

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**

ERGONOMIC
LABORATORY MICROSCOPE

BX45

BX2 SERIES

The ergonomic microscope for all laboratory applications

UIS
UNIVERSAL
INFINITY SYSTEM



The observation angle adjusts to the individual, reducing the load on the operator's shoulders and neck

0—25degrees

Extendable binocular observation tube for an ergonomically ideal posture and comfortable observation

0—45mm

The ergonomic design helps to maintain an upright, comfortable posture with the operator's spine correctly aligned — the most beneficial position for long observation periods

90degrees

BX45

Designed to make every microscopy task in the lab easier, more efficient, more comfortable.

Routine laboratory microscopy involves quick, accurate examination of many specimens over prolonged periods of time — exactly the work the BX45 was designed to do. Ease of use and operating comfort top the list of design priorities, making this microscope ideal for routine cytological screening and any other microscopy task requiring examination of multiple specimens.



Super low stage for specimen change with minimal effort

128mm

**Note:*

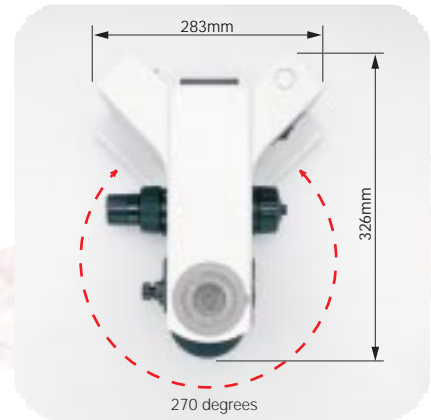
UIS optics: The original Olympus infinity-corrected optical system.

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.

WORK SPACE

Y-shape design for easy installation and ample work space — anywhere

Professional microscope users need space to work in comfort — sufficient desk width and depth, for instance, to rest their forearms on the surface for proper support, and to keep specimens within easy reach. But sometimes, space is just what's lacking. The solution? A microscope with Y-shape design and minimal depth. Compact enough to be placed where it is easy to use, with ample space on both sides. That way, specimens are nearby but not in the way, and it's much easier to take notes or record results. The outstandingly stable Y-shape frame is central to the many performance advantages which make the BX45 ideal for all routine laboratory applications.



Sound ergonomic design: putting the user first

Creating the BX45 started with the people who would use it - how they sit when they're working, what their work area is like, the procedures they follow, the methods they use. This inspired us to create a microscope that would exceed every user's expectations and to set new standards. Stress free, uncomplicated operation for any user, over any length of time, in any space. For anyone involved in routine laboratory microscopy, those things matter.



CHANGING OBJECTIVES

No need for light adjustment when changing objectives

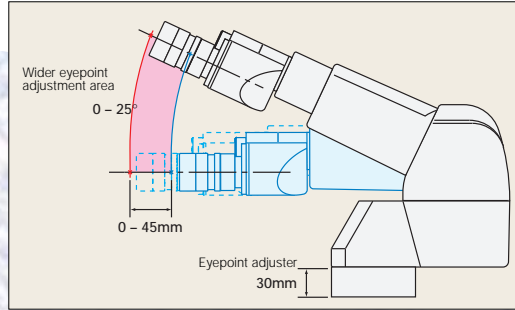
The 10x objective (PL10xCY, PLFL10xCY) is intensity equalized, so it's not necessary to adjust the light intensity when changing between the 10x and 40x objectives, a common requirement for reading cytological slides. The discomfort which can be caused when the eyes are exposed to sudden changes in light intensity is eliminated. The low position of the revolving nosepiece makes objective change easier, less tiring: minimal movement is needed, so the operator's arms can rest comfortably on the desk.



EYEPOINT OPTIONS

Adjustable observation tube lets you choose the right eyepoint every time

The BX45's newly-developed adjustable observation tube is 80mm higher and 70mm closer to the operator than a conventional tilting tube, allowing the eye point position to be moved toward the observer over a span of 45mm with a tilt range of 0-25 degrees. The eyepoint adjuster (U-EPA2) allows the eyepoint position to be raised by 30mm. This means that almost every



operator, regardless of height, can look straight into the eyepiece without tilting the head, ensuring the most comfortable working position. And if the posture changes during observation, just change the eyepoint to match it. Easy, comfortable and fatigue-free — the ideal combination for prolonged observations. What's more, the flexibility of the UIS infinity-corrected optical system permits up to two eyepoint adjusters to be attached between the frame arm and the observation tube.



