# HIKROBOT®

# MV-CA023-10UM/UC

## 2.3 MP 1/1.2" CMOS USB3.0 Area Scan Camera
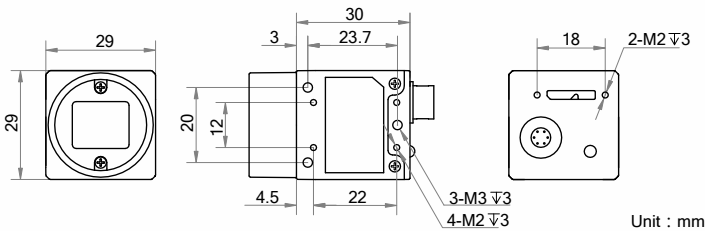
GEN<i>CAM

USB 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, GenlCam Standard, and the third-party software based on these protocol and standard.
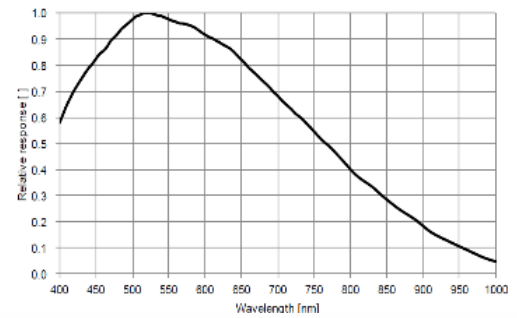
## Dimension



Unit : mm

## Available Model

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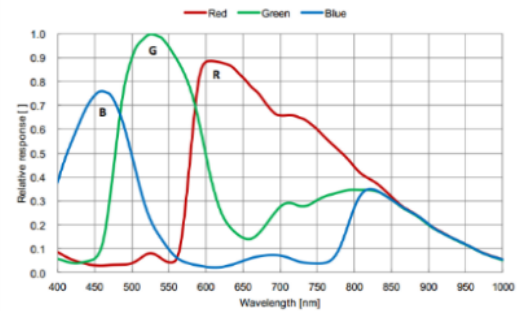- Color camera: MV-CA023-10UC

## Applicable Industry

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

## Sensor Quantum Efficiency



MV-CA023-10UM



## Aremak Bilişim Teknolojileri
Endüstriyel Görüntü İşleme Çözümleri

Adres: ODTÜ Teknokent Bilişim ve İnovasyon Merkezi, Mustafa Kemal Mahallesi, Dumlupınar Bulvarı No:280G, İç Kapı No:1260, Çankaya, Ankara/Türkiye

W: www.aremak.com.tr
E: shop@aremak.com.tr
T: +908502551506

en.hikrobotics.com

# 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 | |