, W.D. 28 mm, rotatable to extend the W.D.
Accessories Included	Centering telescope, phase contrast slider with precentered phase rings, slider with Darkfield stop for dry objectives, LBD daylight filter, IF550 filter

**Accessories** Included ■ Optional □

M-880	Plan Extra Wide Field, PL 10x/24 (Ø 30 mm), high eyepoint, with dioptric adjustment	
M-881	Plan Extra Wide Field, PL 10x/24 (Ø 30 mm), with micrometer (10mm/100um), high eyepoint, with dioptric adjustment	
M-882	Wide Field, WF 15x/16 (Ø 30 mm), with dioptric adjustment	
M-639	Prism upgrade - from 100/0, 0/100 to 100/0, 50/50 (only on newly purchased microscopes)	
M-640	Light source upgrade - from X-LED <sup>s</sup> to X-LED <sup>s</sup> (only on newly purchased microscopes)	
M-641	Adapter for micromanipulator plate	
M-793.4	Holder for 2+2 slides	
M-793.6	Holder for Utermöhl-Chamber	
DC-005	TNT dust cover, extra large - 820(l)x550(h) mm	•
VP-IM5	IQ/OQ/PQ validation protocols	
15104	Cleaning kit	

## IM-5 is freely configurable in terms of objectives, by choosing among:

Included ■ Optional □

Infinity-corrected Plan-Achromatic, Long Working Distance objective flatness up to F.N. 22:		eld
M-782	IOS LWD W-PLAN objective 4x/0.13	
M-773	IOS LWD W-PLAN objective 40x/0.60	
M-786	IOS LWD W-PLAN objective 60x/0.70	

Positive Phase Contrast Infinity-corrected Plan-Achromatic, Long Working Distance objectives, field flatness up to F.N. 22:

M-782.1	IOS LWD W-PLAN PH objective 4x/0.13	
M-783N	IOS LWD W-PLAN PH objective 10x/0.25	
M-784N	IOS LWD W-PLAN PH objective 20x/0.40	
M-785	IOS LWD W-PLAN PH objective 40x/0.60	

flatness up to F.N. 25:	
Infinity-corrected Semi-Apochromatic, Long Working Distance objectives, fi	ield

	M-800	IOS LWD U-PLAN F objective 4x/0.13	
	M-801	IOS LWD U-PLAN F objective 10x/0.30	
	M-802	IOS LWD U-PLAN F objective 20x/0.45	
	M-803	IOS LWD U-PLAN F objective 40x/0.65	
	M-804	IOS LWD U-PLAN F objective 60x/0.75	

Positive Phase Contrast Infinity-corrected Semi-Apochromatic, Long Working Distance objectives, field flatness up to F.N. 25:

M-1177	IOS LWD U-PLAN F PH objective 20x/0.45	
M-1178	IOS LWD U-PLAN F PHobjective 40x/0.65	