

OLYMPUS®

Olympus is about life. About photographic innovations that capture precious moments of life. About advanced medical technology that saves lives. About information- and industry-related products that make possible a better living. About adding to the richness and quality of life for everyone. Olympus. Quality products with a **FOCUS ON LIFE**

SYSTEM MICROSCOPE

BX41

BX2 SERIES

The new standard for laboratory microscopes

UIS
UNIVERSAL
INFINITY SYSTEM



BX41

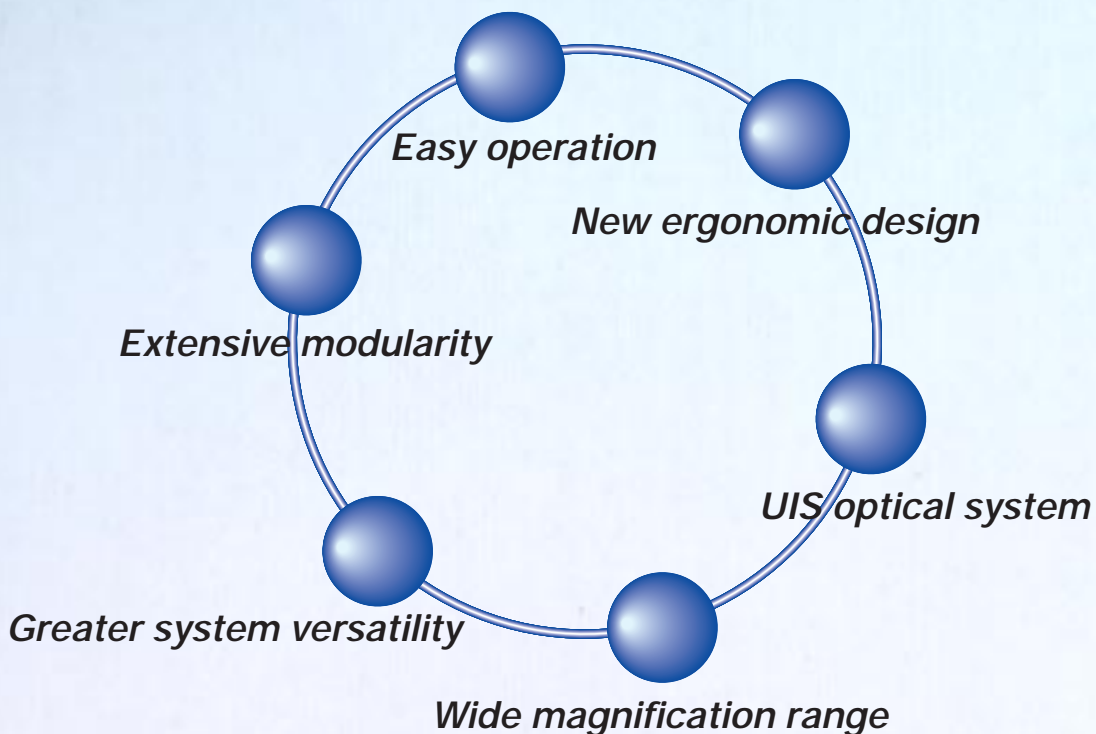
The laboratory microscope that's all quality

- *Cost-efficiency*
- *High degree of versatility and modularity*
- *Easy operation*
- *New ergonomic design*
- *Olympus UIS* (Universal Infinity System) optics*
- *Wide magnification range (1.25× – 100×)*
- *Reliability*
- *Rigid Y-shape frame*
- *Superb fluorescence microscopy*
- *Centering free, long-life fluorescence bulb*

**Note:*

UIS optics: The original Olympus infinity-corrected optical system.

This system expresses the superb Olympus optical technology, it provides high resolution, clear images and it has the flexibility to meet the multitude of current and future applications.





A wide range of accessories and easy operation for your application

The choice of cost-effective accessories provides wide-ranging capability, meeting today's expanding microscope applications and observation methods. Simple operating procedures ensure outstanding effectiveness in all routine work, making the BX41 the natural choice for your application.

Magnifications from 1.25× to 100× without changing the condenser give wide-ranging observation flexibility

The BX41 allows continuous observation over the wide magnification range of 1.25× to 100×. Next to the standard quintuple revolving nosepiece, a sextuple nosepiece with accessory slot is available. With the U-SC3 swing out condenser, it is possible to get optimal illumination from 1.25×* to 100× without changing the condenser.

