MV-CS004-10UM/UC
0.4 MP 1/2.9" CMOS USB3.0 Area Scan Camera

HIKROBOT

SCORPION VISION
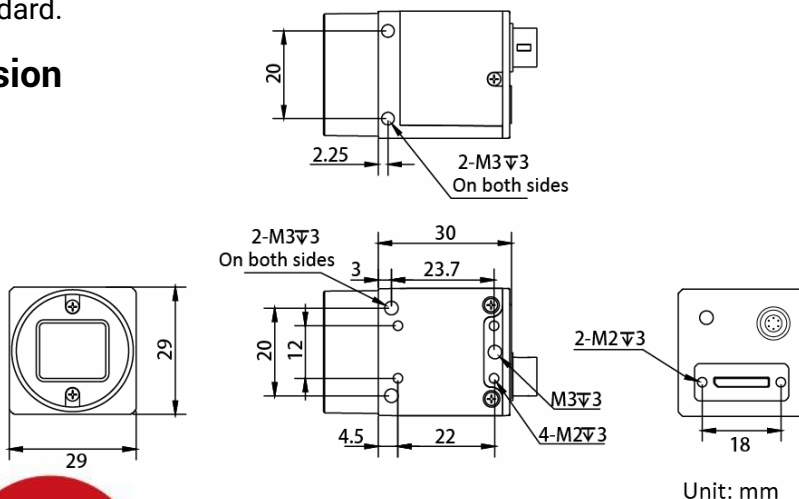
GEN⟨i⟩CAM

USB3 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 526.5 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 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.
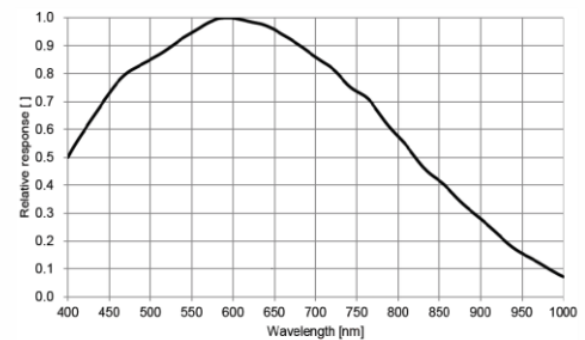
Dimension

Unit: mm

Available Model

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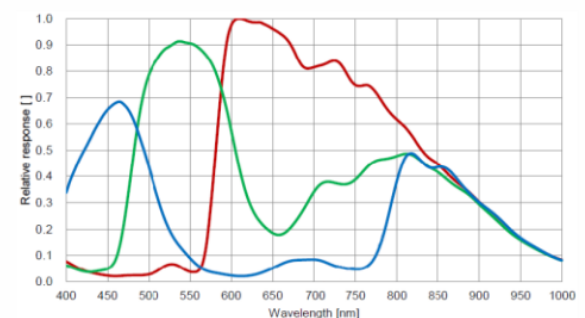- Color camera: MV-CS004-10UC

Applicable Industry

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

Sensor Quantum Efficiency

MV-CS004-10UM

MV-CS004-10UC

Specification

Model	MV-CS004-10UM	MV-CS004-10UC
Performance		
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	526.5 fps @720 × 540 Mono 8	526.5 fps @720 × 540 Bayer RG 8
Dynamic range	73.6 dB	
SNR	42.9 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 8/10/12, 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	
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. 2.4 W@5 VDC (USB3.0 provides power supply)	Typ. 2.6 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	