

#### INTRODUCTION

ACUCAL Microscopy cameras are particularly remarkable for their fast live images, short reaction times, high resolution and clear contrast. And they are compatible with almost all microscopes. Our product range covers digital Microscope Cameras with intuitive software for archiving, measurement, analysis and presentation. 100% reproducibility of the exposures and highly convenient remote control of the cameras and ensure a fast and economical workflow.



- ACUCAM-5MP HDMI camera is a multiple interfaces (HDMI+USB/Wifi+SD card) CMOS camera and it adopts ultra-high performance CMOS sensor as the image-picking device. USB2.0 is used as the data transfer interface.
- For HDMI output, a camera control panel and toolbar are overlaid on the HDMI screen, in this case, the USB mouse can be used to set the camera, browse and compare the captured image.
- For USB output, unplug the mouse and plug in the USB cable or plug wifi stick into your PC USB , then the video stream can be transfer to computer with the supplied software.

#### FEATURES

- All in 1( HDMI+USB/WIFI+SD card) C-mount camera with high sensitivity CMOS sensor.
- Support still image capture(JPEG, BMP, TIFF, PNG, PCX, TGA, TIF, DICOM) & Video Recording.
- Simultaneous HDMI & USB output.
- Built-in mouse control.
- Built-in image capture & video record to SD card.
- Built-in camera control panel for mouse control.
- Interfaced to a computer via USB2.0 technology for rapid image download.
- Plug-to-use, suitable for imaging of any standard Biological, Stereo and Metallurgical microscopes for observations, such as bright field, DIC, phase contrast and fluorescence.
- Integrated zinc aluminum alloy housing;
- Ultra-Fine color engine with perfect color reproduction capability;
- With advanced video & image processing application with basic image processing tools and annotations.

#### FIELDS OF APPLICATION

Materialography  
Quality Control  
Pathology

Inspection Industry  
Geology  
Forensic

Patrography  
Mineralogy  
Cell Biology

#### INTERFACE & BUTTON FUNCTIONS

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

#### SPECIFICATION

- **Image Sensor:** 1/2.8"
- **Frame Rate:** 30 fps at 1920X1080 (HDMI & USB)
- **Pixel Size:** 3.2  $\mu\text{m}$  x 3.2  $\mu\text{m}$
- **Sensitivity:** 0.15 mv with 1/30s
- **Scan Mode:** Progressive Scan
- **Operating Temperature :** 0° C to + 50° C
- **Operating Humidity:** 30%-80%, Non-condensing
- **Exposure Time:** 0.1 ms to 10s
- **Auto Exposure:** Automatic / Manual
- **White Balance:** Automatic / Manual
- **Shutter:** Electronic Rolling
  - **Other Specification for HDMI Output**
    - UI Operation : With USB Mouse
    - Image Capture : JPEG Format with 5MP Resolution in SD Card
    - Video Record : 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
  - **Other Specification for USB Output**
    - White Balance : Auto White Balance
    - Color Technique : Ultra-Fine Color Engine (USB)
    - Recording System : Still Picture or Movie (USB)