MV-CS028-10UM

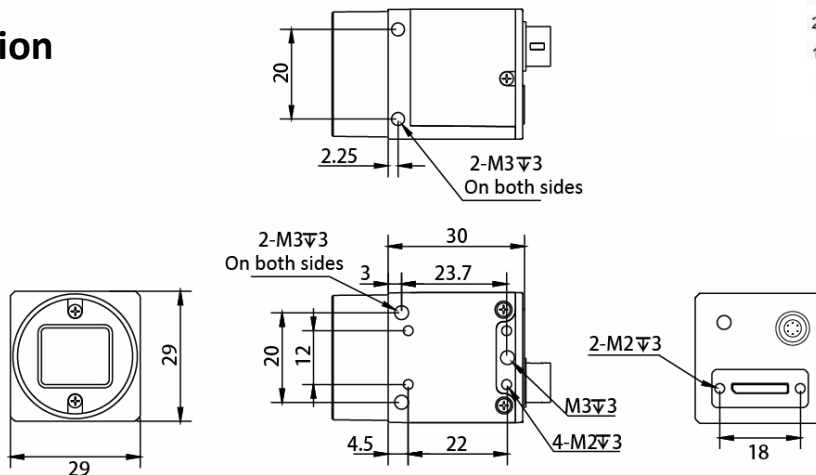## 2.8 MP 2/3" CMOS USB3.0 Area Scan Camera

GEN<i>CAM

US3 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 121.1 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.

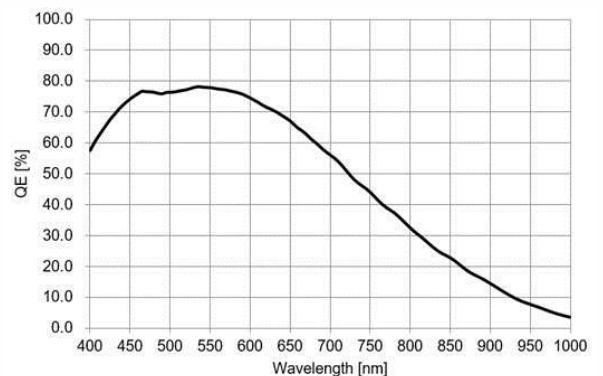## Dimension

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

Model	MV-CS028-10UM
Camera	
Sensor type	CMOS, global shutter
Sensor model	Sony® IMX421
Pixel size	4.5 µm × 4.5 µm
Sensor size	2/3"
Resolution	1936 × 1464
Max. frame rate	121.1 fps @1936 × 1464
Dynamic range	71.1 dB
SNR	43.6 dB
Gain	0 dB to 24 dB
Exposure time	UltraShort exposure mode: 1 µs to 5 µs
	Standard exposure mode: 6 µs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8/10/10Packed/12/12Packed
Binning	Supports 1 × 1, 2 × 2
Decimation	Supports 1 × 1, 2 × 2
Reverse image	Supports horizontal and vertical reverse image output
Electrical features	
Data interface	USB3.0, compatible with USB2.0
Digital I/O	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).
Power supply	9 VDC to 24 VDC, supports USB3.0 power supply
Power consumption	Typ. 2.8 W@5 VDC (USB3.0 provides power supply)
Mechanical	
Lens mount	C-Mount
Dimension	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")
Weight	Approx. 80 g (0.18 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: -30 °C to 60 °C (-22 °F to 140 °F)
	Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)
Humidity	20% to 95% RH, non-condensing
General	
Client software	MVS or third-party software meeting with USB3 Vision Protocol
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS
Compatibility	USB3 Vision, GenICam
Certification	CE, FCC, RoHS, KC