FOCUSING



Easier fine focusing

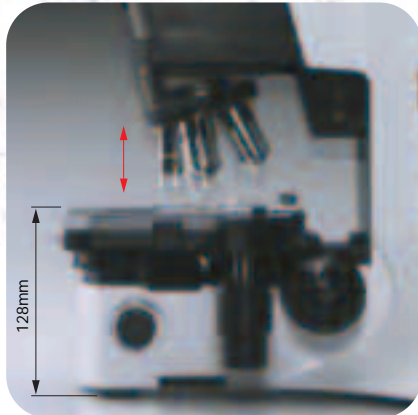
The fine focusing knob can be removed and attached to either side of the microscope. It is coated too, smooth and easy to operate with one finger. And with the thin coarse and fine focusing knobs both on the same side of the microscope body, the operator can make more effective use of the desk surface. Employment of a refocusing stop mechanism allows quick return to the right focusing position after raising the revolving nosepiece to change the specimen.



CHANGING SPECIMENS

Fixed, low-position stage makes your work easier

With the stage surface 128mm (approx. 5 inches) from the desk, it is obvious why the BX45 is so easy to use. Focusing is done by moving the revolving nosepiece up and down, so the height of the stage remains constant. Only minimal forearm movement is needed and it is easy to change or mark the specimen. Another advantage is that the X direction guide does not protrude from the side of the stage, so there's no interference with focusing action. Several specimen holders are available to suit your liking: single holders for fast slide change with one hand and dual slide holders for extra scanning capacity.

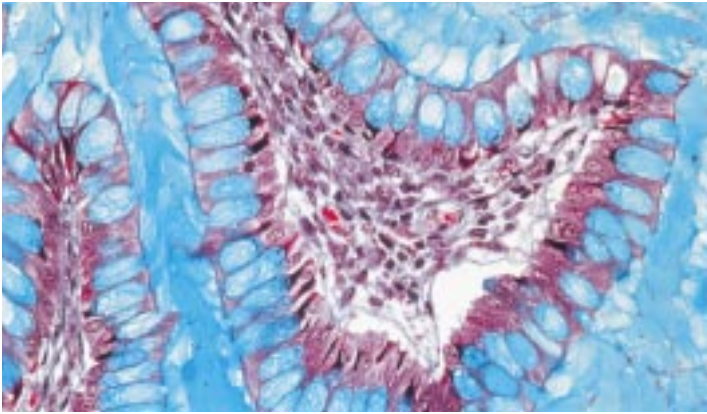


STRESS-FREE

Designed to let you concentrate on observation

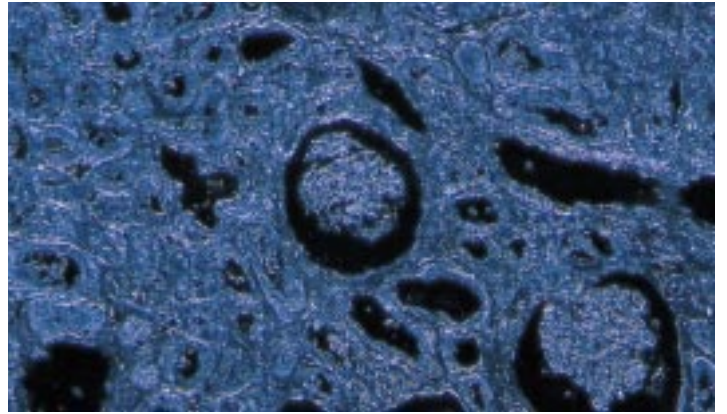
The microscope illumination and condenser are pre-centered and pre-focused, so those operations are not needed and bulb replacement only takes seconds. All operational elements are logically and functionally located. Everything is right at hand; the operator's concentration can stay dedicated to observation and diagnosis.