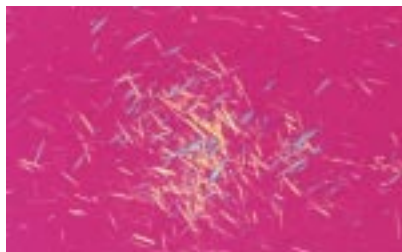
* When photographing with the 1.25× objective, please use the ultra low condenser U-ULC2.

A broad range of objectives for every individual need

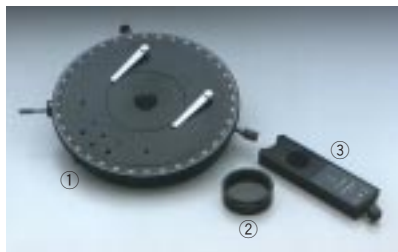
For quality and cost-efficiency, the BX41 uses the Achromat (ACH), Plan (PL) and semi apochromatic Universal Plan (UPLFL) objective series.

Easy, accurate gout inspection

A transmitted light gout analyzer (U-GAN) and rotatable stage (U-SRG2) are provided for easy, accurate gout detection.



UPLFL40×P, PE2.5×, U-TP530

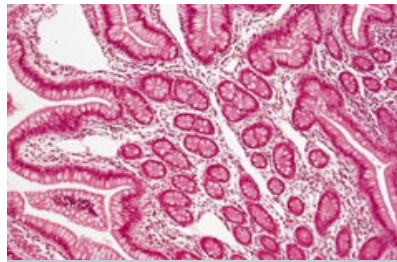


① U-SRG2 rotatable stage ② U-POT polarizer
③ U-GAN gout analyzer

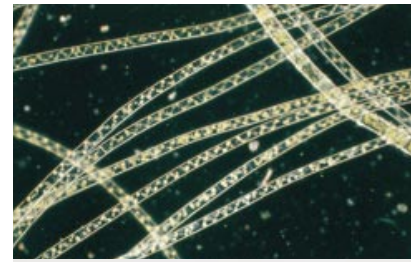


A wide choice of condensers for a variety of applications

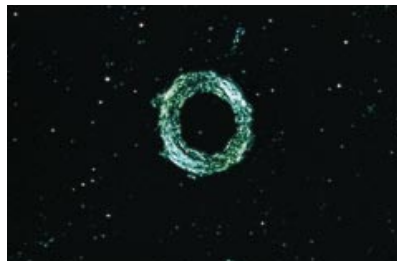
Different types of observation methods require different condensers, and the BX41 includes a practical range of specially designed alternatives: the highly cost-effective Abbe condenser (U-AC2); a swing-out condenser (U-SC3); a phase-contrast condenser (U-PCD2); and a choice of darkfield condensers (U-DCD, U-DCW).



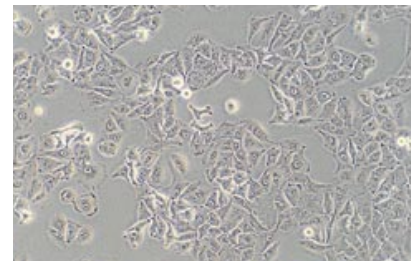
① U-SC3 ② U-AC2 ③ U-AC



① U-DCD ② U-DCW



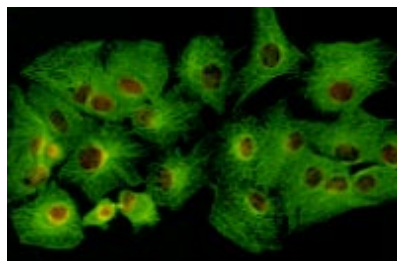
① U-POT ② U-ANT ③ U-KPA



U-PCD2

High performance in routine fluorescence observation

An integrated reflected light illuminator (BX-URA2) has been developed to minimize aberration. Fluorescence images of nearly twice the conventional brightness are obtained. A highly cost efficient fluorescence unit ensures that the BX41 complies with the requirements of routine fluorescence microscopy. A research fluorescence illuminator is also compatible with the microscope frame.



