

**OLYMPUS**<sup>®</sup>

Your Vision, Our Future

Biological Microscope

**CX23**

Bringing Reliability to the Classroom



# User-Friendly Design and Outstanding Optical Performance



Ergonomic grip

- Ergonomic grips add safety when retrieving the microscope from high places.
- Colored grips indicate the appropriate places to hold the microscope.
- Smooth, rounded design eliminates sharp edges.
- The CX23 microscope is one of the lightest in its class, with a total weight of approx. 5.9 kg (13.01 lbs).

**Lift**

1



Angled arm enables comfortable carrying



Ergonomic grip for easy carrying

- The arm is angled to keep user's wrists in a comfortable, neutral position.
- The eyepiece can be fixed in place to help prevent damage or loss during transportation.
- A rackless stage and stage cover enable safety and stability during long periods of use.

**Carry**

2



Fixed eyepieces



Rackless stage and stage cover



Convenient and easily accessible power cable storage



Locking pin for easy binocular rotation

- A locking pin keeps the observation tube in place.
- Interpupillary adjustments, ranging from 48 to 75 mm, enables individual users to set it to their needs.
- Eyepoint adjustments accommodate the user's height and provide greater comfort.
- Left and right diopter adjustment enable optimal focus for each eye.

**Prepare**

3



Interpupillary adjustment



Eyepoint height adjustment

## Designed for the Classroom



### Set the Sample

4

- An inward-facing rotating nosepiece facilitates a larger working area above the stage, enabling easier operation and specimen exchange or making it easier to apply oil to immersion objectives.
- Objectives with long working distances provide clearance for thick samples and slides.
- Bring specimens into focus quickly by using the coaxial knobs for fine or coarse adjustments. The microscope is built for durability and precise control, whether accessed from the left or right side.
- A torque release function helps prevent damage if excess force is applied to the coarse focusing knob or stage knob.



Inward-facing revolving nosepiece



Coaxial knobs

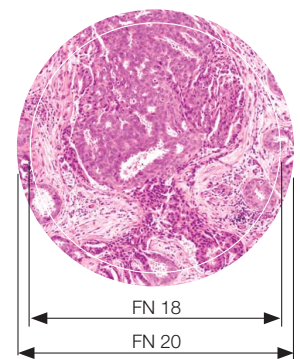
### Observe

5

- The focus lock helps prevent the objectives from damaging the specimen.
- Field number (FN) of 20 provides a wide field of view.
- The CX23 microscope features plan achromat objectives that preserve outstanding image flatness throughout the field of view.
- The energy saving LED light source provides a long operation lifetime of 20,000 hours.
- Daylight balanced LED illumination preserves the vivid colors on HE-stained samples.



Focus lock



Wide field of view

### Store

6

- A storage compartment on the back of the CX23 microscope makes it easy to stow the power cable after use.
- Protect your investment with an optional custom designed wooden case.
- When the CX23 microscope needs to be left unattended, a built-in security slot enables attachment of an anti-theft cable.



