# EIM Series
## Inspection Microscope

- Built-in software for measurement (no PC connection required)
- High resolution with high definition optical image viewing
- Detent zoom lens for flexible zoom changing
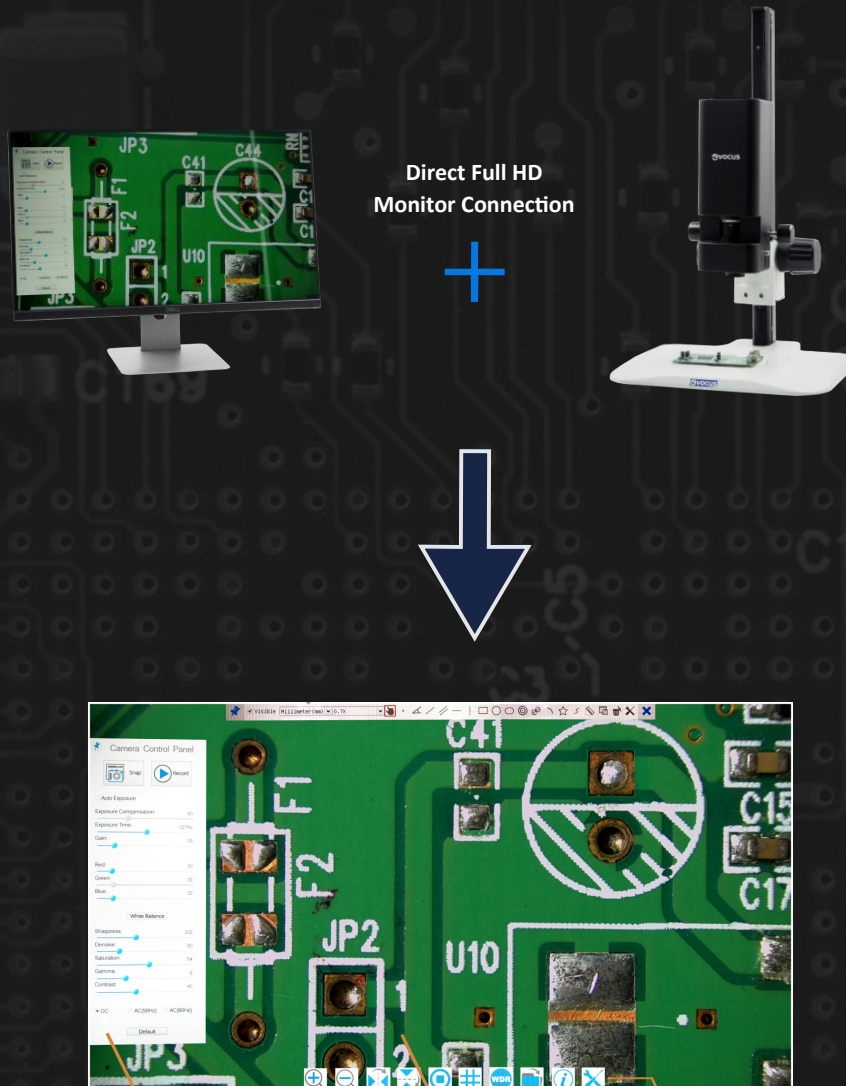- Built-in image capture and video record to SD card

# Features

- High resolution with big zoom ratio 1:8.3

- Parallel optical system

- Whole focus, uniform illumination

- Built-in software for measurement (no PC connection required)

- All in 1 (HDMI+WIFI+SD card) C-mount camera with high sensitivity CMOS sensor

- Simultaneous HDMI & WIFI output

- Built-in mouse control

- Built-in image capture & video record to SD card

- Built-in camera control panel for mouse control

- Built-in toolbar including zoom, mirror, comparison, freeze, cross,browser functions

- Built-in image & video browsing, display & play

- Ultra-Fine color engine with perfect color reproduction capability(USB)

