

# MV-CS004-10UM/UC V5

0.4 MP 1/2.9" CMOS USB3.0 Area Scan Camera



GEN*i*CAM

USB<sup>TM</sup>  
VISION

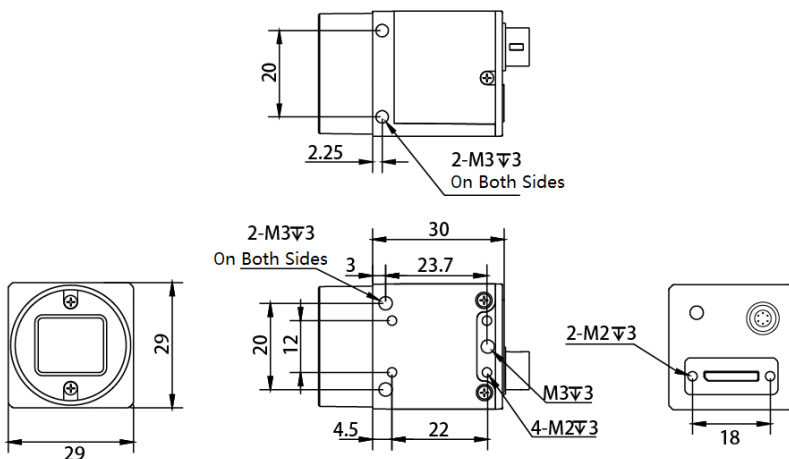
## Introduction

MV-CS004-10UM/UC camera adopts Sony® IMX287 sensor to provide high-quality images. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 525.5 fps in full resolution.

## Key Feature

- Adopts brand new design to reduce power consumption.
- Supports sequencer, contrast ratio, white balance, Gamma correction, etc.
- Supports hardware trigger, software trigger, free run, etc.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Compatible with USB3.0 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

## Dimension



Unit: mm

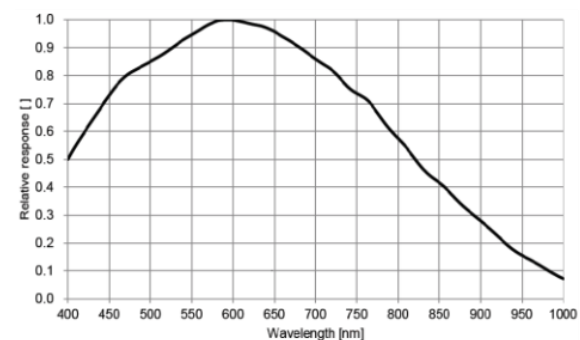
## Available Model

- Mono camera: MV-CS004-10UM V5
- Color camera: MV-CS004-10UC V5

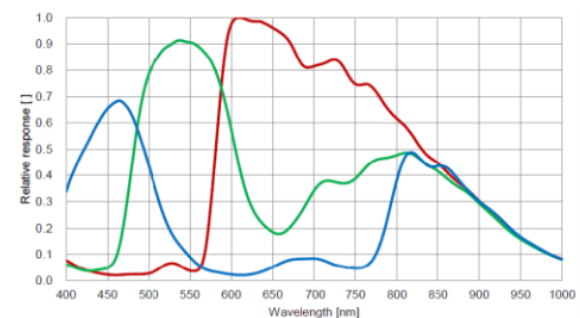
## Applicable Industry

Electronics and semiconductor, factory automation, food and beverage, medicine package, etc.

## Sensor Quantum Efficiency



MV-CS004-10UM V5



MV-CS004-10UC V5

## Specification

Model	MV-CS004-10UM V5	MV-CS004-10UC V5
<b>Performance</b>		
Sensor type	CMOS, global shutter	
Sensor model	Sony® IMX287	
Pixel size	6.9 μm × 6.9 μm	
Sensor size	1/2.9"	
Resolution	720 × 540	
Max. frame rate	525.5 fps @ 720 × 540 Mono 8	530 fps @ 720 × 540 Bayer RG 8
Dynamic range	73.4 dB	68.0 dB
SNR	42.7 dB	39.7 dB
Gain	0 dB to 24 dB	
Exposure time	UltraShort exposure mode: 1 μs to 14 μs	
	Standard exposure mode: 15 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8 Bayer RG 8/10/10Packed/12/12Packed YUV422Packed, YUV422_YUYV_Packed RGB 8, BGR 8
Binning	Supports 1 × 1, 2 × 2	
Decimation	Supports 1 × 1, 2 × 2	
Reverse image	Supports horizontal and vertical reverse image output	
<b>Electrical features</b>		
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. 1.7 W @ 5 VDC (USB3.0 provides power supply)	
<b>Mechanical</b>		
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 80 °C (-22 °F to 176 °F)	
Humidity	20% RH to 95% RH (no condensation)	
<b>General</b>		
Client software	MVS or third-party software meeting with USB3.0 Vision Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit win11, 32/64-bit Linux	
Compatibility	USB3.0 Vision, GenICam	
Certification	CE, RoHS, KC	