

OLYMPUS®

RESEARCH MICROSCOPE

BX52/BX62

BX2 SERIES

Designed and built for leading research applications

Rock-solid stability and rigidity for advanced microscope applications



New design and materials maximize rigidity a

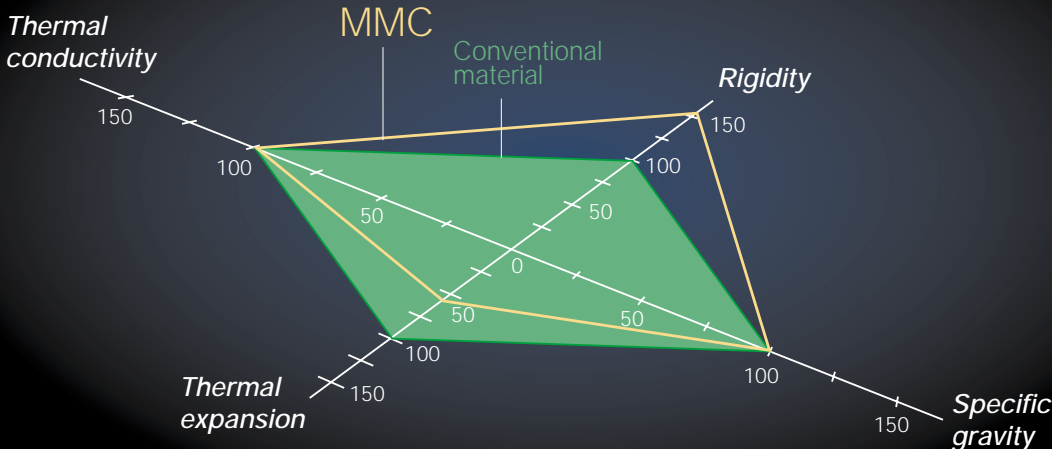
Based on the latest results in compound material research, the new microscopes are manufactured from a Metal Matrix Composite (MMC). MMC is a composite material of ceramic and aluminium introduced for the first time for microscopy. Due to strong efforts in the development of a unique production process, Olympus enables the microscope user to benefit from the advantages of the new material.

MMC radically improves the static rigidity and the thermal rigidity of the microscope frame. Both are very important factors required to achieve perfect results in different advanced microscopy applications.

The functionality of the new microscopes can be extended by the use of modular motorized components. The top of the range model BX62 is already equipped with a built-in motorized high-precision focus drive. The combination of both the MMC frame and the motorized components provides the perfect platform for your leading research applications.

BX52/62 — The optimum solution for:

- 3D-Microscopy
- Time Lapse Observations
- Confocal Microscopy
- High-speed Dynamic Imaging
- Advanced Fluorescence Microscopy
- In-vitro Imaging
- High-end Digital Imaging
- Object Tracking



New steps forward in fluorescence performance

Already renowned in the field, Olympus has now taken fluorescence performance even further ahead, using a newly-developed aspheric lens in the lamp housing to improve light collection and achromatic performance right up near to infrared conditions. The lens covers a wide wavelength range and provides fluorescence images almost twice as bright as conventional ones even under very low magnifications.

Optimal prism combinations for all specifications and magnifications

Individual specimen characteristics, such as refractive index, thickness and surrounding medium, greatly influence the formation of images in Differential Interference Contrast. Achieving the best visibility - an optimal balance between high contrast and high resolution - calls for specification- and magnification-dependent DIC prism shearing distances and prism selection.

The Olympus No... combinations to o... purpose prism se... sets which allow... highest contrast... specimen conditi...

