

# Mantis

## Ergonomic stereo microscopes

Superior imaging for a wide range of inspection and re-working tasks

Vision  
ENGINEERING



Patented optical technology allows operators freedom of head movement for superb ergonomics and hand-eye co-ordination, with the ability to wear glasses if required. All Mantis systems aid with productivity and quality improvements.

### Mantis Elite

Mantis Elite has enhanced optical performance, compared to the Mantis Compact, including higher magnification options, a large field of view and longer working distances.

- ✓ 2x - 20x magnification options with quick change turret allowing users to switch between low and high magnification
- ✓ Superb hand-eye co-ordination for inspection and re-working tasks
- ✓ Bright true color LED illumination provides up to 10,000 hours of shadow-free viewing

### Mantis Elite-Cam HD

Mantis Elite-Cam HD has all the features of the Mantis Elite, with the addition of an internally integrated USB digital camera, bringing image capture capabilities to the outstanding optical performance of Mantis.

- ✓ Quickly and simply add annotations / mark-up to captured images using the ViCapture software supplied
- ✓ Video recording (.avi), ideal for training purposes
- ✓ Optimized camera settings for individual applications, including white balance, gain, contrast, color channel gain

### Mantis Compact

Mantis Compact is a stereo microscope which excels in the low magnification range for inspection or manipulation tasks where bench magnifiers have traditionally been used.

- ✓ 2x, 4x, 6x and 8x quick change objectives
- ✓ Patented eyepiece-less optics maximise head freedom providing unrivalled ergonomic performance
- ✓ Small footprint

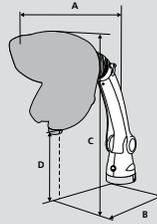
# Technical details

## Stand options

### Universal Stand



### Bench Stand



### Mantis Compact

**Dimensions:**  
**A** = 22.24" (565mm)  
 - 30.51" (775mm)  
**B** = 13.19" (335mm)  
 - 21.96" (545mm)  
**C** = 15.55" (395mm)  
 - 23.82" (605mm)  
**D** = 4.33" (110mm)  
 - 12.60" (320mm)

**Unpacked Weight:**  
 Head 4.63lbs (2.1kg)  
 Stand 7.28lbs (3.3kg)

**Packed Weight:**  
 Head 9.04lbs (4.1kg)  
 Stand 10.14lbs (4.6kg)

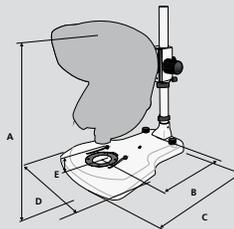
**Power:**  
 9V DC external plug transformer, available in all worldwide plug configurations.

### Mantis Elite/Elite Cam HD

**Dimensions:**  
**A** = 23.35" (593mm)  
 - 31.57" (802mm)  
**B** = 13.86" (352mm)  
 - 24.49" (622mm)  
**C** = 16.34" (415mm)  
 - 24.57" (624mm)  
**D** = 4.06" (103mm)  
 - 12.28" (312mm)

**Unpacked Weight:**  
 Head 6.61lbs (3.0kg)  
 Stand 7.28lbs (3.3kg)

**Packed Weight:**  
 Head 11.02lbs (5.0kg)  
 Stand 9.92lbs (4.6kg)



### Mantis Compact

**Dimensions:**  
**A** = 18.70" (475mm)  
 - 23.93" (608mm)  
**B** = 11.81" (300mm)  
**C** = 14.96" (380mm)  
**D** = 12.99" (330mm)  
**E** = 10.08" (256mm max.),  
 less working distance

**Unpacked Weight:**  
 Head 4.63lbs (2.1kg)  
 Stand 13.23lbs (5.0kg)

**Packed Weight:**  
 Head 9.04lbs (4.1kg)  
 Stand 18.52lbs (8.4kg)

**Power:**  
 100-240VAC 50-60HZ 1.0A Max, available in all worldwide plug configurations.

### Mantis Elite/Elite Cam HD

**Dimensions:**  
**A** = 19.17" (487mm)  
 - 24.41" (620mm)  
**B** = 11.81" (300mm)  
**C** = 14.96" (380mm)  
**D** = 12.99" (330mm)  
**E** = 10.04" (255mm max.),  
 less working distance

**Unpacked Weight:**  
 Head 6.61lbs (3.0kg)  
 Stand 11.02lbs (5.0kg)

**Packed Weight:**  
 Head 11.02lbs (5.0kg)  
 Stand 18.52" (8.4kg)

Mantis Head and Stand Options		
Mantis Compact	Part No.	
<b>Head</b>	MCH-001	
<i>Illumination: Light intensity measured at subject plane with color correction filters</i>		
20 LED	9.400 LUX	Up to 10,000 hours
<b>Universal Stand</b>	MCS-005	
<b>Bench Stand</b>	MBS-002	
<i>Substage illumination details (bench stand only)</i>		
58 LED	2.700 LUX	Up to 10,000 hours
<b>Mantis Elite</b>		
<b>Head</b>	MEH-001	
<i>Illumination: Light intensity measured at subject plane with color correction filters</i>		
24 LED	11.000 LUX	Up to 10,000 hours
<b>Universal Stand</b>	MES-005	
<b>Bench Stand</b>	MBS-002	
<i>Substage illumination details (bench stand only)</i>		
58 LED	2.700 LUX	Up to 10,000 hours
<b>Mantis Elite Cam HD</b>		
<b>Head</b>	MHD-001	
<i>Illumination: Light intensity measured at subject plane with color correction filters</i>		
24 LED	11.000 LUX	Up to 10,000 hours
<b>Universal Stand</b>	MES-005	
<b>Bench Stand</b>	MBS-002	
<i>Substage illumination details (bench stand only)</i>		
58 LED	2.700 LUX	Up to 10,000 hours

Mantis Compact - Optical Data			
Objective lens	Working distance	Field of view	Part No.
<b>2x</b>	6.57" (167mm)	1.77" (45.0mm)	MCO-002
<b>4x</b>	3.78" (96mm)	1.08" (27.5mm)	MCO-004
<b>6x</b>	2.87" (73mm)	0.76" (19.2mm)	MCO-006
<b>8x</b>	2.30" (58.5mm)	0.56" (14.3mm)	MCO-008

Mantis Elite / Elite Cam HD - Optical Data			
Objective lens	Working distance	Field of view	Part No.
<b>2x</b>	6.30" (160mm)	2.24" (57.0mm)	MEO-002
<b>4x</b>	3.78" (96mm)	1.34" (34.0mm)	MEO-004
<b>6x</b>	2.68" (68mm)	0.91" (23.0mm)	MEO-006
<b>8x</b>	2.32" (59mm)	0.67" (17.0mm)	MEO-008
<b>10x</b>	2.13" (54mm)	0.53" (13.5mm)	MEO-010
<b>15x</b>	1.57" (54mm)	0.35" (8.8mm)	MEO-015
<b>20x</b>	1.14" (29mm)	0.23" (6.5mm)	MEO-020

Mantis Elite Cam HD Camera	
Part Number	MHD-001
<b>Sensor type</b>	CMOS
<b>Resolution (HxW)</b>	1600 x 1200 pixels
<b>Sensor size</b>	1/3"
<b>Pixel size</b>	2.8µm
<b>Color depth</b>	8 bits
<b>Refresh rate (fps)</b>	18,3 fps max.
<b>Interface</b>	USB 2.0
<b>File formats</b>	BMP, JPEG, PNG
<b>Power supply</b>	USB powered
<b>Supplied software</b>	uEye Cockpit and ViCapture