

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.



FEATURES

- Standard C-mount CMOS Sensor Color Camera.
 - No compression, no interpolation.
 - Support still image capture(JPEG, BMP, TIFF, PNG, TGA, TIF, DICOM) & Video Recording.
 - USB3.0 interface, up to 480MPS, external power no need.
 - Interfaced to a computer via USB3.0 for attaching camera to desktop/ through single wire with suitable C-mount camera adapter 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.
 - Ease of operation; only take 5 minutes to master the friendly software.
 - Standard C-Mount makes connection to any microscope easy.
 - Integrated zinc aluminum alloy housing.
 - Ultra-Fine TM color engine with perfect color reproduction capability.
 - With advanced video & image processing application software
 - Natural Cooling System
 - Capture/Control API: Native C/C++, C#, DirectShow, Twain and Labview.
- Windows/Linux/macOS/Android multiple platform SDK.

FIELDS OF APPLICATION

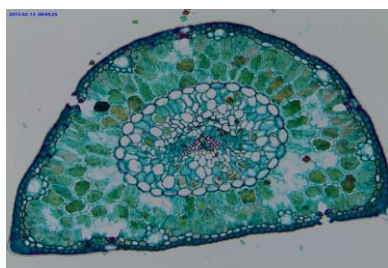
Materialography
Quality Control
Pathology

Inspection Industry
Geology
Forensic

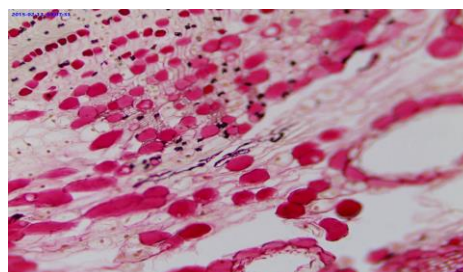
Patrography
Mineralogy
Cell Biology

SPECIFICATION

Parameter	ACUCAM-20MPA	ACUCAM-20MPB
Image Sensor	1" (13.06*8.76) Single Plate type SONY Color CMOS, 20.0 Megapixel	1/1.8" (7.17*5.38) Single Plate type SONY Color CMOS, 20.0 Megapixel
Frame Rate	15@5440x3648 50@2736x1824 60@1824x1216	15@5120x3840 45@2560x1920
Pixel Size	2.4 μm x 2.4 μm	1.4 μm x 2.3 μm
Signal/Noise	35.5 dB	35.5 dB
Dynamic Range	65.3 dB	65.3 dB
Digital Output	8 and 16-bit	8 and 16-bit
ADC Conversion	8 Bit - 12 Bit	12 Bit
Read Noise	7 e- rms	7 e- rms
Dark signal	0.21 mV at 1/30sec	0.21 mV at 1/30sec
Sensitivity	462 mV at 1/30sec & 0.724V/lux-sec	462 mV at 1/30sec & 0.724V/lux-sec
Color Depth	1 Bit; 4 Bit; 8 Bit; 24 Bit	1 Bit; 4 Bit; 8 Bit; 24 Bit
Binning	1x1; 2x2, 3x3	1x1; 2x2
Scan Mode	Progressive Scan	Progressive Scan
Spectral Range	380-650 nm (IR-cut filter)	380-650 nm (IR-cut filter)
Power Requirement	PC USB bus power	PC USB bus power
Operating & Storing Temperature	-20° C to +60° C	-20° C to +60° C
Operating & Storage Humidity	10%-90%, Non-condensing	10%-90%, Non-condensing
Exposure Time	0.1 ms to 30s	0.13 ms to 15s
Auto Exposure & White Balance	Automatic / Manual ROI White Balance/Manual Temp Tint Adjustment	
Gain Programmable	Interface Connector Standard USB 3.0 high-speed interface.	Interface Connector Standard USB 3.0 high-speed interface.
Shutter	Electronic Rolling	Electronic Rolling
C-mount	1.0x recommended	0.5x/1.0x



Pine Leaf



Ten Year Pine Stem