

MACHCAM 71 MP

You Have to Know the Difference to Make the Difference

Introducing Crowley's 71MP Machine Vision Camera

For more than three decades, The Crowley Company has successfully operated worldwide as a unique blend of engineer, manufacturer and micrographic and digital archiving authority. We know cameras. We know resolutions. We know image clarity. We know imaging specifications.

In an exciting new development, The Crowley Company has designed the programmable features of the CHR70M sensor into two easily-implemented 71MP custom machine vision cameras: the **MACHCAM 71C** and the **MACHCAM 71M**. The goal? To produce clear images with the highest resolutions available on the market today for a wide variety of industry applications.

ABOUT THE MACHCAM 71 SERIES

MACHCAM 71C RGB color camera

MACHCAM 71M Monochrome (grayscale)

Key Features:

- Designed with a small camera case for easy integration into existing imaging products (economy of scale)
- Meets the preservation imaging guidelines of NARA (National Archives and Records Administration), Metamorfoze and FADGI (Federal Agencies Digitization Guidelines Initiative)
- USB 3.0 compatible
- Software Development Kit (SDK) included
- Internal trigger mode
- F-mount standard

INDUSTRY APPLICATIONS

- Archival Scanning (Documents and Micrographics)
- LCD/PCB Inspection
- Aerial Imaging
- Scientific Imaging
- Medical Imaging
- Aeronautics
- Packaging and Inspection
- Transportation
- Law Enforcement
- Military
- More



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ABOUT THE **MACHCAM** 71 MEGAPIXEL CAMERA IMAGE SENSOR

After exhaustive research, The Crowley Company chose the CHR70M, the world's highest resolution CMOS image sensor, for implementation into the MACHCAM 71C and MACHCAM 71M. Produced by CMOSIS, these sensors provide an excellent base for Crowley's high-end machine vision cameras.

SENSOR SPECIFICATIONS

Specification	Value
Resolution	70MP
Pixel Size	3.1 x 3.1 μm^2
Optical Format	35mm
Active image size	31x22mm
Shutter Type	Electronic rolling shutter with true CDS correction
Frame Rate	3 fps at full resolution
Sensitivity	0.88 V/lux.s
Conversion Gain	64 $\mu\text{V}/\text{e}^-$
Full Well Charge	13000 e^-
Dark Noise	7 e^- (RMS)
Dynamic Range	63 dB
SNR Max	41.1 dB
Dark Current	3.2 e^-/s (25 degC)
Fixed Pattern Noise	< 0.09% of full swing)
Chroma	Mono and RGB
Operating Temperature Range	0 to +60 degC
RoHS compliance	Yes



CAMERA SPECIFICATIONS

Housing size	3.25 x 3.25 x 2.5" / 83 x 83 x 63.5 mm
Pixel count	10000 x 7096 active pixels
USB 3.0 compatible	External frame grabber not required
Software development kit, DLL	Included
A/D Bits	12 bits
Voltage/Power	12V DC / ~10 watts nominal
Weight	1.39 lbs. / 630 grams
F-mount standard	Custom mounts upon request

ABOUT CROWLEY

The Crowley Company is a world-leader in digital and analog film technologies, providing an extensive number of digital document and film conversion equipment and services worldwide. The four divisions of the company include manufacturing, distribution, technical support and conversion services. Offices are located in Frederick, Md., San Dimas, Ca. and Basingstoke, U.K.

Rev 08/16

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