BX-URA2 reflected light illuminator

Applied ergonomics for easier, more comfortable work

The BX41 ergonomics meet the key operator requirement of conducting observations over a long period without discomfort. Careful study of such critical aspects as observation posture, the positioning of control elements, and making the most effective use of work space has led to refinements in ergonomic design and structure that enable every operator to work in comfort even during prolonged observations.

The right eyepoint means less fatigue

The right eyepoint is vital for working in comfort, and the BX41's tilting binocular tube (U-TBI-3) enables every operator to select the most suitable position. The eyepoint adjuster (U-EPA2) allows the eyepoint position to be raised by up to 60mm.

U-TBI-3 tilting binocular tube and
U-EPA2 eyepoint adjuster



Easy-to-operate fine focusing knob

The detachable fine focusing knob is coated to have a smooth, pleasant surface, easy to operate even with a single finger. It can also be attached to either side of the microscope, so that operators can always use their favored hand for focus and stage control. Tactile covers are fitted to the X and Y stage controls to provide a "light touch" stage movement.



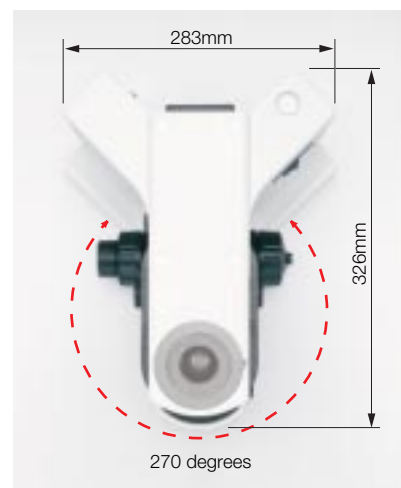
Stage handle with tactile covers





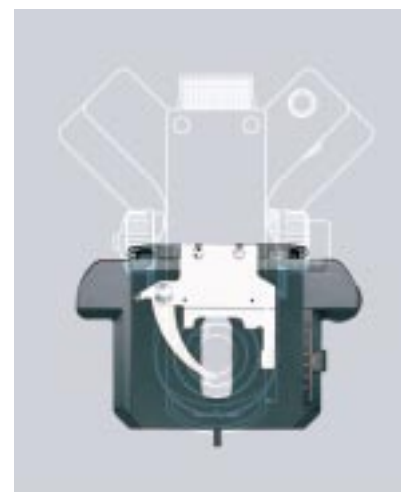
4 Ergonomic Y-shaped design frees up more desk space

The BX41's space-efficient Y-shaped design and the use of a reshaped fine focusing knob help to maximize the free desk area.



5 Stage innovation for your comfort

At 204mm, the height of the stage above the desk surface is designed for increased working comfort. A unique new dual pulley system has been introduced to govern stage movement. Replacing the previous rack & pinion system, it saves space around the stage. The specimen positioning can be optimized not only by X-Y movement but also by rotation of the stage by up to 250 degrees — a valuable feature for photographic, digital or video documentation.



Oil rectangular stages (U-SVRO, U-SVLO)

These stages are designed with grooves that prevent the adhesion of slides due to the occasional spill of immersion oil or mounting medium.



U-SVRO rectangular stage

Accessories for greater versatility

The BX41 features a wide choice of accessories, facilitating image recording and discussion. Choose from photomicrography equipment, digital and video cameras, and discussion accessories.

Image recording equipment

DP11

Microscope digital camera system

With its 2/3 inch 2.5 million pixel CCD camera, the DP11 delivers the outstanding image quality that today's users demand. Clear color reproduction and high sensitivity are achieved by the use of a newly developed RGB primary color on-chip filter. Images are captured at a maximum of 1712×1368 pixels, enabling clear, detailed reproduction of even very small areas of the image. The 1.8-inch TFT color LCD displays 2.4× magnified images at 120,000 pixels, making accurate focusing quick and easy.

Two memory card slots on the camera head allow maximum storage of 64MB (SmartMedia) or 96MB (CompactFlash) — enough for 390 (SmartMedia) or 580 (CompactFlash) images in standard quality 640×512 mode or 8 (SmartMedia) or 12 (CompactFlash) images in super high quality TIFF mode.



BX41+DP11

U-TRU

Trinocular intermediate attachment

This intermediate trinocular attachment can be used simultaneously with the inclinable binocular observation tube (U-TBI-3). Two light paths are selectable: 100% light for binocular observation or 20% for binocular observation and 80% for imaging through the trinocular port.



