

# 319CU MICROSCOPY CAMERA

## High Speed High Fidelity

The second generation 319CU camera builds on and improves upon the architecture of its predecessor by offering faster frame rates than ever possible before on USB 2.0 microscopy cameras. The 319CU camera delivers 12 frames per second at full resolution (2048 x 1536), which is twice the rate offered on prior models without any compromise in image quality as the noise level has been reduced by 90% with the introduction of a new heat dissipation and circuit design. With 32MB of onboard memory the 319CU holds a significant amount of data generated by the image sensor and then transfers captured images to the computer via USB 2.0 bulk transfers. This design promotes frame integrity, faster data rates and allows for multiple simultaneous camera connections. The 319CU is designed for use in brightfield microscopy applications.



## Specifications

Resolution	3.2 MP
Power	USB Bus
Bit Depth	10-bit Digitization & Processing 8-bit RGB Uncompressed Output
Master Clock	48MHz
Enclosure	Die Cast Aluminum
Microscope Interfacing	Stainless Steel C-mount
Recommended Video Adaptor	0.5X
Sensor Technology	CMOS
Pixel Array	2048H x 1536V Arbitrary Simultaneous Windowing, Binning & Sub-sampling
Sensitivity	1.0V/Lux-Second at 550nm
Pixel Size	3.2µm x 3.2µm
Signal-to-Noise Ratio	43dB
Imaging Area	6.55mm x 4.92mm 8.19mm Diagonal
Electronic Shutter Type	Rolling
Frame Rate	12FPS at Full Resolution Proportional to Window Size/Decimation Factor
Maximum Exposure Time	26 Seconds
OS Compatibility	32-bit & 64-bit Windows 7 32-bit Windows Vista & XP
IR Filter	BP680



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