

# B-290 Series



**Entry-Level Lab Upright Microscopes** 

# Best Value-for-Money Solutions & Versatile Use

#### SUITABLE FOR UNIVERSITIES, EXPERTS & ROUTINE LABS

- » The ideal choice for common lab requirements
- » Simply engineered for life-science
- » Ready for phase contrast and darkfield

#### **EXCELLENT PRICE/PERFORMANCE RATIO**

- » N-PLAN objectives (160 mm or IOS) for flat images on 20 mm FN
- » Fixed Koehler illumination for crisp and contrasted images
- » Rounded edge, rackless stage to prevent scratches

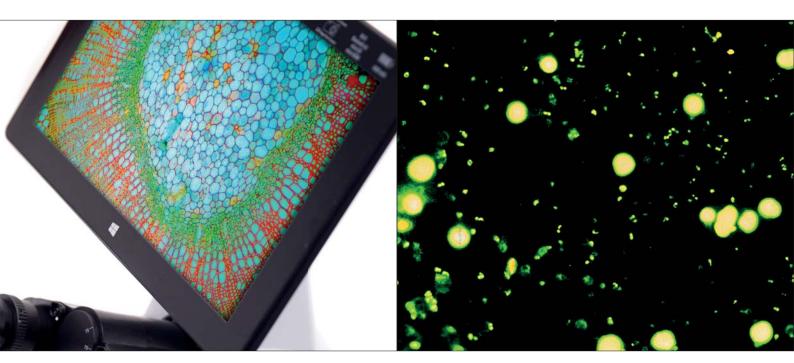


#### **B-290TB - BREAK NEW GROUND WITH WINDOWS TABLET**

- » Large touch-screen of 10.1" with fast, responsive and smooth control
- » 360° rotatable, tiltable and easily detachable
- » Simultaneous camera & power connection for long-term operation

#### **B-290LD SERIES - ON-FIELD TBC & MALARIA DIAGNOSIS**

- » Ultra-convenient LED fluorescence, blue filter
- » No waiting time, immediate operation
- » Cost-effective, money-saving technology



# 100x Oil/Water Objective – Only at OPTIKA

#### SAME OBJECTIVE FOR OIL AND WATER USE

- » Oil represents the best media for high numerical aperture
- » Water combines results with convenience
- » Water is recommended especially for educational purposes

#### **UNPARALLELED TIME & MONEY SAVING**

- » Save time by forgetting about tedious cleaning
- » No time-wasting procedures for maintainance
- » No additional expenses due to inappropriate cleaning



# X-LED<sup>3</sup> – Only Available at OPTIKA

#### STATE-OF-THE-ART ILLUMINATION SYSTEM

- » Uncomparable light intensity, exclusive lens & collector design
- » Constant pure-white colour temperature at all intensity levels
- » Unmatched color fidelity, uniformity and brightness

#### **CUT ELECTRICITY BILLS BY 90%**

- $\scriptstyle *$  Money & energy saving, only 3.6 W
- » More efficient brightness than a 50 W halogen lamp
- » LED long lifetime (65,000 hours = 22 years at 8 hours/day usage)



-aboratory

# **IOS** & Professional Features

#### LABORATORY GRADE OPTICS FOR OUTSTANDING IMAGES

- » Planachromatic optics
- » Designed to ensure field flatness on 20 mm (N-PLAN)
- » IOS Infinity corrected optical system

#### FULL CONTROL OF YOUR IMAGES

- » Fully settable condenser for perfect imaging
- » Easy to set objective-coded iris diaphragm, focusable & centrable
- » Phase contrast and darkfield slider available



# B-290 Series

This series incorporates all the experience gathered by OPTIKA Microscopes in the field of light microscopy, adapted specifically for common laboratory applications. Suitable for routine microscopy with brightfield, darkfield, phase contrast and LED fluorescence, designed to last.

#### X-LED<sup>3</sup> Exclusive Lighting Source

Special technology able to double the light intensity for incomparable performance, ensuring constant pure-white colour temperature (6,300K colour temperature).

Relevant money and energy saving thanks to the incredibly low energy consumptions which allows you to cut the electricity bills by 90%!

The electric consumption (3.6 W only) proves the high efficiency of this system: incredibly high light intensity combined with low consumption.