# System Diagram



**Direct Full HD Monitor Connection**

+

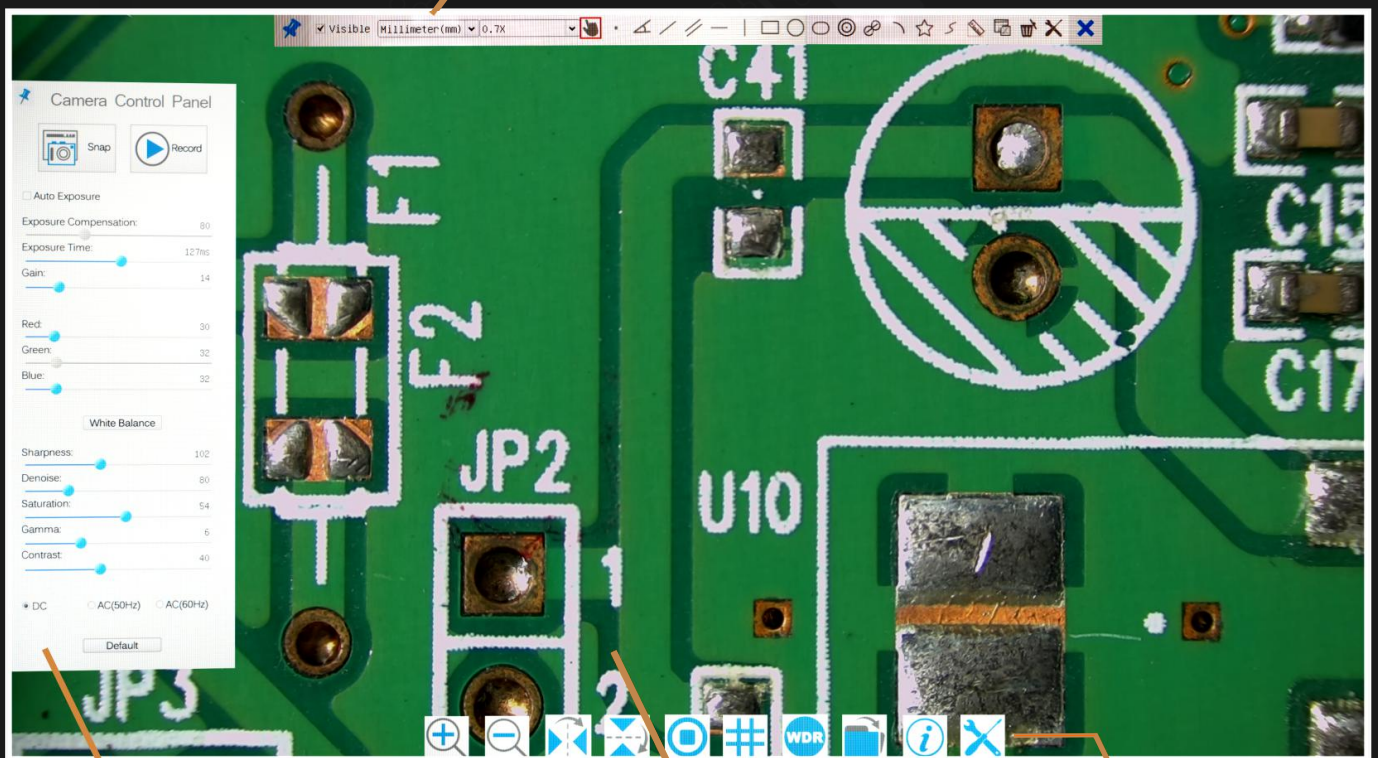**Users can start doing measurement, without PC connection required!**

## Potential Application

- Scientific Research, Education (Teaching, Demonstrating, and Academic Exchange)
- Digital Laboratory, Medical Research
- Industrial Visual (PCB Examination, IC Quality Control)
- Medical Treatment (Pathological Observation)
- Food (Microbial Colony Observation and Counting)
- Aerospace, Military (High Sophisticated Weapon)

# Software Interface

## Measurement Toolbar

- Circle
- Rectangle
- Vertical Line
- Horizontal Line
- Parallel Line
- Angle
- Calibration Setting



## Camera Control Panel

- Capture Image
- Record Video
- Adjust Image Exposure
- Adjust Image Color
- Setting White Balance
- Adjust Sharpness
- Adjust Saturation

## Live View Image

## Menu Toolbar

- Zoom In/Out
- Flip/Rotate Image
- Freeze Live Image
- Indicator Line
- Wide Dynamic Range Setting
- Browse Save Image/Video
- Microscope Setting

## Detent Zoom Lens with Knob

With this flexible zoom changing mechanism knob, user can detent zoom at each magnification point from 0.6x, 0.8x, 1.0x, 1.5x, 2.0x, 2.5x, 3.0x, 3.5x, 4.0x, 4.5x, and 5.0x.

## User-friendly Interface and Button

The interface of this inspection microscope is a user-friendly. From this interface, user can turn On/Off their microscope, slot in SD card, and connect mouse to control live view function.

| USB | USB Camera or Mouse |
|---|---|
| HDMI | HDMI Output |
| DC12V | 12V Power In |
| SD | SD Card Slot |
| ON/OFF | Power On/Off Switch |
| LED | Power On Indicator |

## Solid and Rigid Build-Up

The casing is made up from hard steel material, hence giving this microscope a solid and rigid structure. It is also coated with matte black paint to prevent from rusting to withstand and maintain the condition of the microscope in any condition.

## High Track Stand

Give user the ultimate range of working distance with the high track length (up to 500mm height).

| Height of Track Stand | 500mm |
|---|---|
| Travel Distance | 460mm |
| Base Size | 320 x 305 x 16mm |
| Reading Precision | 0.1mm |
| Black and White Plate Diameter | 95mm |

| Model | EIM |
|---|---|
| CCD Adaptor | 0.5X |
| Total Magnification | 0.3X – 2.5X |
| Field of View (mm) | 16 x 12 – 1.9 x 1.4 |
| Sensor & Size | 1080P/2M/Sony IMX185 (C) 1/1.9" (7.20 X 4.05) |
| Pixel (μm) | 3.75 x 3.75 |
| G Sensitivity Dark Signal | 1120 mv with 1/30s<br>0.15 mv with 1/30s |
| FPS Resolution | 60 @ 1920 x 1080 (HDMI)<br>25 @ 1920 X 1080 (WiFi) |
| Binning | 1 x 1 |
| Exposure | 0.06ms ~ 918ms |
| **Other Specification for HDMI Output** | |
| UI Operation | With USB Mouse |
| Image Capture | JPEG Format with 2M Resolution in SD Card |
| Video Record | ASF Format 1080P 30fps in SD Card |
| Camera Control Panel | Including Exposure, Gain, White Balance, Color Adjustment, Sharpness and Denoising Control |
| Toolbar | Including Zoom, Mirror, Comparison, Freeze, Cross, Browser Function |
| **Operating Environment** | |
| Operating Temperature (in centidegree) | -10 ~ 50 |
| Storage Temperature (in centidegree) | -20 ~ 60 |
| Operating Humidity | 30 ~ 80%RH |
| Storage Humidity | 10 ~ 60%RH |
| Power Supply | DC 12V/2A Adaptor |

500mm

320mm

316mm