DATA SHEET

COOLSNAP FX SYSTEM

CoolSNAP fx Color

Photometrics

1300 x 1030 imaging array
6.7 x 6.7-µm pixels

The Photometrics CoolSNAP$_{fx}$ Color camera is a fast, high-resolution digital camera system designed for scientific and industrial applications. This cooled CCD camera system provides 12-bit digitization at 20 MHz to achieve high color fidelity. The fine pitch of the pixels, 6.7 x 6.7 microns, is ideally matched to the resolution of optical microscopes. Megapixel resolution and small pixels allow imaging of very fine detail, making the CoolSNAP$_{fx}$ Color camera ideal for high-resolution color microscopy.

FEATURES	BENEFITS
20-MHz digitization	Fast image readout for high-speed focus and image capture
1300 x 1030 imaging array 6.7 x 6.7-µm pixels	Resolves fine detail Ideally matched to optical microscope
Flexible binning and readout	Increases light sensitivity while increasing the frame rate
12-bit digitization	Quantifies both bright and dim signals in the same image
Thermoelectric cooling	Long integration times for higher sensitivity
C-mount	Easily attaches to microscopes, standard lenses, or optical equipment
PCI interface	Works with PC, Macintosh, or Linux®
Interline, progressive-scan CCD	Electronic shuttering eliminates camera vibration and facilitates fast triggering

ROPER SCIENTIFIC QUALITY ECONOMICAL COLOR EXPERIMENT READY

Photometrics CoolSNAP fx™

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SPECIFICATIONS

CCD image sensor	Sony ICX085; progressive-scan CCD
CCD format	1300 x 1030 imaging pixels; 6.7 x 6.7-µm pixels; 8.71 x 6.90-mm imaging area (optically centered)
Grade	Grade 0: 0 point defects, 0 cluster defects, 0 column defects (based on CCD manufacturer's cosmetic blemish definitions)
Linear full well	18,000 e^- (single pixel) typical; 30,000 e^- (2x2 binned pixel) typical
Read noise	<15 e^- rms @ 20 MHz typical
Readout bits/speed	12 bits @ 20 MHz or 10 MHz; software selectable
Frame readout	94 ms/frame
CCD temperature	-30˚C regulated
Dark current	0.01 e^-/p/s (-30˚C)
Color mask	RGB Bayer mosaic filter
Operating environment	0 to 30˚C ambient, 0 to 80% relative humidity noncondensing

Note: Specifications are typical and subject to change.

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PHOTOMETRICS

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