

# MV-CU013-A1UC

1.3 MP 1/2" CMOS USB 3.0 Area Scan Camera



GEN<i>i</i>CAM

USB<sup>TM</sup>  
VISION

## Introduction

MV-CU013-A1UC camera adopts CMOS sensor to provide high-quality images. It uses USB 3.0 interface to transmit images in real time, and its max. frame rate can reach 210 fps in full resolution.

## Key Features

- Supports auto or manual adjustment of gain, exposure time, and manual adjustment of LUT, Gamma correction, etc.
- Supports Sequencer and multiple ISP functions to provide high-quality images.
- Supports customized ROI, horizontal and vertical reverse image output.
- Adopts compact design for flexible installation.
- Compatible with USB3 Vision Protocol, GenlCam Standard, and third-party software based on the protocol and standard.

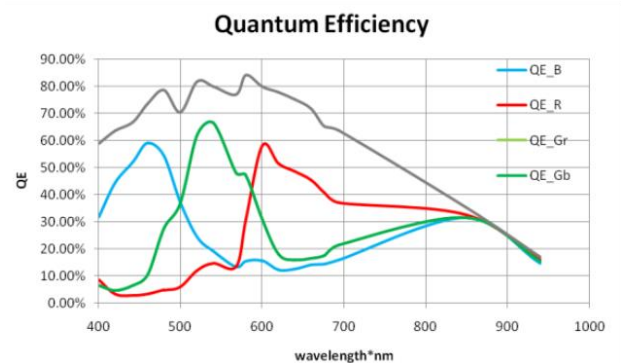
## Available Model

- Color camera: MV-CU013-A1UC

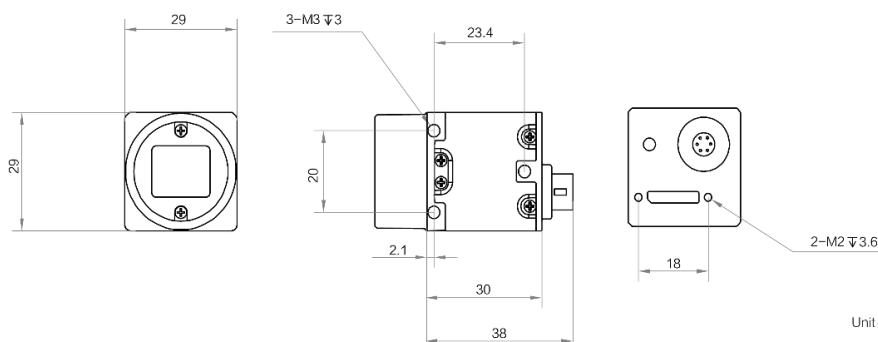
## Applicable Industry

Electronic semiconductor, factory automation, logistics and code reading, liquor and beverage, medicine packing, etc.

## Sensor Quantum Efficiency



## Dimension



## Specification

<b>Model</b>	<b>MV-CU013-A1UC</b>
<b>Performance</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Pixel size</b>	4.8 $\mu\text{m}$ $\times$ 4.8 $\mu\text{m}$
<b>Sensor size</b>	1/2"
<b>Resolution</b>	1280 $\times$ 1024
<b>Max. frame rate</b>	210 fps @ 1280 $\times$ 1024 Bayer GB 8
<b>Dynamic range</b>	54.2 dB
<b>SNR</b>	40.3 dB
<b>Gain</b>	0 dB to 16 dB
<b>Exposure time</b>	30 $\mu\text{s}$ to 10 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Color
<b>Pixel format</b>	Mono 8/10/12 Bayer GB 8/10/10Packed/12/12Packed YUV422Packed, YUV422_YUYV_Packed RGB 8, BGR 8
<b>Binning</b>	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4
<b>Decimation</b>	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical features</b>	
<b>Data interface</b>	USB 3.0, compatible with USB 2.0
<b>Digital I/O</b>	6-pin P7 connector provides power and I/O, including opto-isolated input $\times$ 1 (Line 0), opto-isolated output $\times$ 1 (Line 1), and bi-directional non-isolated I/O $\times$ 1 (Line 2).
<b>Power supply</b>	9 VDC to 24 VDC, supports USB power supply
<b>Power consumption</b>	Typ. 2.1 W @ 5 VDC (USB 3.0 provides power supply)
<b>Mechanical</b>	
<b>Lens mount</b>	C-mount
<b>Dimension</b>	29 mm $\times$ 29 mm $\times$ 30 mm (1.1" $\times$ 1.1" $\times$ 1.2")
<b>Weight</b>	Approx. 76 g (0.2 lb.)
<b>Ingress protection</b>	IP30 (under proper lens installation and wiring)
<b>Temperature</b>	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$ ) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% RH to 95% RH (no condensation)
<b>General</b>	
<b>Client software</b>	MVS or third-party software meeting with USB3 Vision Protocol
<b>Operating system</b>	32/64-bit Windows 7/10, 64-bit Window 11, and 32/64-bit Linux
<b>Compatibility</b>	USB3 Vision, GenICam
<b>Certification</b>	CE, RoHS, KC