# OLYMPUS®

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# Advanced industrial microscope offering efficie

# Packed with features for detailed inspection of all electronic devices

The BX41M microscope concept brings together all the capabilities needed for thorough inspection of a wide variety of electronic devices and semiconductor components. As well as excellent cost-efficiency, it offers a compact design based on advanced ergonomics and incorporating Olympus' original Y-shaped frame, and simple, straightforward operation. The comprehensive list of features includes top-quality UIS optics backed by a full range of accessories, and an arm-integrated reflected light illuminator for easier component installation and greater overall system flexibility.

The BX41M-ESD is provided to protect electronic devices from potentially harmful static electricity, and to broaden the inspection field of this advanced, high-performance microscope.



#### ERGONOMICS



#### A design classic: the Y-shape frame The BX41M introduces further refinements to Olympus' renowned Y-shape frame, already acclaimed by users for its effectiveness in reducing fatigue.

All focusing and stage operations are performed with the operator's hands and arms on the desk, and even microscope operations require only minimal hand movements.

#### More compact Y-shape design for greater ease of use.

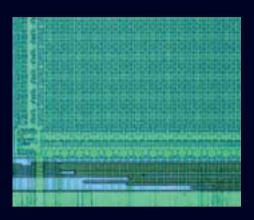
The reduced depth of the new microscopes makes Olympus' renowned Y-shape design even more space-efficient. A smaller lamp housing increases compactness, helping both to reduce the space required for installation and to keep desk space free for samples or ancillary equipment without hindering the operator.

#### Range of tilting observation tubes to assist operator comfort

U-TBI3 and U-ETBI tilting tubes are provided for binocular observation, and the U-SWETTR observation tube for documentation / photomicrography. This range of choice lets each operator achieve the most suitable eyepoint and an ergonomic posture, resulting in greatly reduced fatigue for long-duration observations.



## ency, economy and excellent system versatility





#### Improved efficiency with the motorized revolving nosepiece

The motorized revolving nosepiece (U-D6RE/U-D5BDREM) allows instant switching to an objective of choice. The handswitch / keypad can be positioned for greatest convenience. The fast, keystroke simple objective change minimizes hand movement and improves efficiency. The motorized revolving nosepiece can be attached to BX-KMA.



### Efficient observation of many kinds of samples:

special stages and adaptation plates Various special stages and adaptation plates are provided: a 100x100mm stage plate (U-MMSP4), a wafer holder plate (U-WHP2) for 3- and 4-inch wafers and extralarge stages (U-SIC4R2 and U-SIC4L2), allowing of a glass plate (e.g. U-MMSPG) for transmitted light observations.



#### **FUNCTIONAL UNITS**

#### Observation of samples over 65mm in height

The reflected light illuminator, integrated into the microscope arm, is a standard feature of the BX41M, giving them an extra degree of flexibility. Inserting a spacer between the frame and microscope arm increases the distance between the sample and the objective, making it possible to observe samples of over 65mm in height.



#### Brighter, more economical halogen lamp

The BX41M's brightfield reflected light illuminator is a 30W halogen lamp. With its 50W-equivalent brightness and long life of 2000 hours, this lamp combines excellent economy in both operation and maintenance.

#### **UIS OPTICS**

#### UIS optics for bright, clear observation images

THE BX41M's range of objectives includes units for ultra-long working distance and ultra high magnifications as well as universal objectives, which are applicable to all observation methods. Careful selection ensures smooth, precise inspections of any and every sample.

#### ESD model

#### BX41M-ESD

Incorporating all the basic features of the BX41M, this model also protects electrostatically sensitive samples and other objects under examination by eliminating a possible electrostatic charge from the operator and surrounding air. This is accomplished by making the operating elements of the microscope body (BX41RF-ESD) conductive. Similarly the surface of the reflected light illuminator BX-KMA-ESD (BX41RF-ESD) and the circular ring of the revolving nosepiece (U-D6RE-ESD) are conductive.

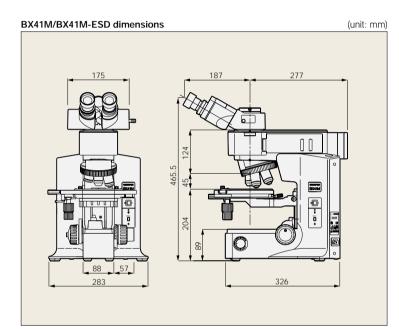
The reduced depth of the Y-shape frame and a smaller lamp housing make the microscope more compact. An optional 30W metal halide light source offers brightness equivalent to that of a 50W halogen lamp and the convenience and savings of a 2000-hour operating life.

- ESD performance: Surface resistance: Below 10<sup>°</sup> ohm Discharge time: Less than 0.2 sec.
- Compatible with reflected light brightfield, simple polarized light and Nomarski DIC observations.



#### BX41M/BX41M-ESD specifications

		BX41M	BX41M-ESD
Optical system		UIS optical system	
	Objectives	UIS objectives	
	Eyepieces	UIS eyepieces	
Microscope frame	Illuminator	Reflected light	Reflected light (with ESD performance)
		6V30W power supply, light preset switch	6V30W power supply, light preset switch
	Focus	Vertical stage movement: 25mm Fine focus movement: 100µm Minimum graduation: 1µm Upper limit stop Torque adjustment for coarse adjustment knobs	
	Maximum specimen height	65mm (w/o spacer)	
Observation tube	Widefield (F.N. 22)	Inverted: Binocular, trinocular and tilting binocular observation tubes Erect: Trinocular and tilting binocular observation tubes	
	Super widefield (F.N. 26.5)	Inverted: Trinocular observation tube Erect: Trinocular and tilting trinocular observation tubes	
Reflected light illuminator		BX-KMA	BX-KMA-ESD
		30W halogen, BF/DIC/KPO	30W halogen, BF/DIC/KPO
Revolving nosepiece	For BF	Sextuple, centerable sextuple, septuple revolving nosepieces (optional: motorized sextuple)	Sextuple revolving nosepiece with slider slot for DIC with ESD performance
Stage		Coaxial stage with left or right hand low drive control, with torque adjustment Movement: X=76mm, Y=52mm Large-sized coaxial stage with left or right hand low drive control, with Y direction locking mechanism Movement: X=110, Y=52mm	



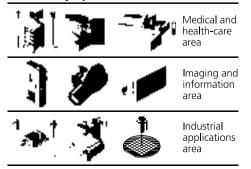
Web site address: http://www.olympus.com





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

#### Olympus business areas





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