

MV-MZS300H-100

Zoom Microscope System



Introduction

MV-MZS300H-100 zoom microscope system has an embedded operating system to support multi-image processing. It can be directly connected to a monitor without a computer, providing image acquisition and viewing in real time.

Available Model

MV-MZS300H-100

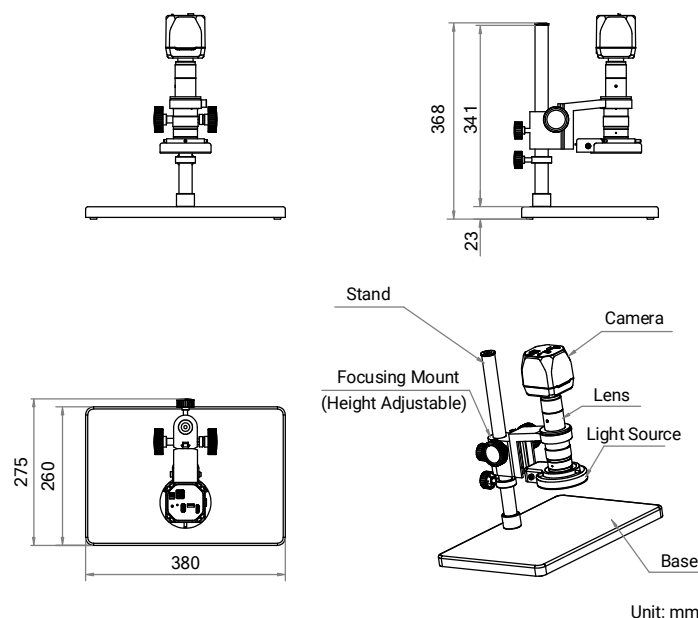
Applicable Industry

Electronic semiconductor, PCBA, biomedical industry, etc.

Dimension

Key Feature

- Provides clear image with low distortion.
- Supports 4 MP high-quality image and 30 fps frame rate.
- Provides HDMI interface to connect to a monitor directly.
- Provides USB interface to connect to a mouse or a USB flash disk.
- Provides USB 3.0 interface to connect to the PC for operation on the client software.
- Supports image storage and image-related parameter adjustment.
- Supports measurement functions and report generation.



Model	MV-MZS300H-100
Performance	
Sensor type	CMOS, rolling shutter
Pixel size	2.9 μm $\times$ 2.9 μm
Sensor size	1/1.88"
Resolution	2560 $\times$ 1440
Max. frame rate	30 fps
Gain	0 dB to 18 dB
Exposure time	300 μs to 100 ms
Mono/color	Color
Exposure mode	Auto/manual
Vision tool	● Image process: White balance, brightness, sharpness, contrast, saturation, digital gain, Gamma correction, digital WDR, noise reduction. ● Auxiliary functions: Image reverse, cross line, grid line, ruler, scale, image freezing, capture, recording, storage. ● Measurement: Report export, calibration, point measurement, line measurement, circle measurement, angle measurement, polygon measurement, polyline measurement, curve measurement, line/circle auto measurement
Lens	
Ocular lens	0.5 x
Objective lens	0.6 x to 4.5 x
Optical magnification	0.3 x to 2.25 x
Digital magnification	20 x to 144 x (with a 21.5" monitor)
Field of view (range)	3.3 mm $\times$ 1.9 mm to 24.7 mm $\times$ 13.9 mm
Working distance	100 $\pm$ 5 mm
Light source	
Color	White
Color temperature	6500 K to 7000 K
Brightness level	0% to 100%
Bore dimension	Φ 61 mm
Electrical feature	
Transmission interface	HDMI
Console interface	USB 2.0 $\times$ 2, USB 3.0 $\times$ 1, micro SD card interface $\times$ 1
Power supply	12 VDC to 24 VDC / 1 A
Power consumption	Camera: Typ. 3.6 W @ 12 VDC
Power	Light source: 3.5 W
Mechanical	
Focusing mount	Lifting height: 62 mm
Dimension	Camera: 75 mm $\times$ 75 mm $\times$ 86.9 mm (3.0" $\times$ 3.0" $\times$ 3.4"); lens: Φ 58 mm $\times$ 166.3 mm (2.3" $\times$ 6.5") Light source: Φ 97 mm $\times$ 123.5 mm (3.8" $\times$ 4.9"); stand: Φ 25 mm $\times$ 341 mm (1.0" $\times$ 13.4") Base: 380 mm $\times$ 260 mm $\times$ 23 mm (15.0" $\times$ 10.2" $\times$ 0.9")
Weight	Approx. 3000 g (6.6 lb.)
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)
Humidity	20% RH to 95% RH (no condensation)