

EMC-65 CL

Global Shutter CMOS

9,344 x 7000 3.2um pixels APS Format



EMC+mf2280 cameras are available with OEM, M58, Nikon F-mount, and Canon EF lens mount * (*with aperture & focus control) EF Mount shown.

The **EMC-65** is a CMOS digital camera with an astounding 65 million pixels ! That is 31.5x the resolution of Full HD. The EMC-65 is available in color, and mono versions and is a lightweight solution, designed for use in industrial machine vision and aerial imaging applications.

The **EMC-65** offers outstanding quality by using the GPIXEL GMAX3265 CMOS sensor. The camera offers data rates up to 1370 megabytes per second and support for all camera link modes. Higher frame rates can be achieved in ROI/Windowing mode (frame rate limited by Camera Link).

Interface illunis EMC cameras to NUC, Jetson NX, Etc. using EPIX mf-2280+ M.2 PCIe frame grabber. Space constraints typically require routing of cables to a side of the case or to a nearby camera. COTS Samtec HLCD flexible cables are used to facilitate routing.

Camera link, USB3 Vision, Thunderbolt and GigE Vision interfaces are also available.

Combined with our proprietary Canon Lens Controller (CLC) you can control Canon EF lenses and dynamically detect lens name, focus, iris control and zoom information

EMC-65 Highlights:

- 9,344 x 7000 = 65M pixels with 3.2um pixel (including optical black)
- Charge Domain Global Shutter CMOS Pixel Technology with light pipe.
- 29.9 x 22.4 mm imaging area ~ APS
- Monochrome, and RGB Bayer versions
- Dynamic range 66dB, FWC = 10.9Ke
- Windowing ROI capability
- Field-updatable firmware and extensive Built In Test (BIT)
- F-Mount, Canon EF mount, M#, other lens mounts available
- OEM module available
- All Sensor features supported

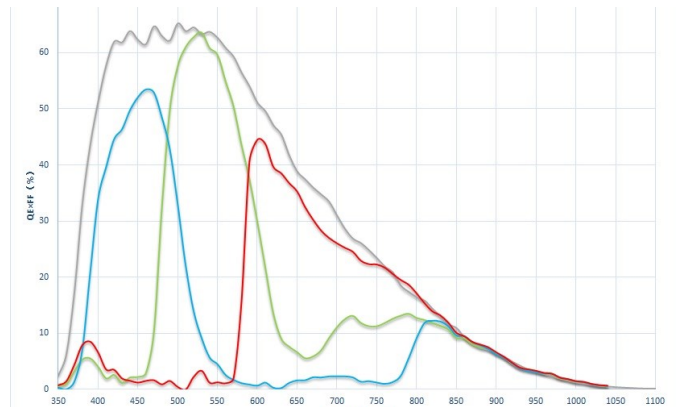
EMC-65 Specifications

Sensor	Gpixel GMAX3265 Mono, Bayer Color
Architecture	Global Shutter CMOS Charge Domain Pixel
Configuration	Progressive scan
Active pixels	9,344 (H) x 7000 (V), 65Mpix
Pixel	3.2 x 3.2 μm with CDS
Active image size	29.9 x 22.4 mm (35mm)
Outputs	14 lvds outputs from sensor. Digitized 12bits, Output 8/10/12bits
Frame rates (Camera link limited)	9.4 fps: Full 8/8bit, Deca 8x10bit 4.9 fps: Medium 2.4 fps: Base
Dynamic range	66dB @ gain x 1.25
Pixel Clock speed	Up to 50Mhz, 14 channels
Full well charge	10,900e @ gain x0.75
Global shutter	Min exposure TBD PLS < -83.5dB (1/15,000)
Dark Noise	5.3e/s
Peak QE	65.3%
Power	7-12VDC at 6W Reverse power protected
Exposure modes	Free Run, Triggered Program, Triggered Pulse Width
Mount options	F-mount, Canon-Mount, M58, OEM configuration
Defect Correction Built In	Pixel, Hot Pixel, Shading
Options	OEM Module, Camera Link, GigE Vision, USB3, Mechanical shutter
Operating Temperature	0 to +70 C (TBD)

Software

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

Performance



Applications

- LCD/FPD Inspection
 - Greater than 8K FPD resolution
- Aerial Imaging
- Biometric and DNA Sequencing
- Document Scanning
- Scientific Imaging
- Military Applications
- Persistent Surveillance
- PCB Inspection

illunis specializes in custom OEM camera designs

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

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

