

MV-CA023-10UM/UC

2.3 MP 1/1.2" CMOS USB3.0 Area Scan Camera



GEN*i*CAM

US3TM
VISION

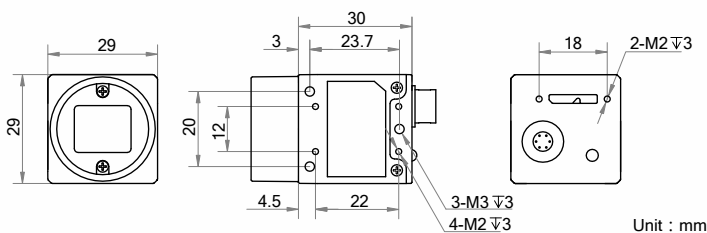
Introduction

MV-CA023-10UM/UC adopts Sony® IMX249 sensor and provides high-quality image. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 41 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, GenICam Standard, and the third-party software based on these protocol and standard.

Dimension



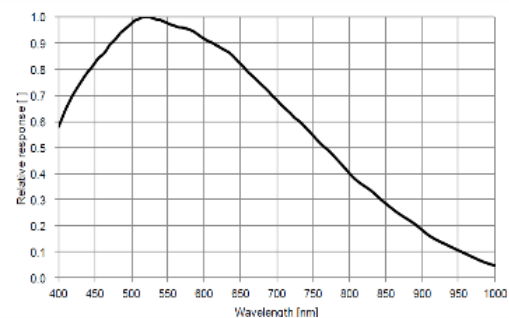
Available Model

- Mono camera: MV-CA023-10UM
- Color camera: MV-CA023-10UC

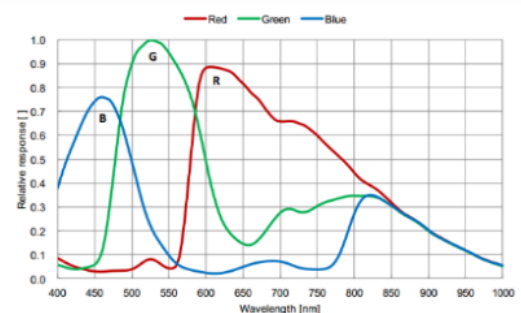
Applicable Industry

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

Sensor Quantum Efficiency



MV-CA023-10UM



MV-CA023-10UC



Specification

Model	MV-CA023-10UM	MV-CA023-10UC
Camera		
Sensor type	CMOS, global shutter	
Sensor model	Sony® IMX249	
Pixel size	5.86 μm × 5.86 μm	
Sensor size	1/1.2"	
Resolution	1920 × 1200	
Max. frame rate	41 fps @1920 × 1200	40 fps @1920 × 1200
Dynamic range	70 dB	
SNR	40 dB	
Gain	0 dB to 20 dB	
Exposure time	34 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
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	
Electrical feature		
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 0), opto-isolated output × 1(Line 1), and bi-directional non-isolated I/O × 1 (Line 2)	
Power supply	12 VDC, supports USB 3.0 power supply	
Power consumption	Typ. 2.5 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. 56 g (0.12 lb.)	
Ingress protection	IP30 (under correct lens installation and wiring)	
Temperature	Working 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 compatible 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	
Certifications	CE, FCC, RoHS, KC	

HIKROBOT

Hangzhou Hikrobot Co., Ltd.
en.hikrobotics.com

© Hangzhou Hikrobot Co., Ltd. All Rights Reserved.

Hangzhou Hikrobot 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.