Versatility in both: Operation and observation

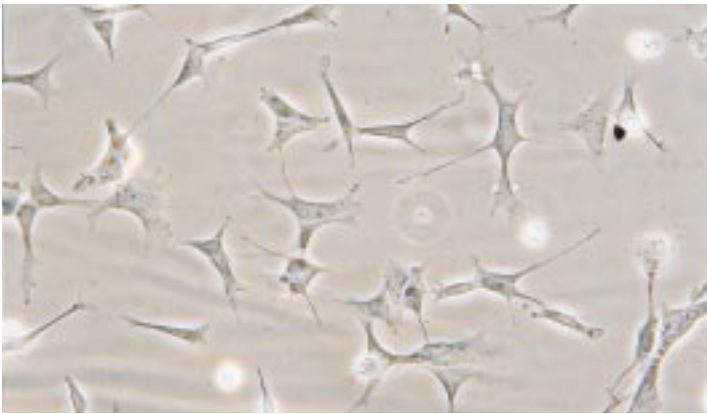


Mucus cells

Brightfield observation

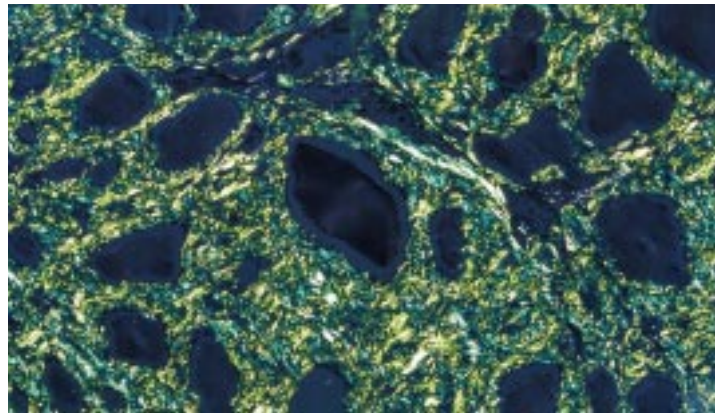


Darkfield observation



Brain section

Phase-contrast observation



Polarized light observation

Complies with many observation methods

The BX45's 3-position universal condenser produces brightfield illumination for all magnifications, from the low 1.25 \times magnification through the high 100 \times magnification. In addition, the condenser serves darkfield, phase-contrast and simple polarized light observations; switching between any of these methods in mid-task is easy.

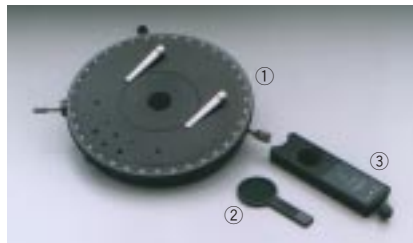


Easy gout inspection

Gout testing requirements are met, as the analyzer is easily inserted or removed from its position in the revolving nosepiece. In addition a rotating stage can be employed.



