

Modular Infinity Microscope







ASI's Modular Infinity Microscope components consist of tube lenses along with adapters and accessories that either are primarily used in the collimated light space or adapters that are to be used on the image side. Collimated light adapters use the 38 mm diameter C60-RING system to connect components. Focus-side adapters attached to lens tubes with either a 30 mm diameter coupling to the I.D. of the C60-TUBE, or with a 50 mm coupling on the O.D. of the lens tube.

With infinity microscope systems, the objective can be spaced away from the tube lens without changing the optical magnification. This "infinity space" provides a region where other optical systems can be coupled to the microscope relatively easily. For epi-fluorescent illumination, a filter cube with a dichroic beam splitter can be added to provide the illumination path.

The cube module accepts a standard Olympus U-MF2 filter cube and provides coupling to the objective, tube lens assembly, and a fiber illuminator optic.

The MIM system uses as standard 38 mm diameter coupling ring to attach standard modules together. Three or four set screws on each component lock to the coupling ring and provide a simple, accurate, and flexible method of assembly. Each coupling ring also provides a space to include a beam stop. Appropriately placed stops can significantly reduce scattered light in the system.

The minimum parts required to construct an infinity microscope system are the microscope objective, the tube lens, and a camera mount.

Basic Components

- Tube Lens Section image forming section with 200 mm f.l. tube lens
- C-Mount camera port.
- Infinity Space Beam Splitter Cube can be used for Epi-fluorescence filter cube or as right-angle objective adapter
- Objective Adapter options for Nikon CFI60, Mitutoyo, or Olympus RMS thread objectives
- Universal Coupling used on all infinity-space components for design flexibility

Optional Components

- C-Mount Beam Splitter provides a second camera/detector port
- Filter Wheel Adapter use with ASI FW1000 filter wheel
- Motorized positioner use ASI LS-50 stage to focus the microscope system
- Inverted or Upright test stand and ASI motorized stages

Specifications

Tube Lens	Standard 32 mm dia. x 200 mm f.l. Nikon Also 100 mm, 120 mm, 160 mm, 300 mm and 400 mm f.l. achromat tube lenses are available.
Beam Splitter	Olympus AX/BX/IX series cube U-MF2
Objectives Supported	Nikon CFI60 Series Mitutoyo LWD Series Olympus ∞ corrected
Camera Port	C-Mount, T-Mount, F-Mount, ENG-Mount
Illumination	Liquid Light Guide Adapter, Lamp Adapters, LED Sources Available.
Configurations	Limitless

