

OPTIKA B-510MET and **B-510METR** deliver impressive performance for high sample throughput with no cover glass IOS W-PLAN MET objectives, Köhler diaphragm to produce high sample contrast and homogeneous bright light, state-of-the-art, exclusive X-LED and an efficient attachment for brightfield, simple polarization and oblique illumination. Available with reflected light only or reflected and transmitted.

B-510MET

Rubber cups, retractable protections for a higher comfort

Exclusive, state-of-the-art illumination system

X-LED⁸

X-LED8 (8 W) as reflected light

Achieve unmatched colour fidelity and brightness of your specimen with daylight white colour temperature (6,300 K).

Brightfield, simple polarization and oblique illumination system for relief contrast

Plan wide field eyepieces PL 10x with F.N. of 22 mm, high eyepoint

Trinocular port for a camera, with 50/50 light distribution

30° inclined Siedentopf tube, +/- 5 dioptric compensation, on left eyepiece

> High-efficiency X-LED8 as reflected light only

> > Carrying handle

High contrast and resolution IOS W-PLAN MET (4x, 10x, 20x, 50x), for metallurgical and epi-illumination applications

> Rackless mechanical stage (233 x 147 mm) with double Vernier scale, anti-scratch surface

Right-handed, X/Y controls in ergonomic position

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



X-LED³

X-LED⁸ (8 W) & X-LED³ (3.6 W) as reflected & transmitted light

Cut electricity bills by 90% saving money and energy with low power consumptions and long lifetime.

Rubber cups, retractable protections for a higher comfort

> Plan wide field eyepieces PL 10x with F.N. of 22 mm, high eyepoint

B-510METR

Trinocular port for a camera, with 50/50 light distribution

30° inclined Siedentopf tube, +/- 5 dioptric compensation, on left eyepiece

Brightfield, simple polarization and oblique illumination system for relief contrast

Beamsplitter for refected and transmitted illumination

High-efficiency X-LED8 as reflected light only

Carrying handle

Sturdy, stable and wide-dimensioned body

High contrast and resolution IOS W-PLAN MET (4x, 10x, 20x, 50x), for metallurgical and epi-illumination applications

> Rackless mechanical stage (233 x 147 mm) with double Vernier scale, anti-scratch glass surface

Swing-out condenser, sliding-in, with 0.2/0.9 N.A. and centering system

Coaxial coarse and fine focusing mechanism (graduated, 0.002 mm) Right-handed, X/Y controls in ergonomic position

Full Köhler illumination system

High-efficiency **X-LED**³ as transmitted light

B-510MET - Technical Datasheet

B-510METR - Technical Datasheet

Observation Methods	Incident light only - brightfield, simple polarized light, oblique illumination	Brightfield, simple polarized light, oblique illumination (incident light)
Head	Trinocular, 30° inclined, splitting ratio eyepieces/photo tube: 50% - 50%	
Eyepieces	Plan wide field, PL 10x/22, high eyepoint, with dioptric adjustment on left eyepiece	
Nosepiece	Quintuple, reversed	
Objectives	IOS W-PLAN MET 4x, 10x, 20x, 50x	
Stage	Rackless, mechanical, 233x147 mm, 78x54 mm movement range	
Focusing	Coaxial coarse & fine (200µm/turn), upper stop, adjustable tension	
Incident Illumination & Diaphragms	High-efficiency X-LED ⁸ (8 W, comparable to a 100 W halogen bulb), manual brightness control. Köhler illumination system with field and aperture diaphragms, both centrable. Oblique illumination system for relief contrast.	
Transmitted Illumination & Diaphragms		High-efficiency X-LED ³ (3.6 W), manual brightness control. Köhler illumination system with field diaphragm
Condenser		N.A. 0.2/0.9, swing-out, sliding-in and with centering system
Accessories Included	Polarizer and rotating analyzer filters	

Accessories Included ■ Optional □

M-1001	PL10x/22mm eyepieces (pair), high eyepoint, with rubber cup (retractable protections)	
M-1003	PL15x/16mm eyepieces (pair), high eyepoint	
M-781	PL10x/22mm eyepiece, high eyepoint, with micrometric scale (10mm/100um) and rubber cup (retractable protections)	
M-336	IOS W-PLAN MET objective 5x/0.12	•
M-338	IOS W-PLAN MET objective 10x/0.25	•
M-339	IOS W-PLAN MET objective 20x/0.40	•
M-335	IOS W-PLAN MET objective 50x/0.75	
M-1104	IOS LWD U-PLAN MET objective 100x/0.80	
M-1136	IOS LWD W-PLAN POL objective 5x/0.12	
M-1137	IOS LWD W-PLAN POL objective 10x/0.25	
M-1138	IOS LWD W-PLAN POL objective 20x/0.40	
M-1139	IOS LWD W-PLAN POL objective 50x/0.75	
M-620	0.35x focusable C-Mount adapter	
M-620.1	0.5x focusable C-Mount adapter	
M-620.2	0.65x focusable C-Mount adapter	
M-620.3	1x focusable C-Mount adapter	
M-173	Photo adapter for APS-C and Full Frame Reflex cameras	
M-699	Universal adapter for M-173 and eyepiece cameras	
M-1004.N	Centering telescope, 30 mm diameter	
M-005	Micrometric slide, 26x76 mm, range 1 mm, div. 0.01 mm	
M-636	Polarising set (filters only) for B-510 series	
M-977	Green filter, 45 mm diameter	
M-979	Yellow filter, 45 mm diameter	
M-989	Frosted filter, 45 mm diameter	
M-690	Eyecups (pair)	
15104	Cleaning kit	
VP-510	IQ/OQ/PQ Validation Protocols	
DC-003	TNT dust cover, medium – 600(l)x550(h) mm	•