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**Microscope Unit** 

Alignment

Interferometers

Inspection/ Observation

**Bio-photonics** 

Laser Processing

### Microscope Unit Guide

We provide three different types of observation system.
For the purposes of experiment or work, you can select an appropriate observation system.

### **■Zoom Microscope**

Just mounting the camera can change continuously the magnification from the image of the low magnification and also get the image of high magnification.

It is suitable for observation of those with complex and dense structure, such as semiconductor devices, MEMS and so on. Moreover, with the longest 500mm working distance, it is quite useful to observe inside of the high-temperature furnace or the vacuum chamber.

#### Observation unit with coaxial illumination

Attaching the objective lens for a microscope, it displays an enlarged image on the monitor or laptop PC by using the camera. By using a compact barrel with ports for illumination, there is flexibility of installation, and it also can be incorporated into the production equipment such as a laser processing machine.

It is quite useful to observe the high magnification in particular.

### ■Stereo Microscope

Since it can obtain the observed image that there is very wide field of view by binocular and a disparity of the left and right eyes, it is suitable for the observation of irregularities such as electronic components and processed parts. With a long working distance, it is suitable for observation while moving the sample and for the visual inspection by frequent exchanging of a sample.

# Performance comparison between the observation unit with coaxial illumination and zoom microscope

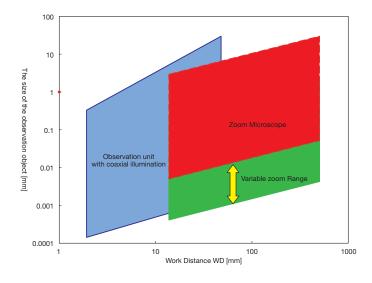
Between the size of the subject can be observed and the working distance, there is roughly a proportional relationship. In general, by increasing the magnification, WD will be shorter.

The observation unit with coaxial illumination is better for the observation of a high magnification because it is possible to replace the objective lens and select WD and the magnification.

It does not have zoom function, but you can observe the fine structure of the sample in an excellent resolution. However, when using the camera, it will be limited by the resolution of the camera and the monitor side.

The zoom microscope is inferior to the objective lens in the resolution, but by varying the magnification, it can project a size that is easily observed on the monitor.

For the observation size, there is no significant difference from the observation unit with coaxial illumination, you can select the very long WD.



## System Diagram











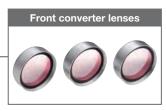
Lens tube with zoom





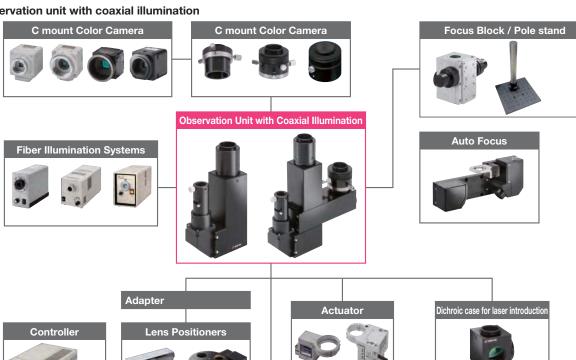






### Observation unit with coaxial illumination

Visible



**Objective Lens** 

infrared

Ultraviolet

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### Microscope Unit

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