#### Safe And Convenient Operations

Rounded edge rackless stage has been designed with a belt-driven mechanism that allows a smooth movement without any protruding part.

This design gives you a more compact solution and lowers any risk of injury after accidentally hitting the rack with your hands.

#### Clear Observation With 100x Objective

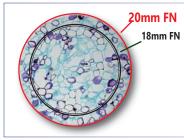
Students and basic users will enjoy B-290 Series for the clear and sharp images they can get using 100x objective with water, thanks to the extremely bright X-LED<sup>3</sup> light source and the fully centerable Abbe condenser. Forget about the tedious lens cleaning you are used to when using 100x objective: dirt and dust will not affect your objective.



### Entry-Level Lab Upright Microscopes

#### Laboratory Grade Optics, N-PLAN & IOS N-PLAN System

OPTIKA N-PLAN objectives ensure bright, clear images with excellent flatness and compensation for chromatic aberration. IOS Infinity-corrected optical system prevents image deterioration even if other optical components are added, such as polarizers, beamsplitters and so on.



#### Large Specimen View (20 mm Field Number)

The **F.O.V.** (field of view) is based on a comfortable diameter of 20 mm. This means that a wide area of the sample can be inspected and allows a natural and easy view, particularly needed in a laboratory environment.

#### **Easy Transportation**

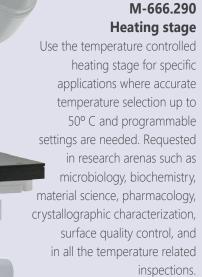
B-290 has a carefully shaped design that gives stability and ease in the transportation. Thanks to the handle on the back, it can be safely moved around the classroom or the laboratory.



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### Get the most out of our accessories



#### 290 M-184 age Darkfield olled condenser

With optional diaphragm M-184 you can easily obtain a darkfield view for dry objectives. M-184 can be placed directly under the condenser without the need of additional operations.

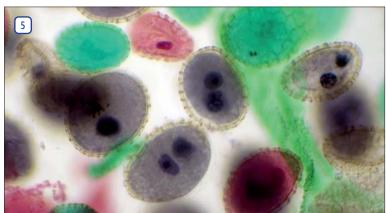
### B-290 Series

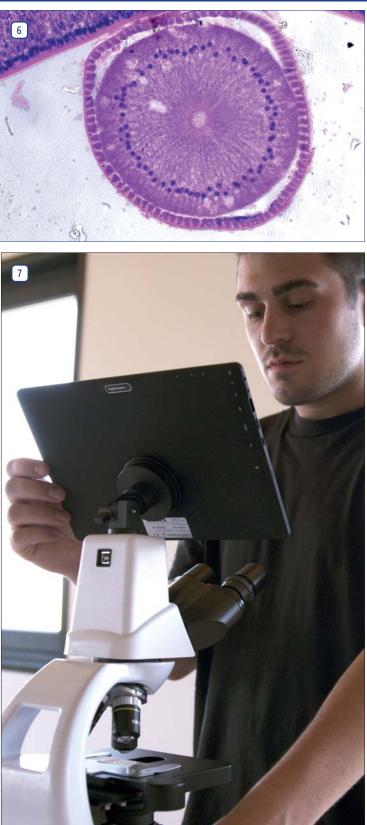
#### Legend

- 1. B-290TB with 360° rotating tablet PC for discussion.
- 2. Pine, one year stem, with B-292 and 10x objective.
- 3. B-290 Series exclusive X-LED<sup>3</sup> illumination system.
- 4. B-293 used by a teacher.
- 5. Lilly pollen, with B-292PLi and 20x objective.
- 6. Ascaris female, with B-293 and 40x objective.
- 7. Student setting the right focusing on a B-290TB.









# Laboratory

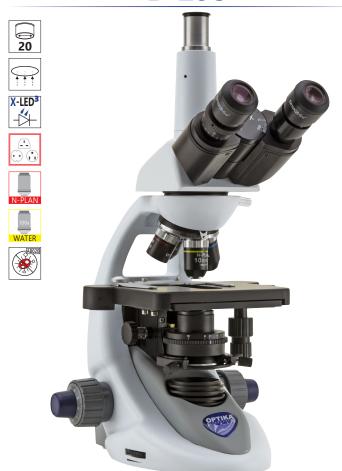
### **B-290** Series - Brightfield Models



### **B-292**



**B-293** 



Binocular head with N-PLAN objectives, rackless stage and exclusive **X-LED<sup>3</sup>** for unmatchable performance, powerful and uniform illumination.