BX41+PM10SP+U-TRU

PM10SP

Automatic photomicrographic system

The PM10SP features 1% spot and 30% average light metering, along with 3 zones of reciprocity failure adjustment, auto/manual/time setting modes and AE lock function. The 35mm configuration features a multi exposure mode.



PM20

Automatic photomicrographic system

Perfect for all standard photomicrography, this widely-used system also employs a fluorescence auto mode, enabling fully automatic exposure in fluorescence photomicrography without complex calculations. In addition, there's a choice of two auto exposure metering areas: 1% spot and 30% average.



Discussion attachments

U-D03

Dual observation attachment

For enhanced specimen review or teaching/instruction an arrow pointer is interposed in the same viewing field.



U-D03



U-SD03

Side by side observation attachment

For specimen reviewed by two observers sitting side by side.

U-SD03



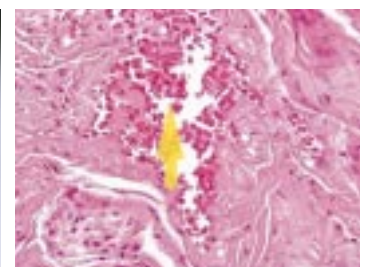
U-APT



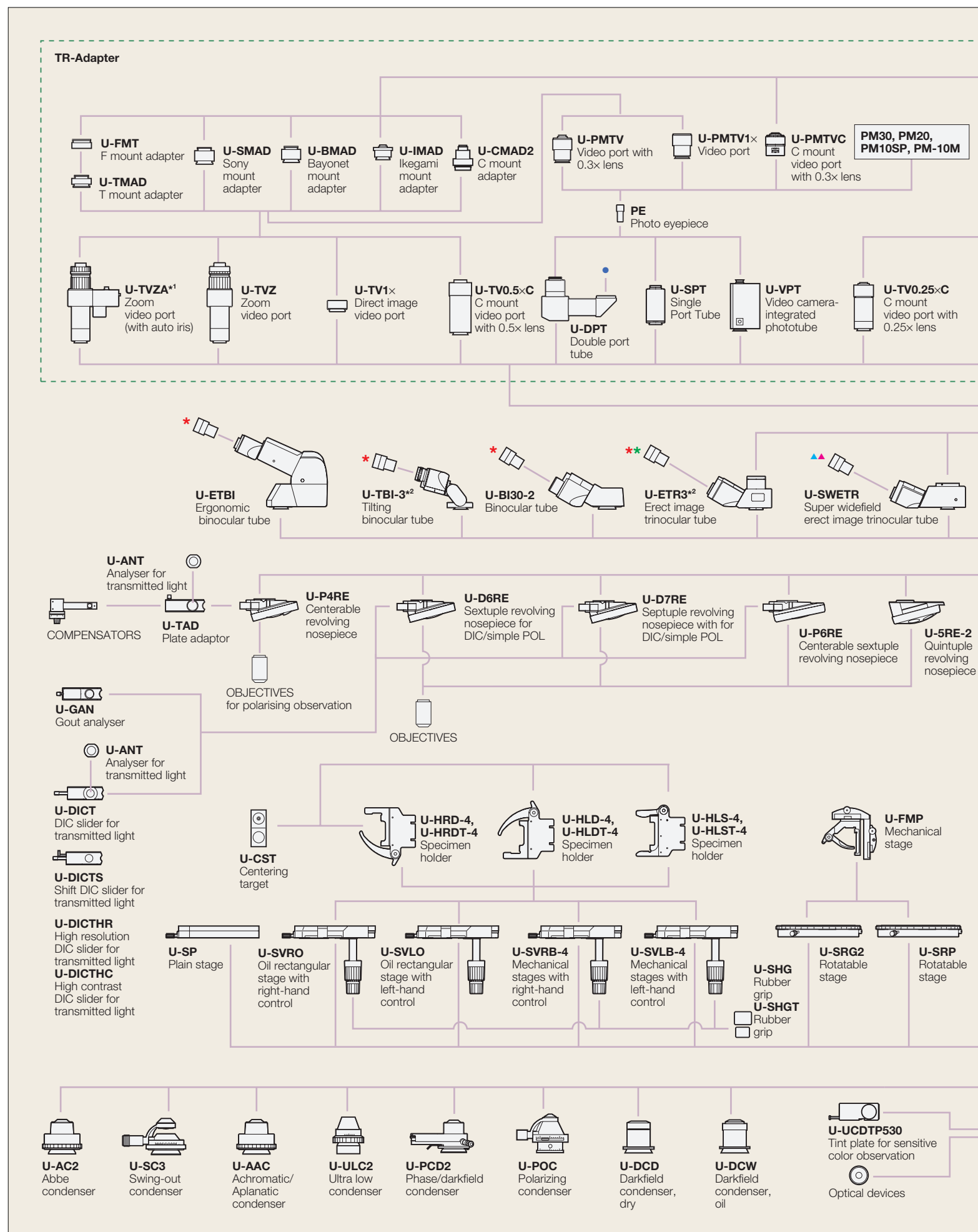
U-APT

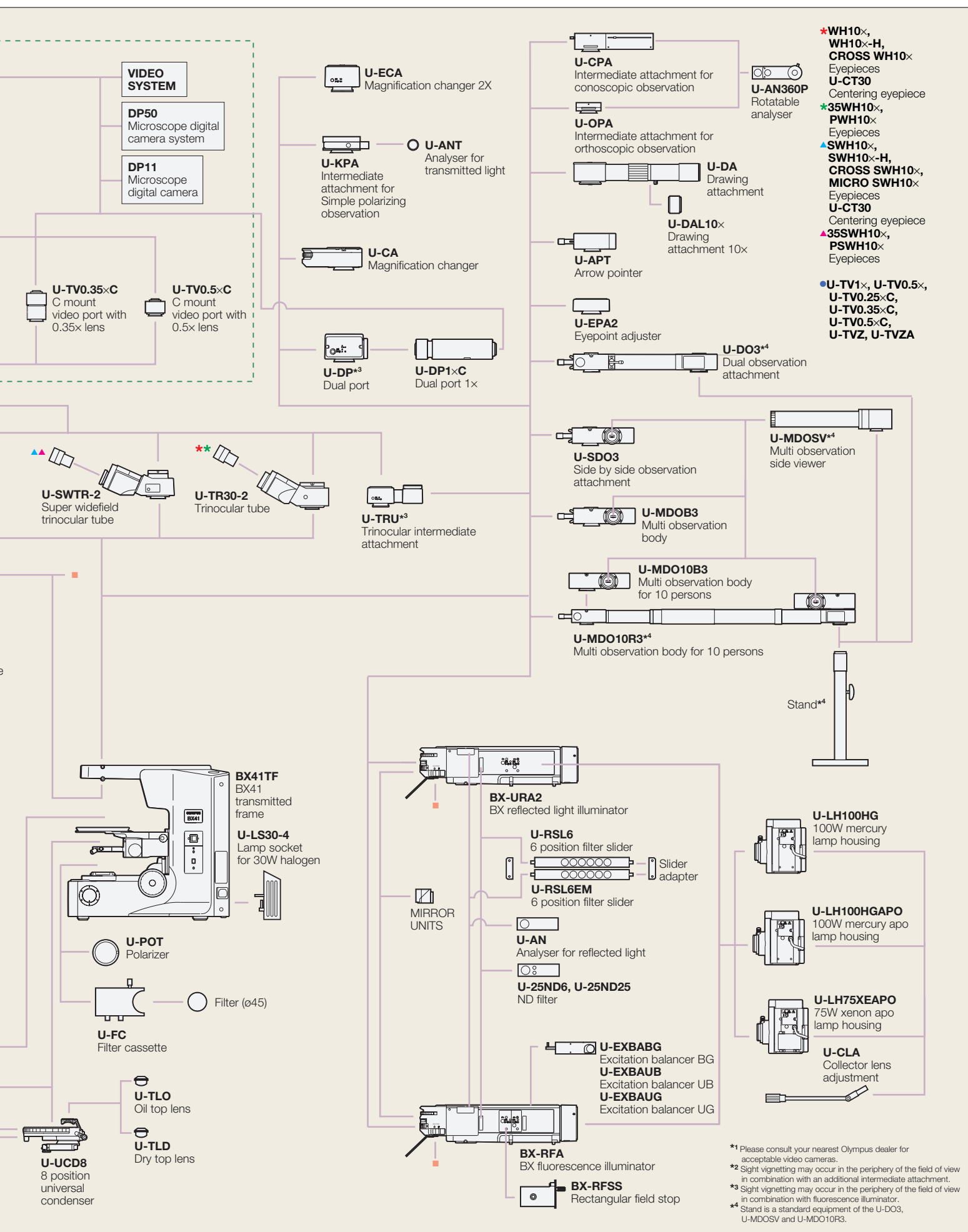
Arrow pointer

Enables insertion of a red or green LED arrow for display on a monitor or for reproduction with a photomicrograph.



SYSTEM DIAGRAM





BX41 specifications

Microscope frame	Optical system	UIS optical system
	Focus	Vertical stage movement: 25mm stage stroke with coarse adjustment limit stop Torque adjustment for coarse adjustment knobs Stage mounting position variable High sensitivity fine focusing knob (adjustment gradations: 1µm)
	Illuminator	Built-in Koehler illumination for transmitted light 6V30W halogen bulb (pre-centered) Light preset switch
Revolving nosepiece		Interchangeable reversed sextuple/quintuple nosepiece
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 ergo binocular, inclined 0°-25°
	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), 4x—100x •Swing out Achromat (N.A. 0.9), 1.25x—100x (swing out: 1.25x—4x) •Achromatic Aplanat (N.A. 1.4), 10x—100x •Phase-contrast, darkfield (N.A.1.1), 4x—100x •Darkfield dry (N.A. 0.8-0.92), 10x—400x •Darkfield oil (N.A. 1.20-1.40), 10x—100x •Ultra low (N.A. 0.16), 1.25x—4x

