

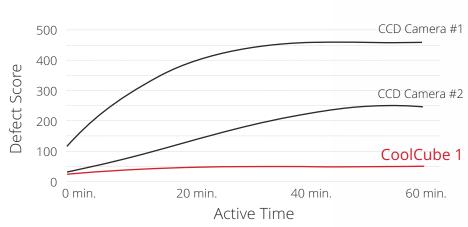
Find out how MetaSystems' super low noise cameras can improve image quality.

USB-Camera for Color and Monochrome Imaging

Extremely low image noise due to optimized housing

MetaSystems introduces CoolCube 1, a digital high resolution progressive scan CCD camera combining superior technical features with an attractive price. CoolCube 1 is available as a monochrome version (CoolCube 1m) or as a Bayer-mask color version (CoolCube 1c).

CoolCube 1 is compatible with all MetaSystems' imaging products. Due to its very low power consumption and optimized housing design CoolCube 1 keeps the imaging sensor cool. This results in unusually low thermal noise. CoolCube is therefore particularly suited to low light level situations and fluorescence imaging.



Comparison of noise level of different CCD cameras using the same sensor chip clearly shows the superior performance of the CoolCube 1. Graphs of defect score (pixels with increased noise current) as a function of operating time.







Resolution/Pixel Size 1360 x 1024 pixels; 6.45 μm x 6.45 μm

Sensor 2/3" EXview HAD CCD™, quadratic pixels,

monochrome or color (BAYER pattern)

Order Number CoolCube 1m (monochrome): H-0310-009-MS

CoolCube 1c (color): H-0310-010-MS

Frame Rate 15 fps @ full resolution

Full Well Capacity 17,000 e Digitization Depth 12 Bit

Shutter **Global Shutter** Exposure Time 20 µs to 270 s

1 - 16 Gain

Data Interface High Speed USB 2.0 USB powered; 2.4 W

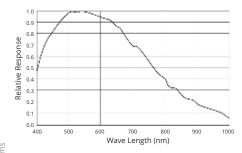
Power Supply / Power

Consumption

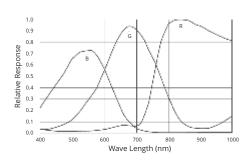
Internal Image Memory 32 MByte Mechanical Interface C-Mount

Dimensions 70 mm x 70 mm x 70 mm

Weight 730 g



Spectral response of CoolCube 1m (monochrome)



Spectral response of CoolCube 1c (color)

MetaSystems

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COOLCUBE 1

