

illuminis CMV-50 FIBER

Global Shutter CMOS

7920 x 6004 - 4.6µm PIXEL at 15/30 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 integrating the ams/CMOSIS CMV50000ES-1E3M1PA or CMV50000ES-1E3C1PA sensors with the Kaya Instruments Fiber IP and Komodo capture card. The image sensor has 24 digital outputs each running up to 69MHz. This results in 15/30 fps at full resolution with 12 bits per pixel using dual 10Gig fiber links. Low thermal noise makes this camera particularly good for long exposures.

CMV-50 FIBER CMOS HIGHLIGHTS

- ✓ 7920 X 6004 4.6µm active pixels
- ✓ Dimensions 36.4x27.6mm ~ Approximately 35mm Full Frame
- ✓ Dynamic Range 64dB
- ✓ Windowing ROI capability with Subsampling and Binning modes
- ✓ 24 Tap readout at up to 69MHz each (1320Mpix/sec)
- ✓ 15/30 fps at full resolution, faster when windowed
- ✓ One or two 10G fiber links using inexpensive networking SFP+ modules
- ✓ Optical Fiber 300m - 40km, Copper Cable 5m - 15m
- ✓ Integrated with a Kaya Instruments Komodo PCIe capture card with up to 4 cameras per card
- ✓ Kaya Instruments Vision Point capture application and SDK
- ✓ Lens Mount Options: M58/OEM, M72, Nikon F, Canon EF (In Development)

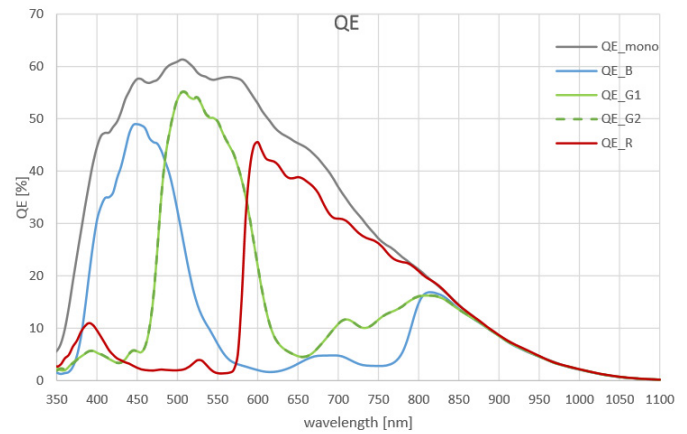
CMV-50 FIBER CMOS SPECIFICATIONS

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 lvs 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
Global Shutter	Minimum Exposure TBD
Minimum Exposure	110 µsec
Read Noise	2.4 DN
Trigger Modes	Free Run, Triggered Programmed, Pulse Width Exposure, HDR
Lens Mount Options	M58/OEM, M72, Nikon F, Canon EF (In Development)
Power	7-12VDC at 10W Reverse power protected
Operating Temperature	TBD -40°C to +85°C (Design Tested)
Defect Correction	Row, Column, Pixel, Hot Pixel
Options	Tripod Adapter

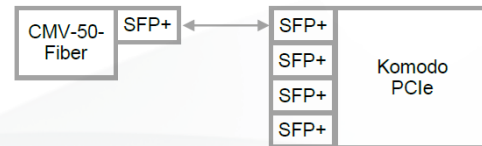
Data Interface	bits / pixel	Frame Rate
Dual Fiber	12	30 (In Development)
Single Fiber	12	15

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

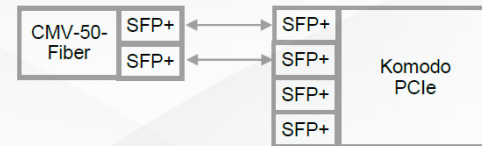
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CONFIGURATIONS



Single 10gbit Fiber: 15fps (Up to 4 cameras)



Dual 10gbit Fiber: 30fps (Up to 2 cameras)

APPLICATIONS

- ✓ LCD/FPD INSPECTION
- ✓ AERIAL IMAGING
- ✓ BIOMETRIC AND DNA SEQUENCING
- ✓ DOCUMENT SCANNING
- ✓ SCIENTIFIC IMAGING
- ✓ MILITARY APPLICATIONS
- ✓ PERSISTANT SURVEILLANCE
- ✓ PCB INSPECTION
- ✓ LONG EXPOSURES

Get in Touch

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