Observation mode: Brightfield.

**Head:** Binocular, 30° inclined and 360° rotating. Interpupillary distance 48-75 mm.

Dioptric adjustement: On both eyepieces.

**Eyepieces:** WF10x/20 mm, high eye-point and secured by screw.

Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings.

#### **Objectives:**

N-PLAN 4x/0.10 N-PLAN 10x/0.25 N-PLAN 40x/0.65 N-PLAN 100x/1.25 (Oil/Water) All with anti-fungus treatment.

**Specimen stage:** Double layer rackless mechanical sliding stage, 150x139 mm, 75x33 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

**Condenser:** Abbe N.A. 1.25, with objective-coded iris diaphragm, focusable and centerable.

**Illumination (Fixed Koehler type):** X-LED<sup>3</sup> with white 3.6 W LED (6,300 K) and light intensity control. Multi-plug 100-240Vac/6Vdc external power supply.

Trinocular head with N-PLAN objectives, rackless stage and exclusive **X-LED<sup>3</sup>** for unmatchable performance, powerful and uniform illumination.

#### Observation mode: Brightfield.

**Head:** Trinocular (fixed, 50/50), 360° rotating and 30° inclined. Interpupillary distance 55-75 mm.

Dioptric adjustement: On both eyepieces.

**Eyepieces:** WF10x/20 mm, high eye-point and secured by screw.

Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings.

#### **Objectives:**

N-PLAN 4x/0.10 N-PLAN 10x/0.25 N-PLAN 40x/0.65 N-PLAN 100x/1.25 (Oil/Water) All with anti-fungus treatment.

**Specimen stage:** Double layer rackless mechanical sliding stage, 150x139 mm, 75x33 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

**Condenser:** Abbe N.A. 1.25, with objective-coded iris diaphragm, focusable and centerable.

**Illumination (Fixed Koehler type):** X-LED<sup>3</sup> type with white 3.6 W LED (6,300 K) and light intensity control. Multi-plug 100-240Vac/6Vdc external power supply.

### **B-290** Series - Brightfield Models

### **B-292PLi**



**B-293PLi** 



Binocular head with IOS N-PLAN (infinity corrected) objectives, rackless stage and exclusive **X-LED<sup>3</sup>** for incredibly bright illumination.

#### Observation mode: Brightfield.

Head: Binocular, 360° rotating and 30° inclined. Interpupillary distance 48-75 mm.

Dioptric adjustement: On both eyepieces.

Eyepieces: WF10x/20 mm, high eye-point and secured by screw.

Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings.

#### **Objectives:**

IOS N-PLAN 4x/0.10 IOS N-PLAN 40x/0.65 All with anti-fungus treatment.

IOS N-PLAN 10x/0.25 IOS N-PLAN 100x/1.25 (Oil/Water)

Specimen stage: Double layer rackless mechanical sliding stage, 150x139 mm, 75x33 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

Focusing: Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

Condenser: Abbe N.A. 1.25, with objective-coded iris diaphragm, focusable and centerable.

Illumination (Fixed Koehler type): X-LED<sup>3</sup> type with white 3.6 W LED (6,300 K) and light intensity control. Multi-plug 100-240Vac/6Vdc external power supply.

Trinocular head with IOS N-PLAN (infinity corrected) objectives, rackless stage and exclusive X-LED<sup>3</sup> for incredibly bright illumination.

#### Observation mode: Brightfield.

Head: Trinocular (fixed, 50/50), 360° rotating and 30° inclined. Interpupillary distance 55-75 mm.

Dioptric adjustement: On both eyepieces.

Eyepieces: WF10x/20 mm, high eye-point and secured by screw.

Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings.

#### **Objectives:**

IOS N-PLAN 4x/0.10 IOS N-PLAN 10x/0.25 IOS N-PLAN 40x/0.65 IOS N-PLAN 100x/1.25 (Oil/Water) All with anti-fungus treatment.

