EMC2 10G Cameras

Ultra high resolution, affordable, lightweight camera solutions for aerial imaging and mapping, drones, embedded systems and industrial applications. Resolutions of 103 and152Mpix are available.

Embedded Modular Camera (EMC2) family is based on the Gpixel GMAX32103 and GMAX32152 CMOS global shutter sensors which are available in Bayer color and Monochrome configurations.

The **EMC2** is a family of sophisticated small, light weight cameras with industry standard Pleora 10GigE Vision interface.   An enhanced mode provides frame rate increases to 1.7X over standard data rates in 12 bit data output using a proprietary low loss compression algorithm. The enhance mode allows for faster frame rates and/or smaller image files for more image storage.

The **EMC2** supports large format sensors with 103 and 152 Megapixels.

EMC2 Highlights:

- Gpixel GMAX103 or GMAX152 sensors with 3.2um Global shutter pixels for unlimited exposures ! <u>No Mechanical shutters to replace or repair.</u>
- Host data connection 10GigE Vision through Pleora EBUS
- Light weight, small design
- Sensors are 3-point mounted for back focus and flatness.
- Built in features for aerial imaging: Auto exposure, etc.
- EMC2-103 available with OEM, F, Canon EF/RF, or M72 lens mount
- EMC-152 is a large format available (60.6mm diagonal) with OEM or M72
- UVIR, Skylight or custom optical filter.
- EMC-103 standard mode is 7fps, enhanced mode is12fps
- EMC-152 standard mode is 5.0fps, enhanced mode is 8.6fps

EMC2 Specifications

Sensor/Camera's supported	EMC2-103 11,276 x 9200 103Mpix EMC2-152 16,556 x 9200 152Mpix
Light Weight	500g without lens
Data interface	Pleora Ntx-DECA 10GigE Vision
Software	Pleora EBUS, illunis control application
Operating modes	12bits per pixel. Standard and Enhanced
EMC-103 Frame Rate	7.0 fps standard mode **12.0 fps enhanced compression mode**
EMC-152 Frame Rate	5.0 fps standard mode **8.6 fps enhanced compression mode**
Image circle	EMC-103 43mm EMC-152 60mm
Lens mount EMC-103	Nikon F-Mount Canon RF-Mount (Active aperture and focus) Canon EF-Mount (Active aperture and focus) M58 M72 Custom OEM
Lens mount EMC-152	M72 Custom OEM Pentax 645 Rodenstock or Schneider lens (Call)
Features in camera	Very low loss Image Compression Auto Exposure In Image Metadata Image Flip H/V Shading, Hot Pixel, Pixel/Row/Col correction On Screen Displays Built In Test
OEM Customization	Please Call
Illunis control application	Windows 10 64bit and SDK Pleora EBUS SDK
Data Cable	CAT6 or better.
Camera Power : Separate from mf2280	7-12VDC at 16-20W typical (enhanced) Reverse power protected
Operating Temperature	-30 to +50 C (Limited by the 10G Phy)

Info

Spectral Response

Applications

Aerial mapping and 3D imaging
Machine vision
Medical imaging
Packaging & inspection
Scientific research
Security
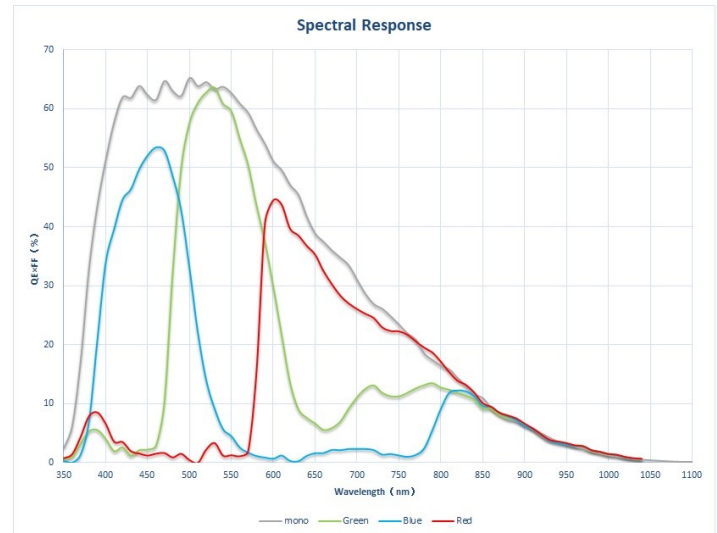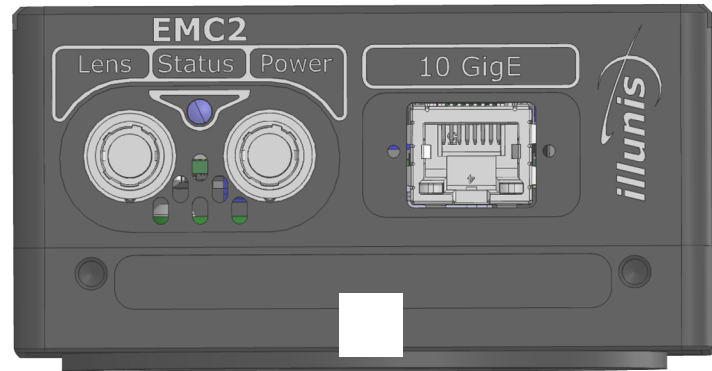Wide area surveillance

Software

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

illunis specializes in custom OEM camera designs

illunis, LLC
14700 Excelsior Blvd.
Minnetonka, MN 55345
USA

Phone: 952.975.9203
Fax: 952.294.8308
email: info@illunis.com
web: www.illunis.com