



CMV-71 USB3

Rolling Shutter CMOS

10,000 X 7096 - 3.1µm PIXEL



The CMV-71 is a rolling shutter CMOS digital camera with an astounding 71 million pixels! The CMV-71 is available in color and monochrome versions and is designed for use in industrial, machine vision, aerial, document imaging, and security applications.

The CMV-71 uses the ams/CMOSIS CHR71000ES-1E5M1PA or CHR71000ES-1E5C1PA sensor. This sensor has 8 analog outputs (8-tap) each running up to 42.5MHz. This results in 4.2 fps at full resolution. Higher frame rates achieved in ROI/windowing mode. The CMV-71 has all of the “rugged” features, such as industrial design, military de-rated components, and a CNC machined case. Fan cooling insures minimum dark current and excellent image quality.

CMV-71 USB3 HIGHLIGHTS

- ✓ 10,000 x 7096 3.1µm active pixels
- ✓ Rolling Shutter CMOS
- ✓ Windowing ROI capability
- ✓ Dynamic range 64dB
- ✓ 8 Tap readout at up to 42.5MHz each (340Mpix/sec)
- ✓ 8 bits, 4.22 fps at full resolution, faster when windowed
- ✓ 12 bits, 2.1 fps at full resolution, faster when windowed
- ✓ Field-updatable firmware and flat field correction
- ✓ Pleora USB3
- ✓ M58/OEM, M72, Nikon F, Canon EF lens mounts

CMV-71 USB3 SPECIFICATIONS

Sensor	ams CHR71000ES-1E5M1PA ams CHR71000HGES-1E5M1PA ams CHR71000ES-1E5C1PA
Architecture	Rolling Shutter CMOS
Configuration	Mono, RGB Bayer
Active Pixels	10000 (H) x 7096 (V)
Pixel Size	3.1 x 3.1µm (31 x 22mm)
Sensor Outputs	8 analog outputs from sensor. Digitized and output as 8/10/12 bits
Frame Rates (USB-3)	See Table
Dynamic Range	64dB
Pixel Clock Speed	21.25, 30, 42.5 MHz per tap, 8 taps
Well Depth (e)	>13Ke
Rolling Shutter Exposure	Min exposure ~133us
Dark Noise	7e ⁻ (Fan cooled to ambient)
Dark Current	3.2 e ⁻ /s at room temperature
Power	7-12VDC at 3-6W
Exposure Modes	Free Run, Triggered, Triggered Pulse Width
Image Correction	Row, Column, Pixel, Hot Pixel, Flat Field Column gain and offset
Operating Temp (USB-3)	0°C to 40°C
Lens Mount Options	M58/OEM, M72, Nikon F, Canon EF
Data Output Options	Camera Link, USB3
Options	Tripod Adapter, High Grade Sensor

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



Get in Touch

✉ info@illunis.com

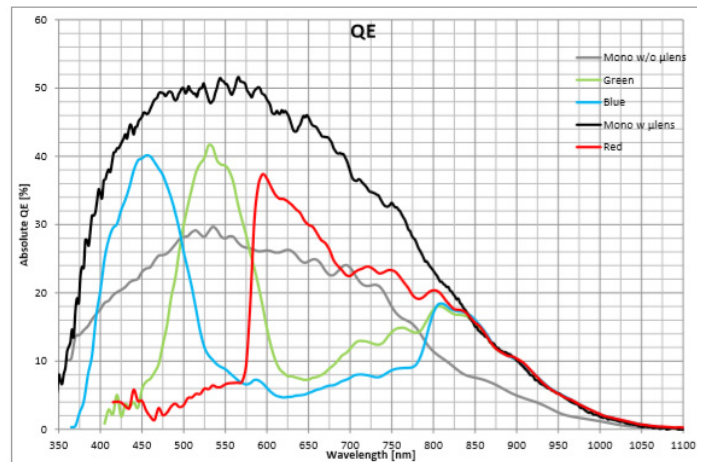


CONTACT US

illunis, LLC
14700 Excelsior Boulevard
Minnetonka, MN 55345 USA

☎ +1.952.975.9203
☎ +1.952.294.8308 (fax)
✉ info@illunis.com
🌐 www.illunis.com

QE



APPLICATIONS

- ✓ LCD/FPD INSPECTION
- ✓ DOCUMENT SCANNING
- ✓ SCIENTIFIC IMAGING
- ✓ METROLOGY
- ✓ SOLAR PANEL INSPECTION
- ✓ PCB INSPECTION

ROI INCREASES FRAME RATES:

HD (1920 X 1080) at 95+ fps
UHD (3840 x 2160) at 30+ fps
29M (6560 x 4384) at 9.8 fps
50M (8176 x 6128) at 5.8 fps
VGA (640 x 480) at 348 fps

The Pleora EBUS SDK can be found at:
<http://pleora.com/our-products/ebus-sdk>

USB3	bits / pixel	Frame Rate
2 Tap	8/10/12	2.1
4 Tap	8	3.0
4 Tap Overclock	8	4.22