Specimen stage: Double layer rackless mechanical sliding stage, 150x139 mm, 75x33 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

Focusing: Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

Condenser: Abbe N.A. 1.25, with objective-coded iris diaphragm, focusable and centerable.

Illumination (Fixed Koehler type): X-LED<sup>3</sup> type with white 3.6 W LED (6,300 K) and light intensity control.

Multi-plug 100-240Vac/6Vdc external power supply.

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#### 2 **B-290TB** - Digital Microscope with Camera & Tablet

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### **B-290TB**

3.1 MP Built-in camera and 10.8" Windows tablet PC with N-PLAN objectives, rackless stage and exclusive **X-LED<sup>3</sup>** for unmatchable performance in illumination. Ideal for discussion group with 360° rotating tablet.

Observation mode: Brightfield.

Head: Binocular, 360° rotating and 30° inclined. Interpupillary distance from 48 to 75 mm; dioptric adjuctment on left eyepiece. Built-in 3.1 MP camera.

Dioptric adjustement: On both eyepieces.

Eyepieces: WF10x/20 mm, high eye-point and secured by screw. Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings.

#### **Objectives:**

N-PLAN 4x/0.10 N-PLAN 40x/0.65 All with anti-fungus treatment.

N-PLAN 100x/1.25 (Oil/Water) Specimen stage: Double layer rackless mechanical sliding stage, 150x139

N-PLAN 10x/0.25

mm, 75x33 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

Condenser: Abbe N.A. 1.25, with objective-coded iris diaphragm, focusable and centerable.

Illumination (Fixed Koehler type): X-LED<sup>3</sup> type with white 3.6 W LED (6,300 K) and light intensity control. Multi-plug 100-240Vac/6Vdc external power supply.

» Easily detachable, can be used as a laptop (keyboard sold separately)

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# **B-290TB** - Digital Microscope with Camera & Tablet

The latest OPTIKA digital microscopes with Windows tablet PC open new microscopy horizons, combining high-end optics with innovative digital technology for microscopic imaging. B-290TB includes a 3MP camera with a 10.1" Windows tablet. View, capture, analyze and share your images with simplicity and reliability.

#### TABLET TECHNICAL SPECIFICATIONS

Operating system	Windows 10 (64Bit)				
CPU	Gemini-Lake, N4100				
CPU speed	1.10 GHz				
Graphic card	Intel <sup>®</sup> HD Graphics 600				
RAM	Ram 6 GB LPDDR3				
Display size	LED 10.1" IPS Multi Touch Screen				
Display resolution	1920x1200				
Storage	Hdd 128 GB				
Network	WiFi (2.4G / 5G) - Bluetooth 5.0				
Input ports	USB-C (1 USB2.0 for battery charge, 1 USB3.0) - Micro SD card reader				
Output ports	Microphone - Headphone - Micro HDMI				
Battery Type	Lithium-ion				
Battery capacity	6500 mAh				
Power consumption	24.05W				
Power supply	12V 2A EU				
Dimensions (mm)	261 x 167 X 9				
Weight (Kg)	0.53				
Language	Multilanguage				
Weight	530 g				
Tablet accessories included	USB cable USB-B to USB-A (0.5m)				

#### CAMERA TECHNICAL SPECIFICATIONS

CAMERA TECHNICAL SPECIFICATIONS	
Digital camera resolution	3MP
Signal output	USB 2.0
Sensor Size	1/2.5″
Sensor technology	CMOS
Image format	4\3
Full Image size	2048 x 1536
Pixel size	2.2 x 2.2 micron
Frame rate full resolution	5 frames\sec
Frame rate other resolutions	8 fps (1280x1024) - 30 fps (640x480)
Automatic White Balance	Auto - Man
Automatic Gain Control	Auto - Man
Automatic Back light control	Auto - Man
Exposure control	Auto - Man



Simple and user-friendly, ideal for students and experienced users.



### 330° Rotating & Tilting



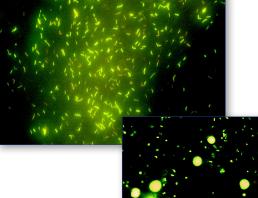
### Detachable



TB-KBD1 - Accessory keyboard for tablet

### B-290LD - LED Fluorescence Microscopes





Fluorescence binocular and trinocular microscopes especially designed for tubercolosis and malaria analysis.

