

# 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

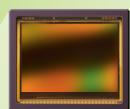
**MACHCAM 71M** Monochrome (grayscale)

### **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)
- USB3
- 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







## 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

**Value Specification 70MP** Resolution Pixel Size  $3.1 \times 3.1 \, \mu m2$ 35mm **Optical Format** 

31x22mm Active image size

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 uV/e-Full Well Charge 13000 e-7 e- (RMS) Dark Noise

63 dB Dynamic Range **SNR Max** 41.1 dB

Dark Current  $3.2 \, \text{e-/s} \, (25 \, \text{degC})$ Fixed Pattern Noise < 0.09% of full swing) Chroma Mono and RGB

-30 to +70 degC (TBC) Operating Temperature Range

RoHS compliance Yes (TBC)

### **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.