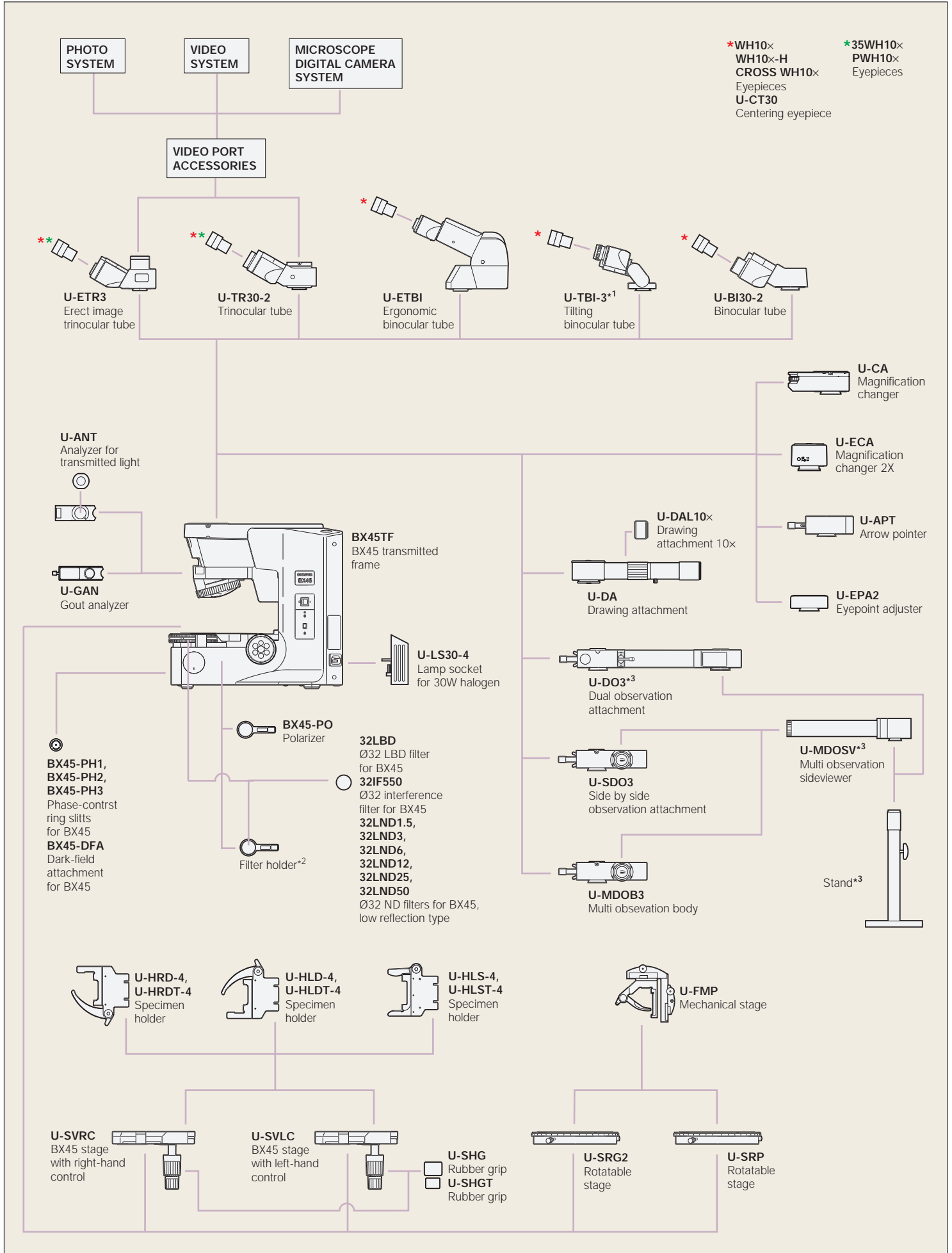
U-GAN gout analyzer



① U-SRG2 rotatable stage ② BX45-PO polarizer
③ U-GAN Gout analyzer



SYSTEM DIAGRAM



*1 Sight vignetting may occur in the periphery of the field of view in combination with an additional intermediate attachment. *2 Attached to BX45TF. *3 Stand is a standard equipment of the U-DO3 and U-MDOSV.

Objectives



PL10xCY, PLFL10xCY

The 10x objective has a built-in ND filter, which equalizes the light intensity in the field of view when switching to the 40x objective. It is capable to scan the specimen slide to the very possible edge without the 40x objective touching the slider holder.



ACH (ACH PH) series

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



UPLFL (UPLFL PH) series

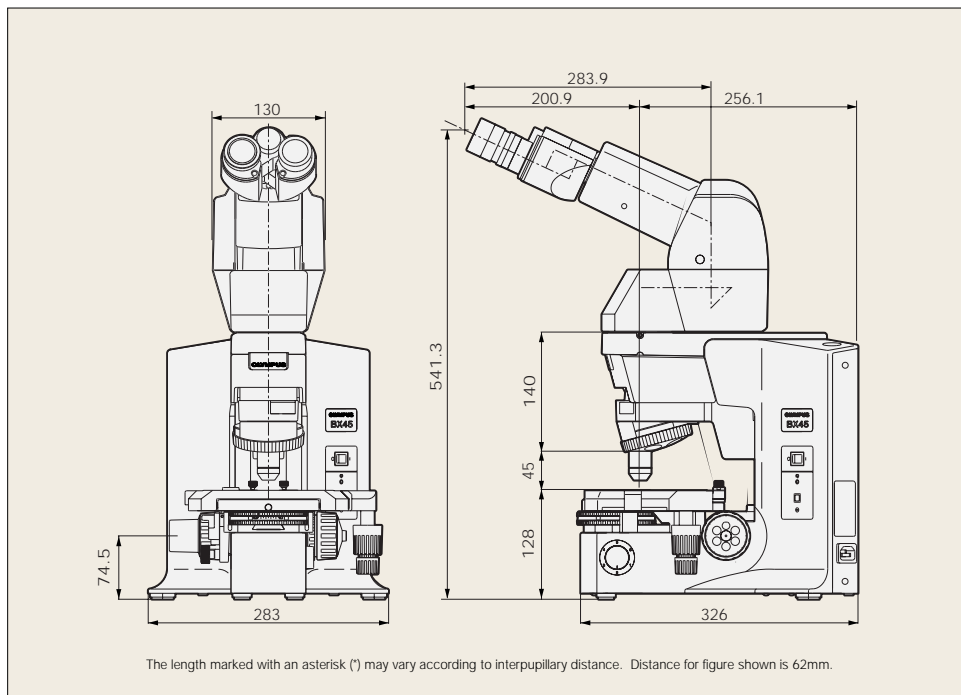
These universal objectives perform superbly with a wide range of microscope techniques. The UPLFL PH series is designed for phase-contrast microscopy.

BX45 specifications

Microscope frame	Optical system	UIS optical system
	Focus	Fixed low stage nosepiece focus 15mm focus stroke with coarse adjustment limit stop Torque adjustment for coarse adjustment knobs 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		Fixed reversed 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°
Stage		Ceramic-coated coaxial stage with left or right hand low drive control, rotating mechanism and torque adjustment mechanism (Plain, rotating stages are also available)
Condenser		Fixed 3 position universal condenser (N.A. 0.9) 1.25x—100x (swing-out: 1.25x—2x)

BX45 dimensions

(unit: mm)

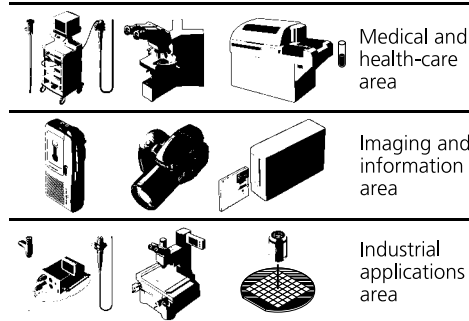


Web site addresses: <http://www.olympus.co.jp>
<http://www.olympus.com>
<http://www.olympus-europa.com>



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

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