illunis

CMV-50 CL
Global Shutter CMOS

7920 x 6004 – 4.6µm PIXEL at 27 fps

The CMV-50 is a 24 tap 50 megapixel global shutter CMOS digital camera! The CMV-50 is available in color and monochrome versions and is designed for use in industrial, machine vision, aerial imaging, military surveillance, and scientific applications.

The CMV-50 Global Shutter CMOS offers outstanding quality by using the ams/CMOSIS CMV50000ES-1E3M1PA or CMV50000ES-1E3C1PA sensors. The image sensor has 24 digital outputs each running up to 69Mhz. This results in 27 fps at full resolution using Camera Link dual full readout. Higher frame rates can be achieved in ROI/windowing mode. Low thermal noise makes this camera particularly good for long exposures.
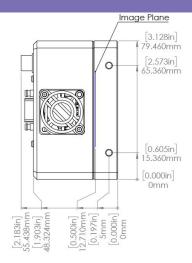
CMV-50 CL CMOS HIGHLIGHTS

- 7920 X 6004 4.6µm active pixels
- Dimensions 36.4x27.6mm ~ Approximately 35mm Full Frame
- Global Shutter CMOS
- Dynamic Range 64dB
- 8/12 bits up to 27 fps, faster with ROI
- 8, 12 bit selectable data output
- Field Updatable Firmware
- Lens Mount Options: M58/OEM, M72, Nikon F, Canon EF, Phase 1
- Windowing ROI capability
- 24 Tap readout at up to 69MHz each (1320Mpix/sec)
- CL Base, CL Medium, CL Full and CL Dual Full

Sensor	ams/CMOSIS CMV50000
Architecture	Global Shutter CMOS
Configuration	Mono, Bayer Color
Active Pixels	7920 (H) x 6004 (V), 47.5 Mpix
Pixel Size	4.6 x 4.6µm
Active Image Size	36.4 x 27.6mm (35mm Full Frame)
Sensor Outputs	24 lvds outputs from sensor. Digitized 12 bits, Output 8/12 bits.
Frame Rate	See Table
Dynamic Range	64dB
Pixel Clock Speed	Programmable 10-69Mhz
Full Well Charge	16000e
Minimum Exposure	110 µsec
Read Noise	2.4 DN
Trigger Modes	Free Run, Trigger
Lens Mount Options	M58/OEM, M72, Nikon F, Canon EF, Phase 1,
Power	7-12VDC at 3-6W
Operating Temperature	-30°C to +70°C (tested in CL)
Defect Correction	Row, Column, Pixel, Hot Pixel
Options	Tripod Adapter

DIMENSIONS

Image Plane

[3.128in] 79.460mm
[2.573in] 65.360mm
[0.605in] 15.360mm
[0.000in] 0mm

[2.183in] 55.438mm
[1.903in] 48.324mm
[0.500in] 12.710mm
[0.197in] 5mm
[0.000in] 0mm

APPLICATIONS

- ✓ LCD/FPD INSPECTION
- ✓ AERIAL IMAGING
- ✓ SCIENTIFIC IMAGING
- ✓ DNA SEQUENCING
- ✓ TRAFFIC MANAGEMENT
- ✓ MILITARY APPLICATIONS
- ✓ PERSISTANT SURVEILLANCE
- ✓ PCB INSPECTION
- ✓ LONG EXPOSURES

Data Interface	bits / pixel	Frame Rate
Camera Link Base	8/12	3.41
Camera Link Medium	8/12	6.82
Camera Link Full	8	13.64
Camera Link Dual Full	8	27.27

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

Get in Touch

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