

# MV-CE050-30UM

5.0 MP 1/2.5" CMOS USB3.0 Area Scan Camera



GEN*i*CAM

US3™  
VISION

## Introduction

MV-CE050-30UM camera adopts Aptina AR0521 sensor to provide high-quality image. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 44.7 fps in full resolution.

## Key Feature

- Supports auto and manual adjustment for gain, exposure control, LUT, Gamma correction, etc.
- Supports hardware triggering, software triggering and free run mode.
- Adopts M2 screw holes for securing cable that connects USB3.0 interface.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on these protocol and standard.

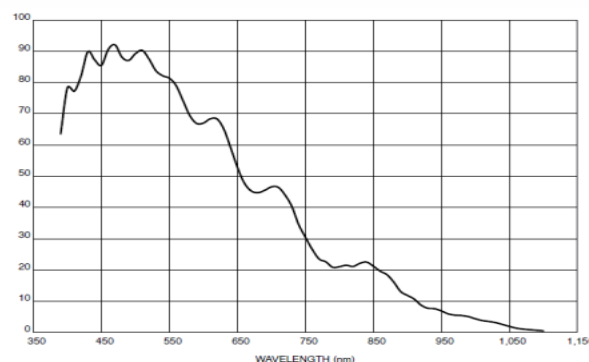
## Available Model

Mono camera: MV-CE050-30UM

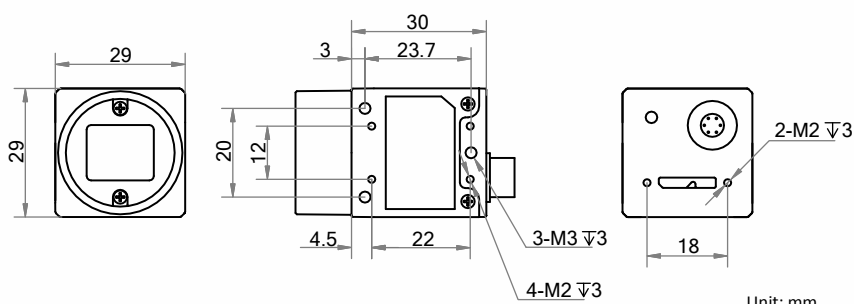
## Applicable Industry

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

## Sensor Quantum Efficiency



## Dimension



## Specification

<b>Model</b>	<b>MV-CE050-30UM</b>
<b>Camera</b>	
<b>Sensor type</b>	CMOS, rolling shutter
<b>Sensor model</b>	Aptina AR0521
<b>Pixel size</b>	2.2 $\mu\text{m}$ $\times$ 2.2 $\mu\text{m}$
<b>Sensor size</b>	1/2.5"
<b>Resolution</b>	2592 $\times$ 1944
<b>Max. frame rate</b>	44.7 fps @ 2592 $\times$ 1944
<b>Dynamic range</b>	60 dB
<b>SNR</b>	40 dB
<b>Gain</b>	0 dB to 15 dB
<b>Exposure time</b>	28 $\mu\text{s}$ to 0.6 s
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/10p/12/12p
<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>Image buffer</b>	128 MB
<b>Electrical features</b>	
<b>Data interface</b>	USB3.0, compatible with USB2.0
<b>Digital I/O</b>	6-pin Hirose connector provides power and I/O, including opto-isolated input $\times$ 1 (Line 0), opto-isolated output $\times$ 1 (Line 1), bi-directional non-isolated I/O $\times$ 1 (Line 2)
<b>Power supply</b>	9 VDC to 24 VDC, supports USB3.0 power supply
<b>Power consumption</b>	Typ. 2.5 W @ 5 VDC (USB3.0 provides power supply)
<b>Structure</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. 80 g (0.2 lb.)
<b>Ingress protection</b>	IP30 (under correct 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 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% to 80% RH, non-condensing
<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 XP/7/10, 32/64-bit Linux and 64-bit MacOS
<b>Compatibility</b>	USB3 Vision, GenICam
<b>Certifications</b>	CE, FCC, RoHS, KC



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