#### Observation mode: Brightfield.

**Head:** Binocular or trinocular, 360° rotating and 30° inclined. Interpupillary distance 55-75mm.

Dioptric adjustement: On both eyepieces.

Eyepieces: WF10x/20 mm, high eye-point and secured by a screw.

**Nosepiece:** Quadruple revolving nosepiece, rotation on ball bearings. **Specimen stage:** Double layer rackless mechanical sliding stage, 150x139 mm, 75x33 mm X-Y movement range. Vernier scale on the two axes, accuracy: 0.1 mm.

**Focusing:** Coaxial coarse and fine focusing mechanism with limit stop to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.

**Condenser:** Abbe N.A. 1.25, with objective-coded iris diaphragm, focusable and centerable.

**Brightfield Illumination (Fixed Koehler type):** X-LED<sup>3</sup> with white 3.6 W LED (6,300 K) and light intensity control. Multi-plug 100-240Vac/6Vdc external power supply.

Fluorescence Illumination: Extra efficiency LED, with light intensity control. Peak wavelength: 465 nm, Power: 3.6W.

**Epi Fluorescence Attachment:** Slider with 3 positions (2 fluorescence, 1 brightfield), with 1 included filterset: Fluorescence B: EX 460-490, DM 505, EM 515LP: Acridine Yellow, Acridine Orange, Auramine, DiO, DTAF, FITC, GFP, YFP, etc.

#### Part number: B-292LD1.50

Equipped with binocular head and following objectives: IOS N-PLAN 10x/0.25 (Cover/No Cover), with anti-fungus treatment IOS N-PLAN 20x/0.40 (Cover/No Cover), with anti-fungus treatment IOS N-PLAN 40x/0.65 (Cover/No Cover), with anti-fungus treatment IOS W-PLAN MET 50x/0.75 (No Cover), with anti-fungus treatment.

#### Part number: B-293LD1.50

Trinocular version of B-292LD1.50.

#### Part number: B-292LD1

Equipped with binocular head and following objectives: IOS N-PLAN 10x/0.25 (Cover/No Cover), with anti-fungus treatment IOS N-PLAN 20x/0.40 (Cover/No Cover), with anti-fungus treatment IOS N-PLAN 40x/0.65 (Cover/No Cover), with anti-fungus treatment IOS W-PLAN 100x/0.80 (No Cover, Dry), with anti-fungus treatment.

#### Part number: B-293LD1

Trinocular version of B-292LD1.

Stand Nan
B (Bl

Standard filterset						
Name	Excitation filter (nm)	Dichroic mirror cut-off (nm)	Emission filter (nm)			
B (Blue)	460 - 490	505	515LP			

