

# RMV-71

10,000 x 7096 - 3.1µm pixel



## Rolling Shutter CMOS



The **RMV-71** is a CMOS digital camera with an astounding 71 million pixels ! The RMV-71 is available in color and mono versions and is designed for use in industrial machine vision, aerial imaging and document imaging applications.

The RMV-71 offers outstanding quality using the CMOSIS CHR71M CMOS sensor. The image sensor has 8 analog outputs (8-tap) each running up to 42.5MHz. This results in 4.2fps at full resolution. Higher frame rates can be achieved in ROI/windowing mode.

The RMV-71 camera has all the rugged RMV features, such as industrial design, military de-rated components, and a CNC machined case. The sensor is 3-point mounted for flatness and back focus.

### RMV-71 Highlights

- 10,000 x 7096 = 70,960,000 pixels with 3.1 µm pixel
- Monochrome, RGB Bayer and Monochrome No micro-lens versions
- Rolling Shutter CMOS
- Windowing ROI capability
- Dynamic range 64 dB
- 8 Taps at up to 42.5MHz
- 4.22 fps at full resolution, faster when windowed
- Field-updatable firmware and flat field correction
- Camera Link and USB3 output
- F-Mount standard, other lens mounts available

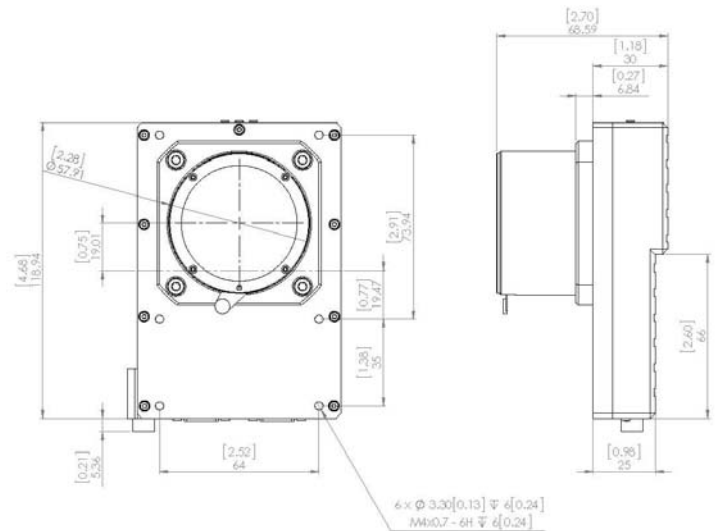
## RMV-71 Specifications

Sensor	CMOSIS CHR71M
Architecture	Rolling shutter CMOS
Configuration	Mono, RGB Bayer
Active pixels	10000 (H) x 7096 (V)
Pixel size	3.1 x 3.1 $\mu\text{m}$
Active image size	31 x 22 mm
Outputs	8 analog from sensor. Digitized and output as 8/10/12 bits
Frame rates	Base Mode CL: 2.1fps Medium format CL: 3fps Medium format Overclock CL: 4.2fps
Dynamic range	64 dB
Clock speed	Up to 42.5 MHz per tap, 8 taps.
Full well charge	>15Ke
Rolling shutter	Min exposure 66us.
Dark Noise	10e -
Dark current	3.2 e-/s at room temperature
Power	7-12VDC at 4-6W
Exposure modes	Free Run, Triggered, Triggered Flash, Triggered Shutter
Mount options	F-mount, OEM configuration, Custom
Status display	Color OLED
Defect Correction	Row, Column, Pixel, Flat Field Column gain and offset
Options	Call for OEM options

## Software

All illunis cameras come with our free camera control software, which allows interactive setup of all camera parameters.

## Dimensions



## Applications

DNA Sequencing  
LCD inspection  
Document scanning  
Scientific imaging  
Military applications  
Persistent Surveillance  
PCB inspection

Not Applicable for Biometric applications

ROI increases frame rates:

HD (1920x1080) at 96+ fps  
UHD (3840x2160) at 30+ fps  
29M (6575x4384) at 9.8 fps  
50M (8176x6132) at 5.8 fps  
VGA (640x480) at 357 fps

**illunis specializes in custom OEM camera designs**

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