HIKROBOT

# MV-CA004-10UM/UC

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





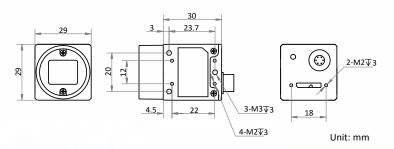
Introduction

MV-CA004-10UM/UC camera adopts Sony<sup>®</sup> IMX 287 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 526.5 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, GenlCam Standard, and the third-party software based on these protocol and standard.

#### Dimension



**Available Model** 

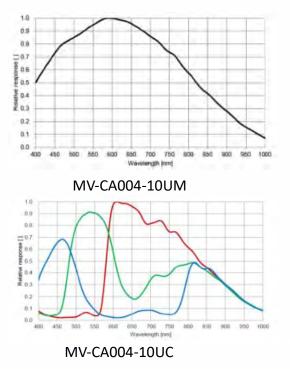
- Mono camera: MV-CA004-10UM
- Color camera: MV-CA004-10UC

## **Applicable Industry**

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

GEN**(i)**CAM

### Sensor Quantum Efficiency



en.hikrobotics.com

## Specification

CameraSensor typeCMOS, global shutterSensor nodelSony® IMX287Pixel size $6.9 \ \mu m \times 6.9 \ \mu m$ Sensor size $1/2.9"$ Resolution720 × 540Max. frame rate526.5 fps @ 720 × 540Dynamic range74 dBSNR41 dBGain0 dB to 20 dBExposure timeUltraShort exposure mode: 1 $\mu$ s to 14 $\mu$ sStandard exposure mode: 15 $\mu$ s to 10 secExposure timeOff/ Once /Continuous exposure modeMono/colorMonoPixel formatMono 8/10/10p/12/12pMono 8/10/10p/12/12pMono 8/10/12, Bayer RG 8/10/10p/12/12pVUV422Packed, YUV422_YUVV_Packed, RG BGR 8BinningSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4BecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4DecimationSupports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4Decimation </th <th></th>	
Sensor model     Sony® IMX287       Pixel size     6.9 μm × 6.9 μm       Sensor size     1/2.9"       Resolution     720 × 540       Max. frame rate     526.5 fps @720 × 540       Dynamic range     74 dB       SNR     41 dB       Gain     0 dB to 20 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       Pixel format     Mono 8/10/10p/12/12p       Binning     Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4       Decimation     Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4       Reverse image     Supports horizontal and vertical reverse image output       Image buffer     128 MB       Electrical feature     USB3.0, compatible with USB2.0       Data interface     USB3.0, compatible with USB2.0       Digital I/O     6-pin Hirose connector provides power and I/O, including opto-isolated input × 1 (Line 2)	
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Power supply 9 VDC to 24 VDC supports USB3 0 power supply	
s voe to 21 voe, supports cobolo power suppry	
Power consumption Typ. 3 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 (0.2 lb.)	
Ingress protection IP30 (under proper lens installation and wiring)	
TemperatureWorking temperature: 0 °C to 50 °C (32 °F to 122 °F)	
Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)	
Humidity 20% to 80% 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	

HIKROBOT

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# MaxxVision®

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