OPTIKA®
MICROSCOPES
ITALY

IM-5FLD

OPTIKA IM-5FLD is designed to be the ultimate inverted research fluorescence microscope, combining innovative technology with unparalleled comfort. You can achieve astonishing images thanks to the IM-5FLD superb optics, Köhler condenser and the pioneering motorized selection of the more suitable LED source, automatically chosen in accordance with the selected fluorescence filter set (B, G, UV, plus optional ones). Last but not least, IM-5FLD boasts the highest F.O.V. available on an inverted microscope.

IM-5FLD

X-LED⁵

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

Achieve unmatched colour fidelity and brightness of your specimen with pure 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)

Exclusive, state-of-the-art X-LED⁵ illumination system

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

Rotatable Köhler condenser (N.A. 0.50, W.D. 28 mm) including slider with pre-centered 4x/10x and 20x/40x phase rings

Sturdy, stable and wide-dimensioned body

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

Choice between 4 series of objectives (among standard or fluorite for BF, standard or fluorite for PH) with anti-fungus treatment

Trinocular port for a camera, with 100/0 and 0/100 light distribution

Right-handed, X/Y controls in ergonomic position

4-position fluorescence filter slider

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

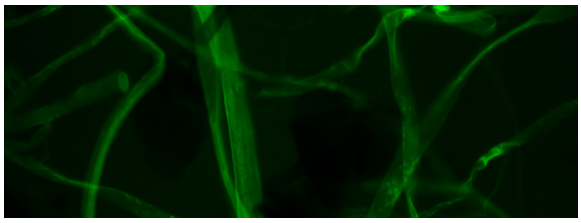
Selector for changing fluorescence filter set with motorized LED source selection

Light intensity control

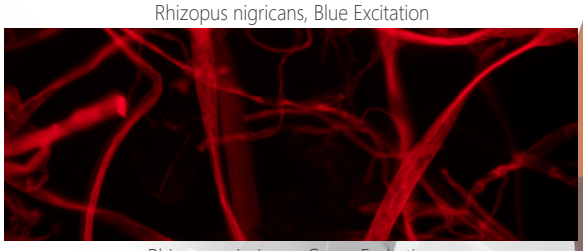
Panel with LED illumination indicators and ECO function

- 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

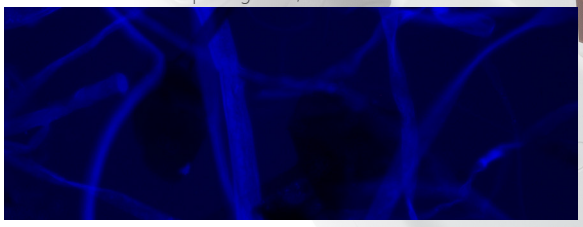
- Köhler condenser, N.A. 0.50, W.D. 28 mm
- Field and aperture diaphragms, centrable
- Can be rotated out of the optical path, extending the working distance
- Darkfield stop for dry objectives
- Slider with 4x/10x and 20x/40x precentered phase rings



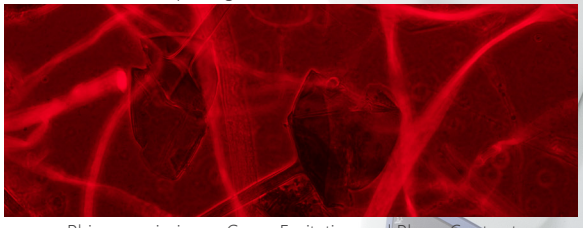
Rhizopus nigricans, Blue Excitation



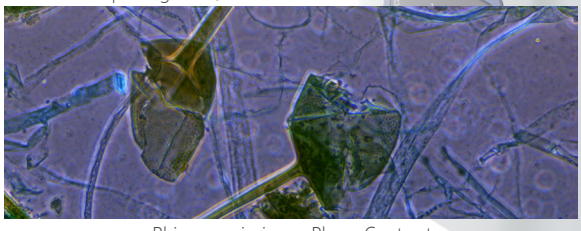
Rhizopus nigricans, Green Excitation



Rhizopus nigricans, Ultraviolet Excitation



Rhizopus nigricans, Green Excitation and Phase Contrast



Rhizopus nigricans, Phase Contrast

IM-5FLD - Technical Datasheet

Observation Methods	Brightfield, phase contrast, darkfield, fluorescence
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[5] (5 W), manual brightness control
Transmitted Light Diaphragms	Field and aperture diaphragms
Incident Illumination	High intensity LEDs (5 W each), motorized LED insertion, manual brightness control
Incident Light Diaphragms	Field diaphragm, centrable
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-793.4	Holder for 2+2 slides	□
M-793.6	Holder for Utermöhl-Chamber	□
M-640	Light source upgrade - from X-LED[5] to X-LED[8] (only on newly purchased microscopes)	□
DC-005	TNT dust cover, extra large - 820(l)x550(h) mm	■
VP-IM5	IQ/OQ/PQ validation protocols	□
15104	Cleaning kit	□

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

Included ■ Optional □

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

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

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