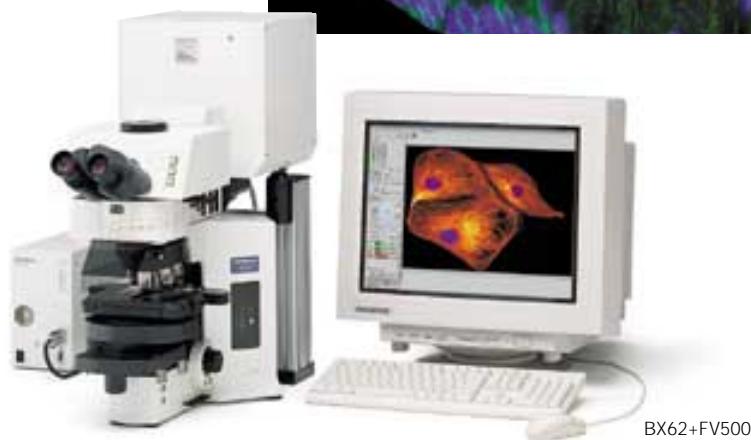
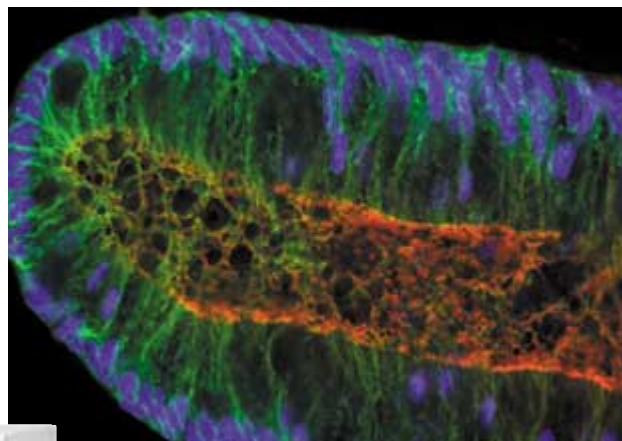
In addition the BX52 has all advantages of the BX51 and BX62 has all advantages of the BX61. Please see the BX51/61 brochure.

nd stability

LSM

Laser Scanning Microscope System

Human colon crypt
Nuclei (Blue) TO-PRO-3
Actin (Green) Alexa 488
APC gene product (Red)
Alexa 568
Christine Anderson,
Laboratory of
Prof. Ray White,
Huntsman Cancer Institute,
Utah

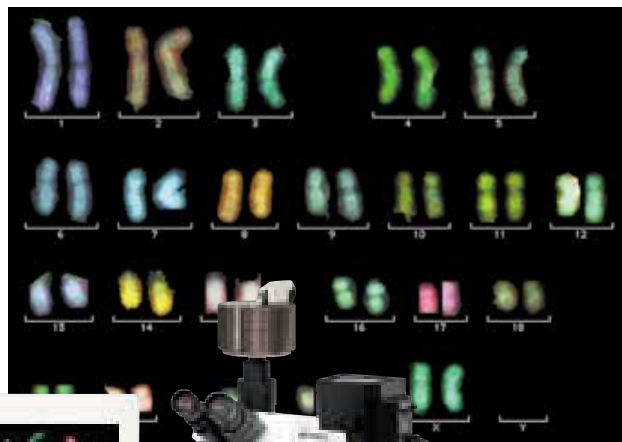


BX62+FV500

Advanced digital imaging

Imaging Systems

The Karyotype of a
Normal Female with
the X-X Chromosome.
Dr. Patricia Bray-Ward and
Dr David Ward,
Yale Dept. of Genetics,
Yale University, New Haven,
CT. United States



BX52+Cooled-CCD

omarski DIC system includes the prism
choose for each imaging task. The general-
ets are supplemented with special-purpose
users to choose highest resolution or
depending on the specific magnification and
ons.