Cable storage compartment



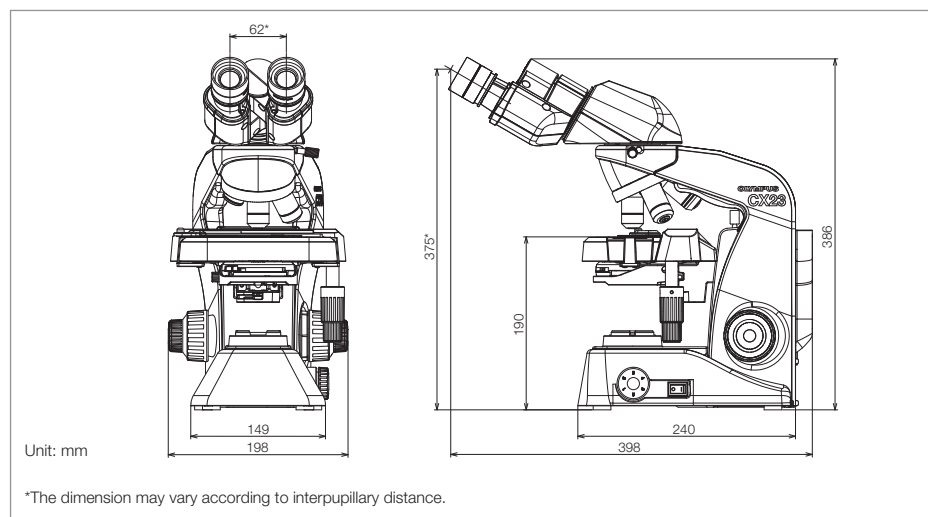
Built-in security slot

## CX23 Specifications

|                                |                                         |                                                                                                                                                                                                                                                                                      |                                                                                           |
|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Model                          |                                         | CX23LEDRF (S1/S2)                                                                                                                                                                                                                                                                    | CX23RTFS2                                                                                 |
| Body                           |                                         | Aluminum die-cast metal frame, protective plastic covering                                                                                                                                                                                                                           |                                                                                           |
| Optical System                 |                                         | Infinity optical system                                                                                                                                                                                                                                                              |                                                                                           |
| Illumination System            |                                         | Built-in transmitted illumination system<br>LED power consumption: 0.5 W (nominal value)                                                                                                                                                                                             |                                                                                           |
| Focusing                       |                                         | •Stage height movement      •Coarse movement stroke: 15 mm      •Coarse adjustment limit stopper<br>•Torque adjustment for coarse adjustment knob      •Fine focus knob (minimum adjustment graduations: 2.5 µm)                                                                     |                                                                                           |
| Revolving Nosepiece            |                                         | Fixed quadruple nosepiece with inward tilt                                                                                                                                                                                                                                           |                                                                                           |
| Stage                          |                                         | Wire movement mechanical fixed stage<br>•Size (W × D): 174 mm × 89 mm      •Traveling range (X × Y): 76 mm × 30 mm<br>•Specimen holder      •Specimen position scale                                                                                                                 |                                                                                           |
| Observation Tube               | Type                                    | Binocular, anti-fungal      Trinocular, anti-fungal                                                                                                                                                                                                                                  |                                                                                           |
|                                | Eyepiece (anti-fungal)                  | 10X Field Number (FN): 20      15X Eyepiece (FN): 12 (optional)                                                                                                                                                                                                                      |                                                                                           |
|                                | Tube inclination                        | 30°                                                                                                                                                                                                                                                                                  |                                                                                           |
|                                | Light path selector                     | None      Eyepiece/Camera port = 100/0 or 0/100                                                                                                                                                                                                                                      |                                                                                           |
|                                | Interpupillary distance adjusting range | 48 – 75 mm                                                                                                                                                                                                                                                                           |                                                                                           |
| Eyepoint adjustment            |                                         | 370.0 – 432.9 mm                                                                                                                                                                                                                                                                     |                                                                                           |
| Condenser                      |                                         | •Abbe condenser NA 1.25 with oil immersion      •Built-in aperture iris diaphragm                                                                                                                                                                                                    |                                                                                           |
| Objectives                     |                                         | Plan Achromat, anti-fungal<br>4X      NA 0.1      W.D. 27.8 mm<br>10X      NA 0.25      W.D. 8.0 mm<br>20X      NA 0.4      W.D. 2.5 mm (optional)<br>40X      NA 0.65      W.D. 0.6 mm<br>100XOil      NA 1.25      W.D. 0.13 mm (CX23LEDRFS1 built-in, CX23LEDRFS2/RTFS2 optional) |                                                                                           |
| Optional Accessories           |                                         | Reflection mirror (CH20-MM), eyepiece micrometer<br>Dust cover, darkfield stop (CH2-DS+CH2-FH)<br>Field Diaphragm (CX23-FS)*<br>Dedicated wooden case (CH20-WB2)                                                                                                                     | Reflection mirror (CH20-MM), eyepiece micrometer<br>Dust cover, darkfield filter (CH2-DS) |
| Dimensions (W × D × H)         |                                         | 198 mm × 398 mm × 386 mm                                                                                                                                                                                                                                                             | 198 mm × 398 mm × 430 mm                                                                  |
| Weight                         |                                         | Approximately 5.9 kg                                                                                                                                                                                                                                                                 | Approximately 6.5 kg                                                                      |
| Rated Voltage/Electric Current |                                         | AC 100 – 240 V    50/60 Hz    0.4 A                                                                                                                                                                                                                                                  |                                                                                           |
| Power Consumption              |                                         | Less than 2 W                                                                                                                                                                                                                                                                        |                                                                                           |

\*CX23-FS is included in CX23RTFS2 standard set

## DIMENSIONS



Dedicated wooden case (optional)

Specimen courtesy of :  
 JAPANESE FOUNDATION FOR CANCER RESEARCH  
 Cancer Institute, Cancer Institute Hospital  
 Department of Pathology  
 Futoshi Akiyama, M.D., Ph.D.  
 Yuichi Ishikawa, M.D., Ph.D.

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