## **B-290** Series - Comparison Chart

Model	Head	Eyepieces	Nosepiece	Objectives	Stage	Focusing	Condenser	Illumination
	Binocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 100x (oil/water)	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	39 mm, moving range and fine, iris diaphra		3.6 W X-LED <sup>3</sup> , brightness control. Fixed Koehler
	Binocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	IOS N-PLAN 4x, 10x, 40x, 100x (oil/water)	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	0x139 mm, moving range and fine, iris diaph		3.6 W X-LED <sup>3</sup> , brightness control. Fixed Koehler
	Trinocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	N-PLAN 4x, 10x, 40x, 100x (oil/water)	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	0x139 mm, moving range and fine, iris diaphragm,		3.6 W X-LED <sup>3</sup> , brightness control. Fixed Koehler
	Trinocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	IOS N-PLAN 4x, 10x, 40x, 100x (oil/water)	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless			3.6 W X-LED <sup>3</sup> , brightness control. Fixed Koehler
	Binocular, 30° inclined, 360° rotating, with tablet			N-PLAN 4x, 10x, 40x, 100x (oil/water)	4x, 10x, 40x, 150x139 mm, moving range		Abbe N.A. 1.25, iris diaphragm, focusable and centrable	3.6 W X-LED <sup>3</sup> , brightness control. Fixed Koehler
Model	Head	Eyepieces	Nosepiece	Objectives	Stage	Condenser	Fluorescence	Illumination
B-292LD1.50	Binocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	IOS N-PLAN 10x, 20x, 40x. W-PLAN MET 50x	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	Abbe N.A. 1.25,3.6 W Fluoiris diaphragm,LED; Bluefocusable and centrableFilterset		3.6 W X-LED <sup>3</sup> , brightness control
B-292LD1	Binocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	IOS N-PLAN 10x, 20x, 40x. W-PLAN 100x (dry)	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	Abbe N.A. 1.25, iris diaphragm, focusable and cent	3.6 W Fluo LED; Blue trable Filterset	3.6 W X-LED <sup>3</sup> , brightness control
B-293LD1.50	<ul> <li>Trinocular,</li> <li>30° inclined,</li> <li>360° rotating</li> </ul>	WF 10x/20	Quadruple, reversed	IOS N-PLAN 10x, 20x, 40x. W-PLAN MET 50x	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	Abbe N.A. 1.25, iris diaphragm, focusable and cent	3.6 W Fluo LED; Blue trable Filterset	3.6 W X-LED <sup>3</sup> , brightness control
B-293LD1	Trinocular, 30° inclined, 360° rotating	WF 10x/20	Quadruple, reversed	IOS N-PLAN 10x, 20x, 40x. W-PLAN 100x (dry)	Double layer, 150x139 mm, moving range 75x33 mm, X-axis rackless	Abbe N.A. 1.25, iris diaphragm, focusable and cent	3.6 W Fluo LED; Blue trable Filterset	3.6 W X-LED <sup>3</sup> , brightness control

#### Optical performance B-292, B-293 and B-290TB

Eyepiece			10x (M-160)		15x (M	-161)	20x (M-162)		
Field number (mm)			20	20		16		10	
Objective	N.A.	W.D (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	
4x (N-PLAN 160 mm)	0.10	15.20	40x	5	60x	4	80x	2.5	
10x (N-PLAN 160 mm)	0.25	5.50	100x	2	150x	1.6	200x	1	
20x (N-PLAN 160 mm)	0.40	5.00	200x	1	300x	0.8	400x	0.5	
40x (N-PLAN 160 mm)	0.65	0.45	400x	0.5	300x	0.4	800x	0.25	
60x (N-PLAN 160 mm)	0.80	0.13	600x	0.33	900x	0.26	1200x	0.16	
100x (N-PLAN 160 mm)	1.25 (oil/water)	0.13	1000x	0.2	1500x	0.16	2000x	0.1	

#### Optical performance B-292PLi, B-293PLi and LD models

Eyepiece			10x (M-160)		15x (M-161)		20x (M-162)	
Field number (mm)			20	20		16		
Objective	N.A.	W.D (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
4x (IOS N-PLAN)	0.10	16.80	40x	5	60x	4	80x	2.5
10x (IOS N-PLAN)	0.25	5.80	100x	2	150x	1.6	200x	1
20x (IOS N-PLAN)	0.40	5.10	200x	1	300x	0.8	400x	0.5
40x (IOS N-PLAN)	0.65	0.43	400x	0.5	300x	0.4	800x	0.25
50x (IOS W-PLAN MET, no cover)	0.75	0.32	500x	0.4	750x	0.32	1000x	0.2
60x (IOS N-PLAN)	0.80	0.14	600x	0.33	900x	0.26	1200x	0.16
100x (IOS N-PLAN)	1.25 (oil/water)	0.13	1000x	0.2	1500x	0.16	2000x	0.1
100x (IOS W-PLAN, no cover)	0.80 (dry)	3.20	1000x	0.2	1500x	0.16	2000x	0.1

