

You Have to Know the Difference to Make the Difference

Introducing Crowley's 71MP Machine Vision Camera

or 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 with micro lenses

MACHCAM 71M Monochrome (grayscale) with micro lenses

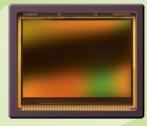
Key Features:

- 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)
- CamLink Interface
- USB3/GigE interface under production

INDUSTRY APPLICATIONS

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







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

Part status

Resolution

Pixel Size

Optical Format

Shutter Type Frame Rate

Output Interface

Sensitivity

Conversion Gain

Full Well Charge

Dark Noise

Dynamic Range

SNR Max

Parasitic Light Sensitivity Extended Dynamic Range

Dark Current

Fixed Pattern Noise

Chroma

Supply voltage

Power

Operating Temperature Range

RoHS compliance

Package

Value

Production

70MP - 10000 (H) x 7096 (V)

 $3.1 \times 3.1 \, \mu m2$

35mm

Electronic rolling shutter with true CDS correction

3 fps

8 analog channels

0.88 V/lux.s

64 uV/e-

13000 e-

7 e- (RMS)

63 dB

41.1 dB

No

 $3.2 \, \text{e-/s} \, (25 \, \text{degC})$

< 0.09% of full swing)

Mono and RGB

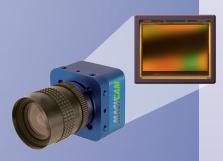
3.3V

300 mW

-30 to +70 degC (TBC)

Yes (TBC)

65 pins PGA



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 and Basingstoke, U.K.













