

# CK-RNE2-240M/CU-159GS

## 2.4 MP CMOS USB3.0 Area Scan Camera

### Features

- Trigger mode: Frame Start /Frame Burst Start
- Decimation, Binning, Black Level, Digital Shift and Static Defect Correction
- Adjustable Gamma for optimizing the brightness of images
- Color models support Light Source Preset, Color Transformation Control and Saturation
- Monochrome models support Noise Reduction and Sharpness
- Programmable LUTs and User Set Control
- Support Timer and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain and so on
- 512KB ROM area for storing large amounts of data and files

### Applications

Suitable for machine vision applications such as industrial inspection, medical, scientific research, education and so on.

### I/O Interface



Pin	Definition	Description
1	Line0+	Opto-isolated input +
2	GND	GPIO GND
3	Line0-	Opto-isolated input -
4	NC	NC
5	Line2	GPIO input/output
6	Line3	GPIO input/output
7	Line1-	Opto-isolated output -
8	Line1+	Opto-isolated output +

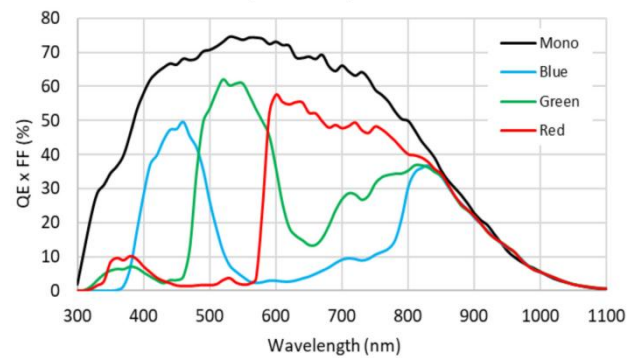
### Models

Mono: CK-RNE2-240MU-159GS

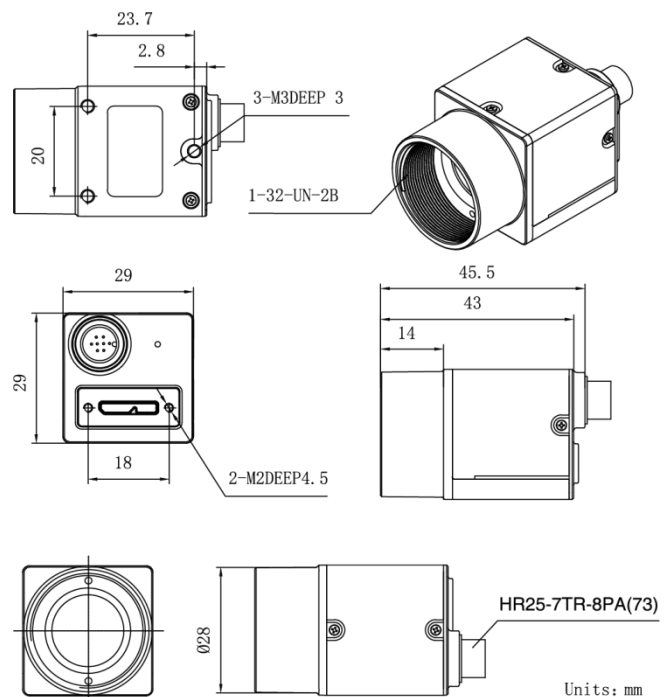
Color: CK-RNE2-240CU-159GS



### Spectral Response



### Technical Drawing



## Specifications

Model	CK-RNE2-240CU-159GS	CK-RNE2-240MU-159GS
Resolution	2048(H) × 1200(V)	
Sensor	Gpixel GMAX4002 Global shutter CMOS	
Sensor Format	1/1.7"	
Pixel Size	4.0μm × 4.0μm	
Frame Rate	159.4 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 10 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer GB8 / Bayer GB10 / Bayer GB12	Mono8 / Mono10 / Mono12
SNR	39.89 dB	39.98 dB
Exposure Time	Standard: 7μs ~ 1s, Actual Steps: 1μs	
Gain	0dB ~ 16dB; Default: 0dB, Steps: 0.1dB	
Binning	1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Decimation	Horizontal FPGA, Vertical Sensor: 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Synchronization	Hardware trigger, software trigger	
Acquisition Mode	Single frame, Continuous, Software trigger, Hardware trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	1 input and 1 output with opto-isolated, 2 programmable GPIOs (MER2-U3-L: N/A)	
Data Interface	USB3.0	
Power Supply	Power through USB3.0 interface	
Typical Power	2.22 W @ 5 VDC	
Operating Temp.	0° C ~ +45° C	
Storage Temp.	-20° C ~ +70° C	
Operating Humidity	10% ~ 80%	
Lens Mount	C / CS	
Dimensions	29(W) × 29(H) × 45.5(L) mm	
Weight	65 g	
Software	CKVisionBuilder or support USB3 Vision protocol software	
OS	32bit / 64bit Windows , Linux , Android , ARMv7 , ARMv8	

