

# CK-RNE2-1220M/CI-9RS

## 12 MP CMOS GigE Area Scan Camera



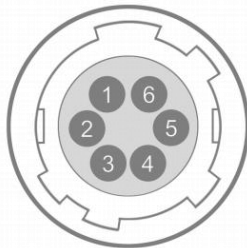
### Features

- Support Gamma, Digital Shift, Black Level
- Timer, Counter, LUTs and User Set Control
- Light source preset, Color Transformation Control, Saturation, Binning and Decimation (color models)
- Support Global Reset Release Shutter exposure
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, and so on
- 16KB data storage area for saving algorithm coefficients and parameter configuration

### Applications

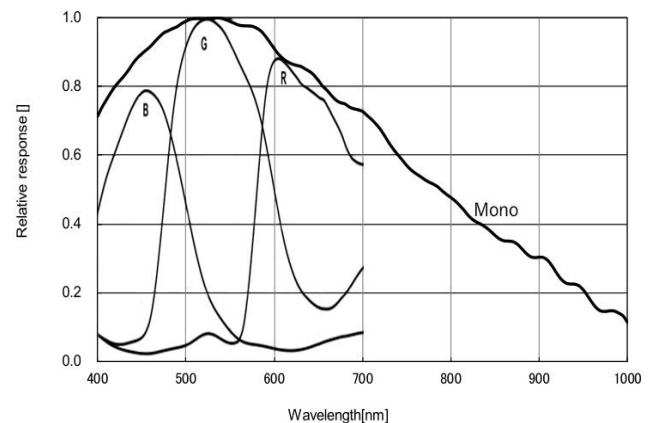
Suitable for machine vision applications such as industrial inspection, medical, scientific research, education and so on.

### I/O Interface



Pin	Definition	Description
1	POWER_IN	Camera external power, +12V DC~+24V DC
2	Line0+	Opto-isolated input +
3	Line2	GPIO input/output
4	Line1+	Opto-isolated output +
5	Line0-/Line1-	Line0-: Opto-isolated input - Line1-: Opto-isolated output -
6	GND	PWR GND & GPIO GND

### Spectral Response



### Models

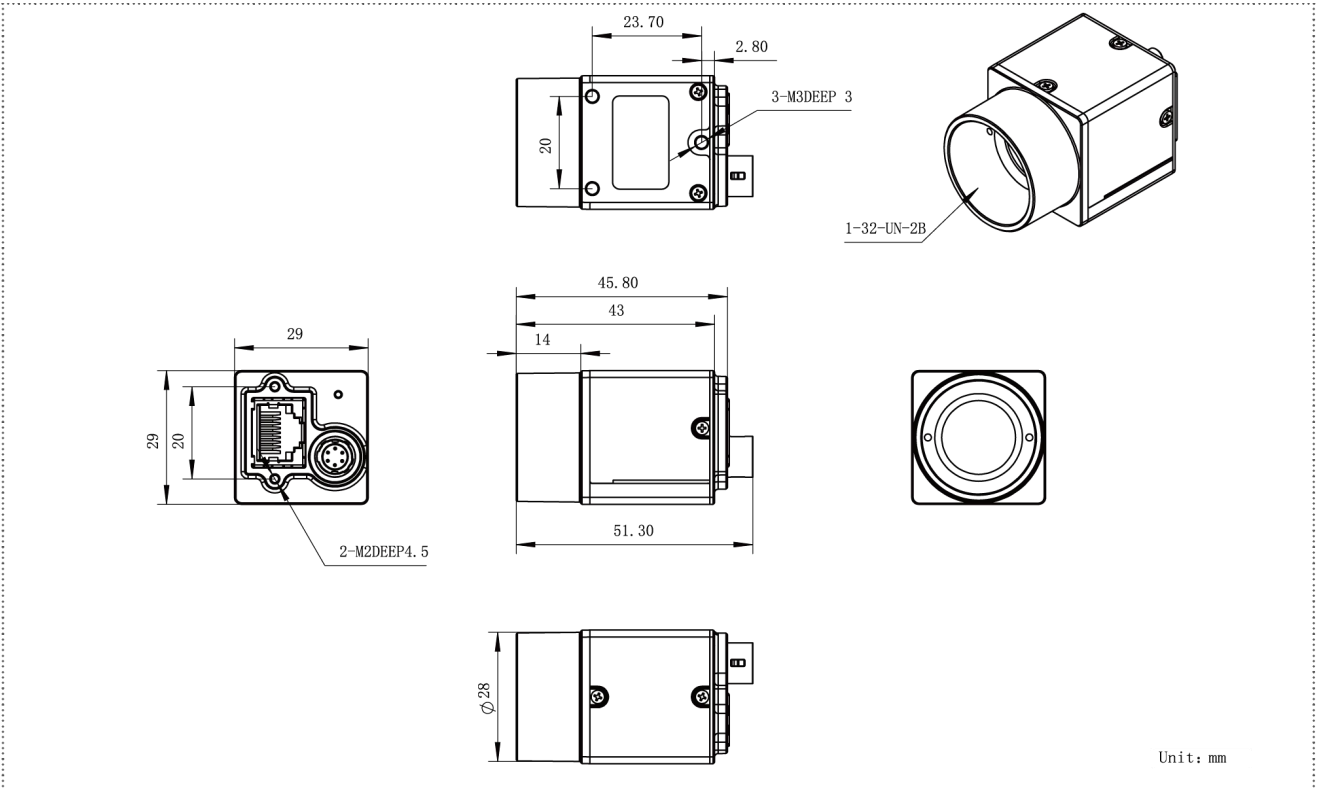
Mono: CK-RNE2-1220MI-9RS  
Color: CK-RNE2-1220CI-9RS

