

# MV-CS028-10UM

2.8 MP 2/3" CMOS USB3.0 Area Scan Camera



**GEN*i*CAM**

**USB<sup>TM</sup>**  
VISION

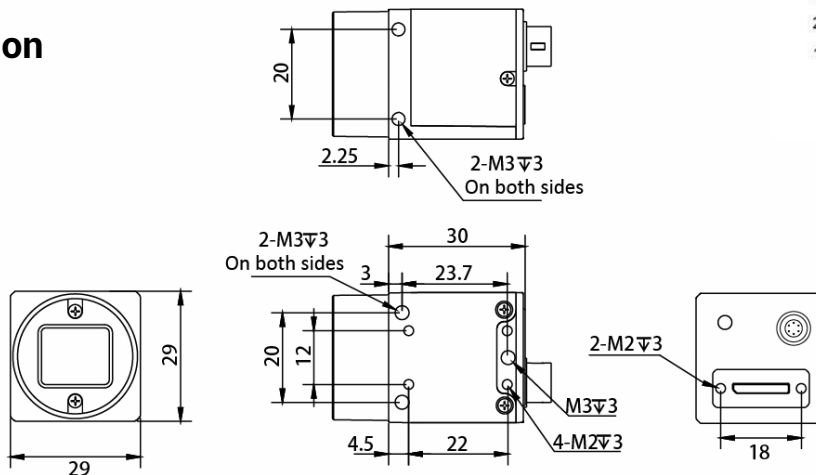
## Introduction

MV-CS028-10UM camera adopts Sony® IMX421 sensor to provide high-quality images. It uses USB3.0 interface to transmit images in real time, and its max. frame rate can reach 132.2 fps in full resolution.

## Key Feature

- Adopts brand new design to reduce power consumption.
- Supports auto or manual adjustment of gain, exposure time, LUT, Gamma correction, contrast ratio, etc.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

## Dimension



Unit: mm

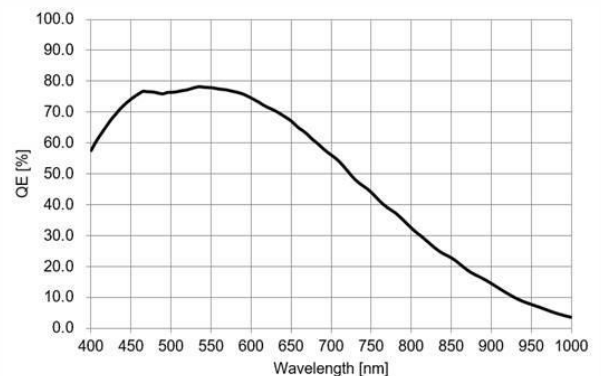
## Available Model

MV-CS028-10UM

## Applicable Industry

Electronics and semiconductor, factory automation, logistics and code reading, medicine package, etc.

## Sensor Quantum Efficiency



# Specification

<b>Model</b>	<b>MV-CS028-10UM</b>
<b>Camera</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Sensor model</b>	Sony® IMX421
<b>Pixel size</b>	4.5 μm × 4.5 μm
<b>Sensor size</b>	2/3"
<b>Resolution</b>	1936 × 1464
<b>Max. frame rate</b>	132.2 fps @1936 × 1464
<b>Dynamic range</b>	71.1 dB
<b>SNR</b>	43.6 dB
<b>Gain</b>	0 dB to 24 dB
<b>Exposure time</b>	UltraShort exposure mode: 1 μs to 5 μs Standard exposure mode: 9 μs to 10 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/10Packed/12/12Packed
<b>Binning</b>	Supports 1 × 1, 2 × 2
<b>Decimation</b>	Supports 1 × 1, 2 × 2
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical features</b>	
<b>Data interface</b>	USB3.0, compatible with USB2.0
<b>Digital I/O</b>	6-pin P7 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).
<b>Power supply</b>	9 VDC to 24 VDC, supports USB3.0 power supply
<b>Power consumption</b>	Typ. 2.8 W@5 VDC (USB3.0 provides power supply)
<b>Mechanical</b>	
<b>Lens mount</b>	C-Mount
<b>Dimension</b>	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")
<b>Weight</b>	Approx. 80 g (0.18 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	Working temperature: -30 °C to 60 °C (-22 °F to 140 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)
<b>Humidity</b>	20% to 95% 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>Certification</b>	CE, FCC, RoHS, KC



Hangzhou Hikrobot Co., Ltd.  
 en.hikrobotics.com