

Mantis Elite UV Stereo Inspection Microscope

for a wide range of ultra-violet inspection tasks



Mantis Elite UV is a patented stereo microscope, ideal for a wide range of non-destructive testing, crack & fatigue detection, conformal coating inspection of PCB's, UV medical adhesives & general UV inspection tasks.

- Superb stereo vision gives unsurpassed crack and coating visibility with its superb clarity and image definition
- Fast & accurate fault detection
- Enhanced productivity and reduced scrap rates
- Independent central switch for UV lamp
- Footswitch control for white light

Mantis Elite UV is a variant of Vision Engineering's Mantis Elite stereo microscope, offering clear, magnified imaging of UV fluoresced cracks, flaws and coatings. Fault detection is made more effective by magnification highlighting minute cracks and pitting.



Mantis Elite UV with swing away boom mount for added flexibility



Eyepieceless optics increase operator head freedom, reducing fatigue

Mantis Elite utilises Vision Engineering's patented Expanded-Pupil technology to provide up to 10 times greater freedom of head movement than conventional binocular eyepiece microscopes.

The Expanded-Pupil optics of Mantis Elite significantly increases head freedom and eye-relief, reducing operator stress and fatigue over long working periods. Mantis Elite is used in a wide range of industrial UV applications including Non-Destructive Testing, crack and fatigue detection, conformal coating inspection of PCBs, UV medical adhesives and general UV inspection tasks.

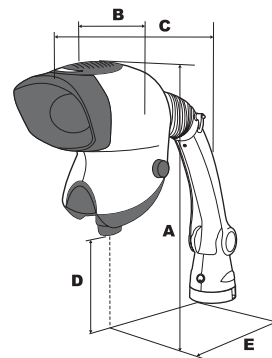
Technical Data

Optical Data		
Objective Lenses*	Working Distance	Field of View
x4	96mm	27.5mm
x6	73mm	19.2mm
x8	59mm	17.0mm
x10	54mm	13.5mm

* single mount objective replaces twin turret assembly.

Lighting Data	
Light intensity measured at subject. Wavelength peak at 375 ± 5 nanometers.	
2 high frequency concentric lamps UVA/White	7,000 Hours
1300 µw/cm ²	

Power Supply
100-120V 220V-240V A/C



Dimensions

- A = 415mm - 624mm
- B = 212mm
- C = 593mm - 802mm
- D = 83mm - 292mm
- E = 352mm - 622mm

Unpacked weight:
Head 3.0kg Stand 3.3kg

Packed weight:
Head 5.0kg Stand 4.6kg

Mantis Floor Stand with 360° Rotation

for inspection tasks with Mantis Compact and Mantis Elite requiring substantial height without compromising stability



Designed specifically for applications requiring substantial height without compromising stability, the floor stand provides a versatile 360° rotation option for Mantis Compact and Mantis Elite.

- Designed for use with the Mantis Compact or Mantis Elite optical head
- Allows easy movement around a large viewing area, without the need to build dedicated inspection stations or specialised fixtures
- Articulated arm attachment provides ability to place the head at any position within a 2m sphere around the top of the base unit

Stability and flexibility

The Mantis floor stand offers the perfect ergonomic solution for portable, magnified inspection over large areas, without the need to compromise stability. The high stability floor stand provides a perfect platform for a highly versatile articulated arm, providing a flexible solution with a full range of movement, allowing for rapid movement between inspection points without the need for complex adjustments.

Patented optics

The patented imaging system of Mantis provides excellent depth perception with optimal colour rendition, making inspection and manipulation straightforward, even when viewing intricate materials. Mantis has been designed to increase throughput and reduce errors by dramatically reducing eyestrain and body fatigue. Operators have a relaxed viewing position with a large field of view, long working distance and freedom of head movement. Mantis can also be used with glasses or contact lenses, if worn.

Unpacked weight:

Mantis Compact Head & Stand = 56kg
Mantis Elite Head & Stand = 56.5kg

Packed weight:

Mantis Compact Head & Stand = 57kg
Mantis Elite Head & Stand = 57.5kg

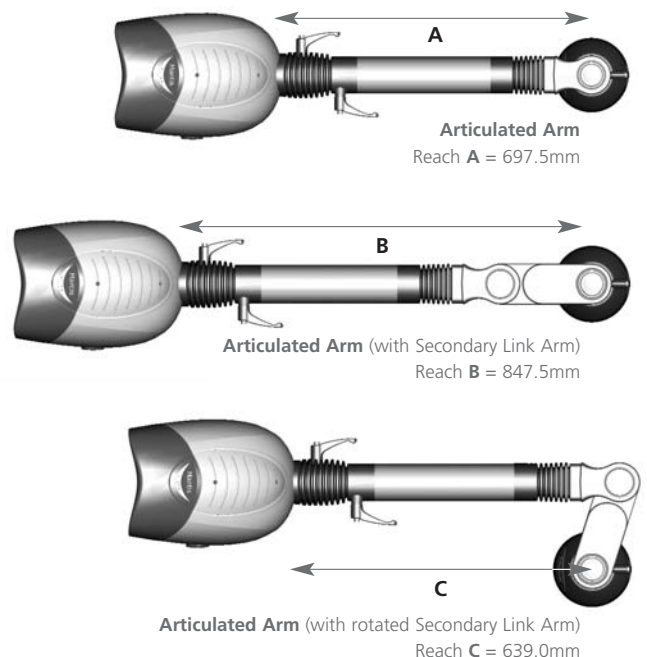
Power Supply:

All Mantis units are powered with a wall plug socket transformer, available in all worldwide plug configurations and delivering 9V DC to the Mantis illuminator in the optical head.



Mantis Compact, with articulated arm, secondary link and floor stand illustrated.

Articulated Arm Technical Specifications



For more information...

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