



CMV-71-TEC

Rolling Shutter CMOS

10,000 X 7096 - 3.1µm PIXEL



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

The CMV-71-TEC offers outstanding quality by using the ams CHR71000ES-1E5M1PA, CHR71000HGES-1E5M1PA or CHR71000ES-1E5C1PA sensor, which is thermo cooled to 20°C below ambient (base mode). Now long exposures are possible with minimal dark current. The Camera Link medium format provides 12 bit data up to 4.2 fps. The CMV-71-TEC camera has an industrial design, military de-rated components, and a CNC machined case.

CMV-71-TEC HIGHLIGHTS

- ✓ 10,000 x 7096 = 70,960,000 3.1µm active pixels
- ✓ Thermo-Cooled Sensor to 20°C below ambient (base mode)
- ✓ Image Storage in Internal Memory
- ✓ Rolling Shutter CMOS
- ✓ Windowing ROI capability
- ✓ Dynamic range 64dB
- ✓ 8 Tap readout at up to 42.5MHz each (340Mpix/sec)
- ✓ 12 bits, 4.22 fps at full resolution, faster when windowed
- ✓ Field-updatable firmware
- ✓ Camera Link output: Base or Medium format
- ✓ M58/OEM, M72, Nikon F, and Canon EF lens mounts

CMV-71-TEC SPECIFICATIONS

Sensor	ams CHR71000ES-1E5M1PA ams CHR71000HGES-1E5M1PA ams CHR71000ES-1E5C1PA
Architecture	Rolling Shutter CMOS
Configuration	Mono Standard, Mono High Grade, RGB Bayer
Active Pixels	10000 (H) x 7096 (V)
Pixel Size	3.1 x 3.1µm (31 x 22mm)
Memory	Store and display up to 8 images
Sensor Outputs	8 analog outputs from sensor. Digitized and output as 8/10/12 bits
Frame Rates (CL)	2.1 fps : Base mode 3.0 fps : Medium mode 4.22 fps : Medium mode overclock
Dynamic Range	64dB
Clock Speed	21.25, 30, 42.5 MHz per tap, 8 taps
Full Well Charge	>13Ke
Rolling Shutter Exposure	Min exposure ~66us Max exposure ~65sec
Sensor Temperature	20°C below ambient (base mode)
Dark Noise	7e -
Dark Current	3.2 e-/s at room temperature
Power	7-12VDC at 3-15W
Exposure Modes	Free Run, Triggered, Triggered Pulse Width
Image Correction	Row, Column, Pixel, Hot Pixel, Flat Field Column Gain and Offset, Shading
Lens Mount Options	M58/OEM, M72, Nikon F, Canon EF

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



Get in Touch

✉ info@illunis.com

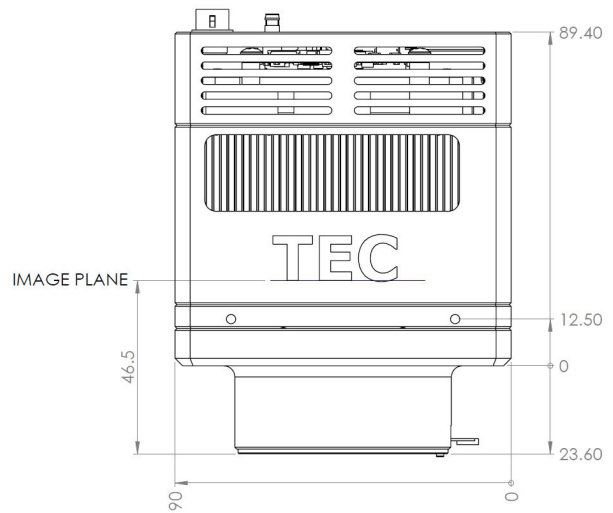


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DIMENSIONS



STANDARD DEVIATION

When the sensor is cooled to 20°C below ambient, camera noise is reduced to 1/5th of the RMOD-71 non-TEC configuration. The plot below compares the standard deviation of a dark image with an un-cooled RMOD-71 and the Thermo Electric Cooled (TEC) CMV-71.