High-quality, cost-efficient objectives

ACH (ACH PH) series

Cost-effective standard objectives for transmitted light brightfield. For phase-contrast microscopy, the ACH PH series is also available.

PL (PL PH) series

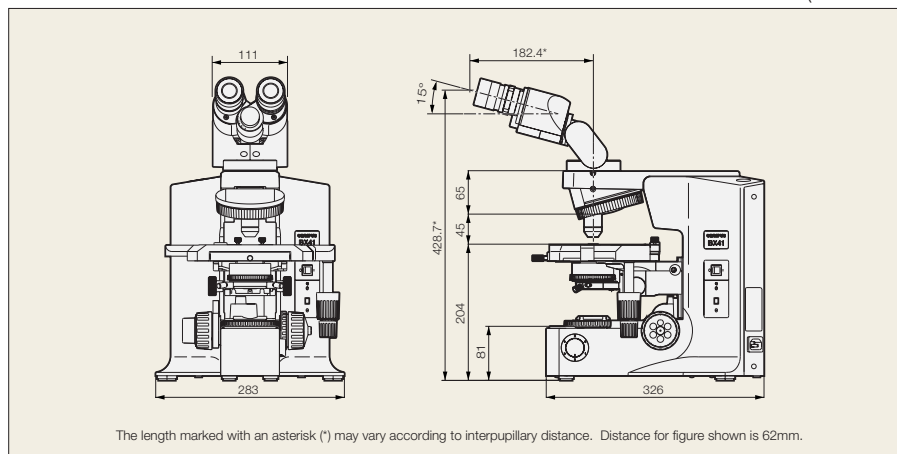
Ensures superb field flatness up to F.N. 22 with brightfield observation in transmitted light. For phase-contrast microscopy, the PL PH series is also available.

UPLFL (UPLFL PH) series

These universal objectives perform superbly with a wide range of microscopy techniques. The UPLFL PH series is designed for phase-contrast microscopy.

BX41 dimensions

(unit: mm)

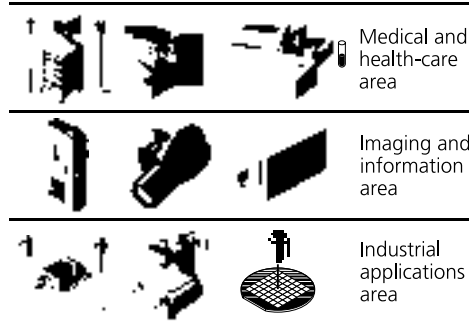


Web site address: <http://www.olympus.com>



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

Olympus business areas



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