

# MV-CS028-10UM

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



GEN*i*CAM

US3<sup>TM</sup>  
VISION

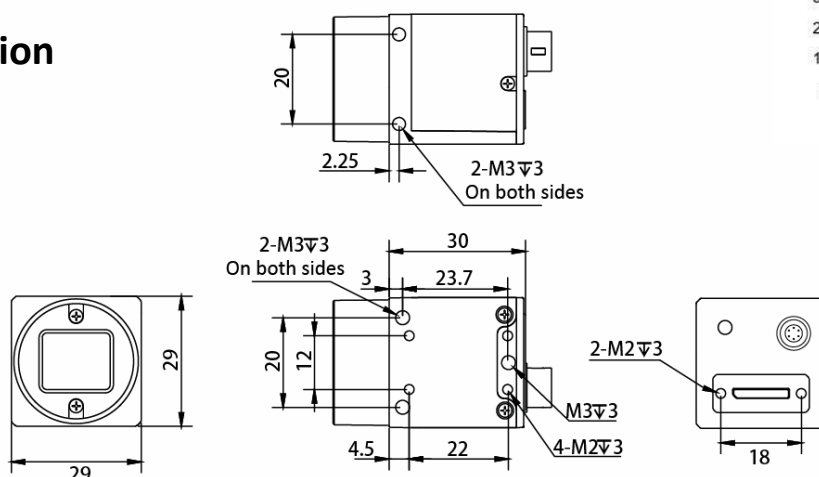
## Introduction

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, GenCam Standard, and the third-party software based on the protocol and standard.

## Dimension



Unit: mm

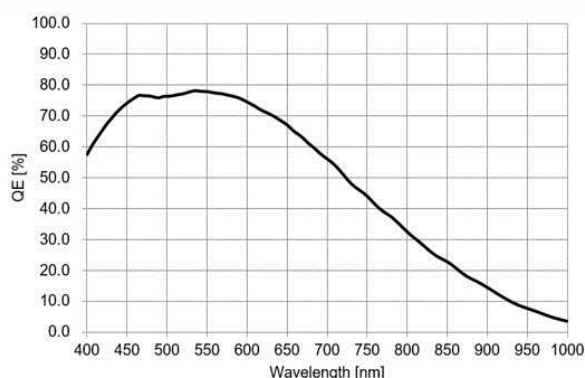
## Available Model

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: 6 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

# HIKROBOT

Hangzhou Hikrobot Technology Co., Ltd.  
No.399 Danfeng Road, Binjiang District, Hangzhou 310051, China.  
en.hikrobotics.com

Copyright Hikrobot

Hangzhou Hikrobot Technology Co., Ltd. All Rights Reserved. Hangzhou Hikrobot Technology does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice. All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.