## Specifications

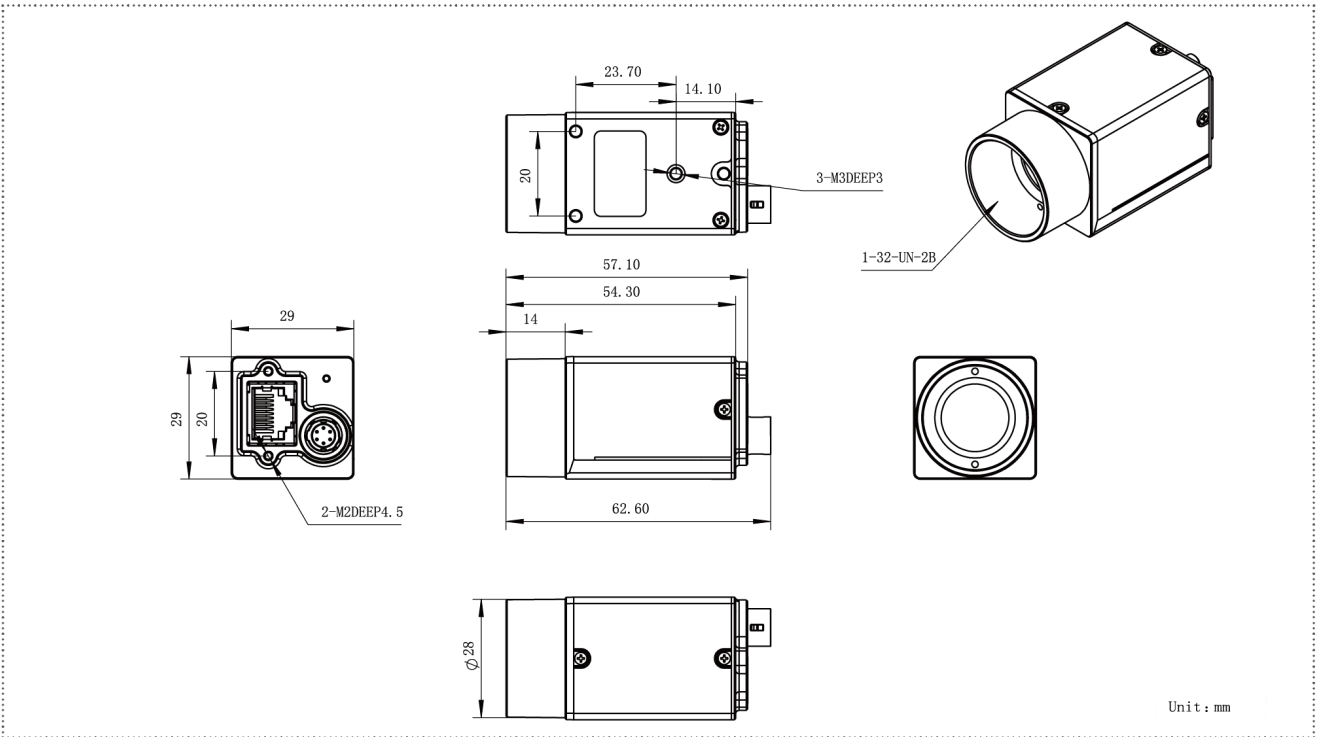
Model	CK-RNE2-1220CI-9RS		CK-RNE2-1220MI-9RS	
Resolution	4024(H) × 3036(V)			
Sensor	Sony IMX226 Rolling shutter CMOS			
Sensor Format	1/1.7"			
Pixel Size	1.85μm × 1.85μm			
Frame Rate	9.63 fps			
ADC	12 bit			
Pixel Bit Depth	8 bit, 12 bit			
Mono/Color	Color		Mono	
Pixel Formats	Bayer RG8 / Bayer RG12 / Mono8 / RGB8 / BGR8 / YUV422_8 / YUV422_8_UYVY		Mono8 / Mono12	
SNR	40.14 dB	39.86 dB	40.06dB	40.2 dB
Exposure Time	Standard: 23μs~1s, GRR: 23μs~1s, Actual Steps: 1 row period			
Gain	0dB~24dB, Default: 0dB, Steps: 0.1dB			
Binning	FPGA: 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4		—	
Decimation	FPGA: 1×1, 1×2, 2×1, 2×2		—	
Synchronization	Hardware trigger, software trigger			
Acquisition Control	Single frame, Continuous, Software trigger, Hardware trigger			
Reverse X/Y	Reverse X/Y			
I/O Interface	1 input and 1 output with opto-isolated, 1 programmable GPIO			
Data Interface	GigE	GigE PoE	GigE	GigE PoE
Power Supply	12VDC-10% ~ 24VDC+10% supplied via the camera's Hirose connector PoE is optiona (Power over Ethernet, IEEE802.3af compliant)			
Typical Power	2.10W @ 12VDC	2.10W @ 12VDC 2.37W @ PoE	2.10W @ 12VDC	2.10W @ 12VDC 2.37W @ PoE
Operating Temp.	0°C ~ +45°C			
Storage Temp.	-20°C ~ +70°C			
Operating Humidity	10% ~ 80%			
Lens Mount	C / CS			
Dimensions	No PoE: 29(W) × 29(H) × 29(L) mm (without lens adapter or connectors) PoE: 29(W) × 29(H) × 40.3(L) mm (without lens adapter or connectors)			
Weight	No PoE: 65 g; PoE: 75 g			
Software	CKVisionBuilder or third-party software meeting with GigE Vision Protocol			
OS	32bit / 64bit Windows, Linux, Mac OS			



# Technical Drawing



Size A No PoE



Size B PoE