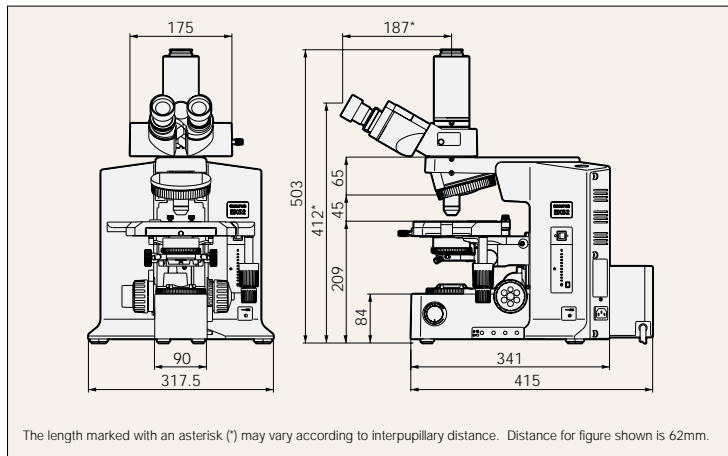
BX52 /62 specifications

		BX52	BX62
Microscope frame	Optical system	UIS optical system	
	Focus	Vertical stage movement: 25mm Stage stroke with coarse adjustment limit stopper Torque adjustment for coarse adjustment knobs Stage mounting position variable High sensitivity fine focusing knob (minimum adjustment gradations: 1µm)	Motorized focus/vertical stage movement: 14mm, 0.01µm increments, maximum speed: 3mm/s, coarse/fine changeover button, stage shunting button and stage up/down button
	Material	MMC (Metal Matrix Composite)	
	Illuminator	Built-in Koehler illumination for transmitted light 12V100W halogen bulb Light intensity LED indicator Built-in filters (LBD-IF, ND6, ND25, option)	Light preset switch
Revolving nosepiece		Interchangeable reversed quintuple/sextuple/septuple nosepiece Motorized sextuple revolving nosepiece with slider slot for DIC Septuple revolving nosepiece for DIC/simple POL	
Observation tube	Widefield (F.N. 22)	<ul style="list-style-type: none"> Widefield binocular, inclined 30° Widefield tilting binocular, inclined 5°-35° Widefield trinocular, inclined 30° Widefield tilting/telescoping binocular, inclined 0°-25°, telescoping 0-45mm 	
	Super widefield (F.N. 26.5)	Super widefield trinocular, inclined 24°	
Stage		Ceramic-coated coaxial stage with left or right hand low drive control: with rotating mechanism and torque adjustment mechanism, optional rubber grips available (Non stick grooved coaxial, plain, rotatable stages are also available)	
Condenser		<ul style="list-style-type: none"> Abbe (N.A. 1.1), for 4x—100x Swing out Achromatic (N.A. 0.9), for 1.25x—100x (swing-out: 1.25x—4x) Achromatic Aplanatic (N.A. 1.4), for 10x—100x Universal (N.A. 1.4/0.9), for 2x—100x (swing-out: 2x—4x, with oil top lens: 20x—100x) 	
Motorized fluorescence illuminator *3		Motorized reflected fluorescence, 6-position mirror turret unit, motorized shutter changeover speed: shutter speed: 0.1 s	
Motorized universal condenser *3		8-position with motorized AS, turret and top lens swing out mechanism (N.A. 1.4—0.9), for 1.25x*1+2—100x	
Motorized transmitted filter wheel *3		To be mounted on light exit, 6 positions, ø32, filter thickness: up to 6mm	
Motorized reflected filter wheel *3		To be mounted between the lamphouse and the frame, 6 positions, ø25/ø32, filter thickness: up to 6mm	
Motorized observation filter wheel *3		To be mounted between the frame and the observation tube, 6 positions, ø25/ø32, filter thickness: up to 6mm	
Hand switch *3		Control of septuple revolving nosepiece, 6-position mirror turret illumination unit and 8-position condenser	
Control box *3		Serial interface RS232C, built-in transmitted/reflected halogen power supply	

*1 Slight vignetting may occur in the periphery of the field due to the top lens. This occurs in observation only. *2 U-FWCO 1.25x should be mounted on U-FWT *3 Optional

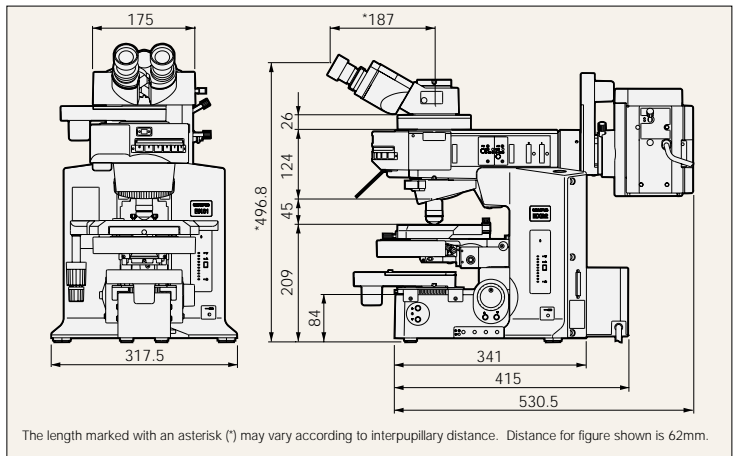
BX52 dimensions

(unit: mm)



BX62 dimensions

(unit: mm)

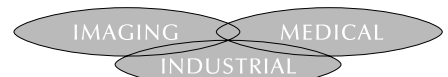


Specifications are subject to change without any obligation on the part of the manufacturer.



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