



# CMV-51 CL

*Global Shutter CMOS*

**8424 x 6032 - 4.6µm PIXEL - 35mm Format**



*The CMV-51 features the latest generation Gpixel GMAX4651 4.6µm charge-domain global shutter sensor. 51MP equates to 24x the resolution of full HD. The CMV-51 is ideal for food and automotive inspection as well as UAV and aerial imaging applications.*

The CMV-51 offers outstanding quality by using the Gpixel GMAX4651 CMOS sensor. The image sensor has 14 digital outputs each running up to 50Mhz. This results in 10.1 fps at full resolution in CameraLink full mode. Higher frame rates can be achieved in ROI/windowing mode. The cooling fan ensures minimum dark current and excellent image quality by maintaining the temperature of the sensor close to the ambient temperature.

## **CMV-51 CL CMOS HIGHLIGHTS**

- ✓ 8424 X 6032 = 51M 4.6µm x 4.6µm pixels
- ✓ Dimensions 38.75 X 27.75mm imaging area ~ 35mm Full Frame
- ✓ No row or column defects
- ✓ Monochrome and RGB Bayer versions
- ✓ Dynamic range 65.8dB
- ✓ Well depth 18.0Ke
- ✓ Windowing ROI capability
- ✓ Field Updatable Firmware and Extensive Built In Test (BIT)
- ✓ CameraLink output: Base, Medium, Full and Deca
- ✓ Drone sized OEM module available
- ✓ M58, Nikon F, Canon EF, and OEM lens mounts

Preliminary

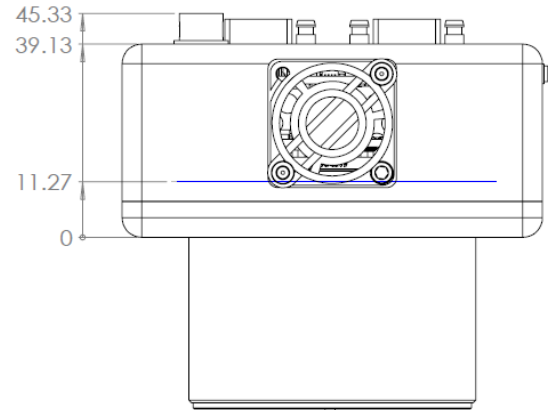
## CMV-51 CL CMOS SPECIFICATIONS

Sensor	Cpixel GMAX4651 Monochrome, Bayer Color
Active Pixels	8424 (H) x 6032 (V), 51Mpix
Pixel Size	4.6µm x 4.6µm with CDS
Active Image Size	37.75 x 27.75mm (~35mm Full Frame)
Sensor Outputs	14 lvds outputs from sensor. Digitized 12 bits, Output 8/10/12 bits
Frame Rate	See Table
Dynamic Range	65.8dB @ gain x3.5
Pixel Clock Speed	Up to 50Mhz, 14 channels
Full Well Charge	18000e @ gain x 3.5
Global Shutter Charge Domain Pixel	PLS < -92dB (1/40000)
Dark Noise	7.6e rms @ gain x5
Peak QE	67.1%
Min / Max Exposure	33µsec / 65sec
Sensor Defects	See Table
Defect Correction	Pixel, Hot Pixel, Shading, Black Clamp
Exposure Modes	Free Run, Triggered Program, Triggered Pulse Width
Power	7-12VDC at 7W - Reverse power protected
Lens Mount Options	M58, Nikon F, Canon EF, OEM
Options	OEM Module, TEC Cooled Version, USB3
Operating Temperature	0°C to +70°C (TBD)
Import Category	Digital Still Image Camera

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



## M58 DIMENSIONS



## APPLICATIONS

- ✓ LCD/FPD INSPECTION > 8K FPD RESOLUTION
- ✓ AERIAL IMAGING
- ✓ BIOMETRIC
- ✓ AUTOMOTIVE INSPECTION
- ✓ AGRICULTURAL INSPECTION
- ✓ MILITARY
- ✓ SURVEILLANCE
- ✓ PCB INSPECTION

Data Interface	bits / pixel	Frame Rate
Camera Link Base	8 / 10 / 12	2.6
Camera Link Medium	8 / 10 / 12	5.2
Camera Link Full	8 X 8	10.5
Camera Link Deca	8 X 10	10.5

Defect	Grade 1	Grade 2	Grade 3
Max # of Defect Pixels	TBD	TBD	TBD
Acceptable Cluster Size	TBD	TBD	TBD
Max # of Clusters	TBD	TBD	TBD
Max # of Defect Row and Columns	0	0	0

# Get in Touch

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