

EMC2-152-10G

Global Shutter CMOS
16,556 x 9200 @8.6fps



The EMC2-152 is a Global Shutter CMOS digital camera with an astounding 152 million pixels! It is available in color, and mono versions and is designed for use in industrial machine vision, aerial imaging, and document imaging applications.

The EMC2-152 offers outstanding quality by using the GPIXEL GMAX32152 CMOS sensor. The sensor has 38 digital outputs. This results in 5 fps at full resolution. Higher frame rates can be achieved in ROI/windowing mode. The EMC2-152 also supports in camera image compression resulting in 8.6 fps at full resolution.

EMC2-152 cameras have all of the illunis “rugged” camera features, such as industrial design, military de-rated components, and a CNC machined case. The active (fan) cooling insures minimum dark current for excellent image quality.

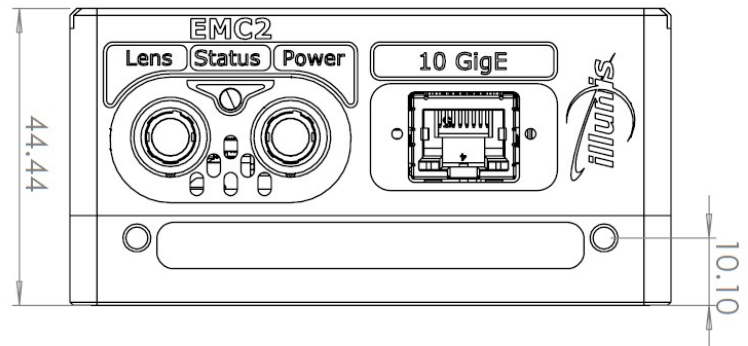
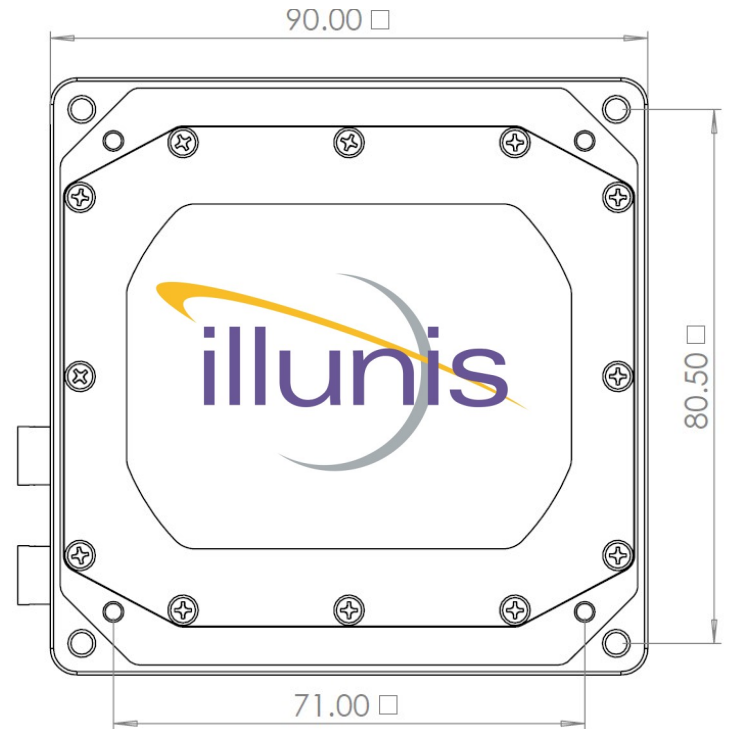
EMC2-152 Highlights:

- 16,556 x 9,200 = 152M pixels with Global shutter pixels for unlimited exposures!
No Mechanical shutters to replace or repair.
- 3.2um pixel Charge Domain GS CMOS Pixel with light pipe.
- 53.0 x 29.4 mm imaging area ~ Large Format (61mm diagonal)
- Monochrome, and RGB Bayer versions
- Sensor is 3-point mounted for back focus and flatness
- Dynamic range 67.dB, FWC = 9.3Ke
- Field-updatable firmware and extensive Built In Test (BIT)
- 10GigE Vision output: 12bit based on the Pleora NTx-Deca.
- All Sensor features supported (HFLIP,VFLIP, ROI, PGA-Gain, etc.)
- Programmable Optical Black Clamp
- Rodenstock, M72 or OEM custom lens mount are available.
- -30 to 50C operating (limited by 10G)
- EMC = Embedded Modular Camera, EMC2 is the 10G version.

EMC2-152 Specifications

Sensor	152,315,200 pixels Gpixel GMAX32152 Mono, Bayer Color
Architecture	Global Shutter CMOS Charge Domain Pixel
Configuration	Progressive scan with vertical ROI
Active pixels	16,556 (H) x 9,200 (V), 152Mpix
Pixel	3.2 x 3.2 μm with CDS
Active image size	53.0 x 29.4 mm (Medium Format) 60.6 mm image circle
Outputs	38 LVDS outputs from sensor. Digitized 12bits, Output 12bits
10GigE Frame rates	Full readout 5.0 fps Compressed 8.6 fps
Dynamic range	67.3dB @ gain x1.4
Full well charge	9.3Ke @ gain x1.4
Global shutter	Min exposure 100us PLS < -83.5dB (1/15,000)
Dark Noise	1.4e/s
Peak QE	66.9% (with μ -Lens)
Power	7-12VDC at up to 21W Max Reverse power protected
Exposure modes	Free Run, Triggered Program, Triggered Pulse Width, Auto Exp.
Lens Mount options	OEM, M72, Rodenstock, custom
Optical Filter	Clear, IRUV or custom
Defect Correction	Pixel, Hot Pixel, Shading, tap match
Options	OEM Module, Conformal coating.
Operating Temperature	TBD -30 to +50 C (10G limited)
Warranty	1 year. Extended options available

Dimensions and Info



Software and Support

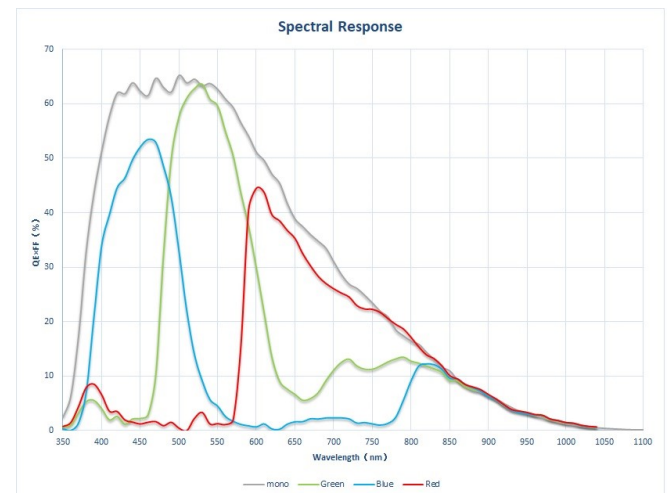
All illunis cameras come with our free camera control software, which allows interactive setup of all camera parameters.

The EMC-152-10G is based on the Pleora NTx-deca GigE Vision interface card. Pleora provides the EBUS environment for application development and the EBUS player for imaging. illunis can provide example code to accelerate your development.

illunis specializes in custom OEM camera designs

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