**Specifications** 

**Specifications** 

Bending radius [mm]

Bundle Diameter [mm]

Inner diameter [mm]

Inward angle of the light emitted [  $^{\circ}$  ]

Part Number

Length [mm]

Covering

Part Number

Magnification

Camera mount (Lens side / Camera side)



# **Zoom Microscope Option**

# Rear converter lens | ZRCL

Catalog W2037

By mounting this rear converter lens between the camera and lens barrel, it will be able to enlarge the optical magnification without changing the working distance.

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#### **Microscope Unit**

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**Bio-photonics** 

Laser Processing

# Guide

► A variety of microscope for C-mount compatible and camera are provided.

Reference (Microscope, Zoom Microscope, OUCI-2, Camera)

### Attention

- ▶ It is only for C mount, so it can not be used to the CS mount products such as microscopes, observation systems or cameras.
- ▶ Optical performance and resolution will not be improved even if mounting the rear converter lens. It will be depending on the performance of the microscope.

#### Reference image Zoom Microscope LWZ-15 (Optical Magnification 15x)



Without Rear converter

Observation Field of View About 0.55×0.45mm



ZRCL-1.5 Observation Field of View About 0.37×0.3mm



ZRCL-2 Observation Field of View About 0.28×0.22mm

Code W2038

# Ring Light Guide | ZRL-ZOL15

ZRCL-1.5 ZRCL-2.0



ZRL-ZOL15

SUS flexible

1,000

60

15

7

31

It is suitable for the case that you do not want to generate a shadow of the lighting from 360° diagonal direction and that you observe the highlighted unevenness of the surface.

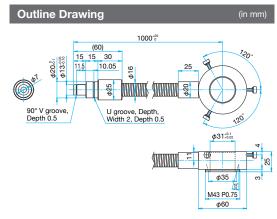
### Guide

A variety of light source is available.

Reference (LED light sorce, Tungsten Halogen light sorce and Metal Halide light sorce)

## Attention

▶ This product is only for Zoom microscope (LWZ-15/LWZ-15M). If it is used with other products, there is a possibility that optimal illumination can not be done.



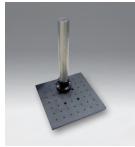
# Focusing unit / Pole stand | ZAS-FAC-PST / PS-S/L



The focusing unit can be installed to the observation unit with coaxial illumination and Zoom microscope. And it can be used as a microscope stand when combined with the pole stand.



Specifications		
Part Number	ZAS-FAC-PST	
Travel [mm]	30	



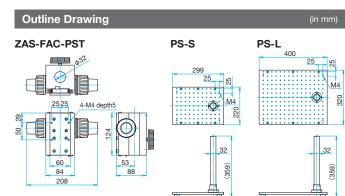
Specifications		
Part Number	PS-S	PS-L

## Guide

▶ It can be installed the manual stage by using the M4 holes on the base plate of the pole stand.

### Attention

- ▶ Screws are <u>not</u> supplied with focusing unit for fixing to observation unit with coaxial illumination and zoom microscope.
- ▶When using a focusing unit and pole stand, please check that required working distance is ensured. ULWZ series is not available for long working distance.









**Specifications** 

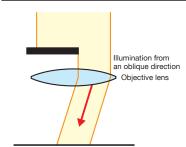
Part Number

By blocking the co-axial illumination partially, surface is illuminated with grazing-incidence and microscopic asperity is emphasized during observation

Mounted state to the Lens tub

Theory of partial light blocking





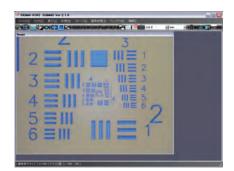
# Image measurement software | SGMMSE

ZPSC-T1

Catalog W2010

This is an integrated software system that easily can be used by a PC mouse, and it enables to carry out image measurement and analysis, image storage, focus synthesis and so on to support the zoom microscope.

This software is for image processing and measurement with 2.0 Mega pixels USB2.0 Color Camera (SK-TC202USB-AT).
 Windows® XP / 7 (32bit) is supported.



Specifications	
Part Number	SGMMS

### [Measurement functions]

• Image and video capture

Image by BMP, JPG, GIF, and PNG format and Video by AVI format can be saved.

Measurement function

It easily measures the size of an object by clicking the mouse on the screen. It can measure the distance between two points, the radius and diameter from the point of three or more points, angle, etc.

Calibration function

11 types of calibration settings can be registered depending on the magnification of the zoom microscope.

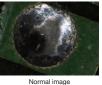
Camera control

Camera's gain, shutter speed, white balance and reversal can be displayed.

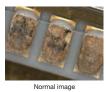
Line display (cross line, scale display)

# HDR (High Dynamic Range Imaging) Function

When observed objects with different reflection, an image can be obtained by reducing the overexposure and underexposure. It can be taken completely the state of the sample.







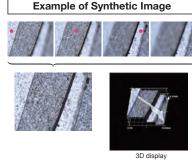


age HDR image

## Hyperfocus / 3D display function

By using the motorized Z-axis stage, it can take an "in-focus" picture over the entire screen. 3D images can be displayed from the image of the composed focus.





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