### <sup>2</sup> **B-290** Series - Accessories

	Eyecups & Eyepieces	Camera A	
	M-001 Huygens 5x eyepiece	<u>M-114</u>	0.5x C-Mount projection lens
	M-008.1 WF10x/20 eyepiece, high eyepoint, with pointer, rubber cup	<u>M-115</u>	0.35x C-Mount projection lens
	M-160 EW10x/20 eyepiece, high eyepoint, with rubber cup	<u>M-118</u>	0.75x C-Mount projection lens
$\geq$	M-161 EW15x/16 eyepiece, with rubber cup	<u>M-173</u>	Photo adapter for APS-C and full frame reflex cameras (trino head)
Laboratory	M-162 WF20x/10 eyepiece	Miscellan	
rat	M-163 EW10x/20 micrometric eyepiece, high eyepoint, with rubber cup	<u>15104</u>	<u>Cleaning kit</u>
8	Objectives	<u>15008</u>	Immersion oil, 10ml
Га	N-PLAN	<u>15009</u>	Immersion oil, 100ml
	M-164 N-PLAN objective 4x/0.10	DC-002 DC-003	Plastic dust cover, medium, 490(l)x490(h) mm (except for B-290TB)
	M-165 N-PLAN objective 10x/0.25		TNT dust cover, medium, 600(l)x550(h) mm (only for B-290TB)
	M-166 N-PLAN objective 20x/0.40	TB-KBD1	Keyboard for tablet (only for B-290TB)
	M-167 N-PLAN objective 40x/0.65	<u>M-005</u>	Micrometric slide, 26x76mm, with 2 scales (1mm/100 & 10mm/100)
	M-168 N-PLAN objective 60x/0.85	<u>M-069</u>	Solar charger
	M-169 N-PLAN objective 100x/1.25 (oil)	<u>M-1380</u>	Centering telescope, 23mm diameter (except for B-292, B-293 and B-290TB)
		<u>VP-290</u>	IQ/OQ/PQ manual for B-290 series
	M-144 IOS N-PLAN objective 4x/0.10	VP-TB	IQ/OQ/PQ manual for TB series
	M-145 IOS N-PLAN objective 10x/0.25	<u>AB-020</u>	Antibacterial surface treatment, only for newly purchased microscope
	M-146 IOS N-PLAN objective 20x/0.40		
	M-147 IOS N-PLAN objective 40x/0.65 M-149 IOS N-PLAN objective 60x/0.80		
			M-069 - Solar charger
	M-148 IOS N-PLAN objective 100x/1.25 (oil) IOS W-PLAN		Included battery: rechargeable – Lithium-Poly.
	M-634.1 IOS W-PLAN objective 50x/0.95 (oil)		Capacity: 2500 mAh Output voltage: 5 Vdc.
	M-1120.N IOS W-PLAN Objective 50x/0.95 (01) M-1120.N IOS W-PLAN PH objective 10x/0.25		Autonomy: over 6 hours at medium intensity (X-LED <sup>3</sup> ).
	M-1120.N IOS W-PLAN PH objective 10x/0.25 M-1121.N IOS W-PLAN PH objective 20x/0.40		Charging models: with solar panel (12h),
	M-1121.N IOS W-PLAN PH objective 20x/0.40 M-1122.N IOS W-PLAN PH objective 40x/0.65		with external USB power supply (2.5h)
	M-335 IOS W-PLAN MET objective 50x/0.75		with external OSB power supply (2.51)
	M-698.2 IOS W-PLAN MET objective 300x/0.75 M-698.2 IOS W-PLAN MET objective 100x/0.80 (dry)		
	Stages           M-175         Rotating stage for polarising set (for 150x139mm rackless st		
	M-666.290 Heating stage (on newly purchased microscopes, for 150x13		) multiplug
	Condensers & Filters	omm stage	<u>", multiplug</u>
	M-174 Polarising set (filters only)		
	M-184 Darkfield stop for condenser		
	M-971 Plane-concave mirror, with base		
	M-975 Blue filter, 45mm diameter		
	M-977 Green filter, 45mm diameter		
	M-979 Yellow filter, 45mm diameter		
	M-989 Frosted glass filter, 45mm diameter		
	M-1124.1 Brightfield condenser (with phase slider slot)		
	(except for B-292, B-293 and B-290TB)		
	M-1124.NO Phase contrast condenser with insert slide 10x/20x-40x		15104 - Cleaning kit
	(except for B-292, B-293 and B-290TB)		It cleans glass guickly and effectively, without leaving
	1 <u>72.026.00 </u>		residue or odor. Ideal for precision lens or prism



How to connect the cameras to our microscopes. Please refer to the Adapter reference list on Digital section.

v 6.6.0 - OPTIKA reserves the right to make corrections, modifications, enhancements, improvements and other changes to its products at any time without notice.

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