MV-CA023-10GM/GC

2.3 MP 1/1.2" CMOS GigE Area Scan Camera

Introduction

MV-CA023-10GM/GC camera adopts Sony IMX249 sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 41 fps.

Key Feature

- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Supports auto and manual adjustment for exposure control, LUT, Gamma correction, etc.
- Up to 128 MB local memory for burst transmission and retransmission.
- Supports hardware trigger, software trigger, etc.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on these protocol and standard.

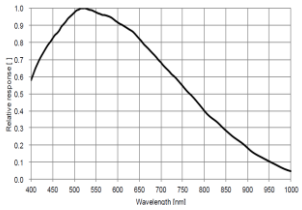
Available Model

- Mono camera: MV-CA023-10GM
- Color camera: MV-CA023-10GC

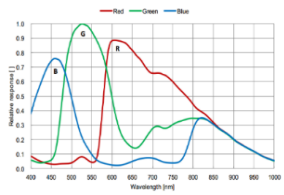
Applicable Industry

Electronic semiconductor, factory automation, food and beverage, medical packaging, etc.

Sensor Quantum Efficiency

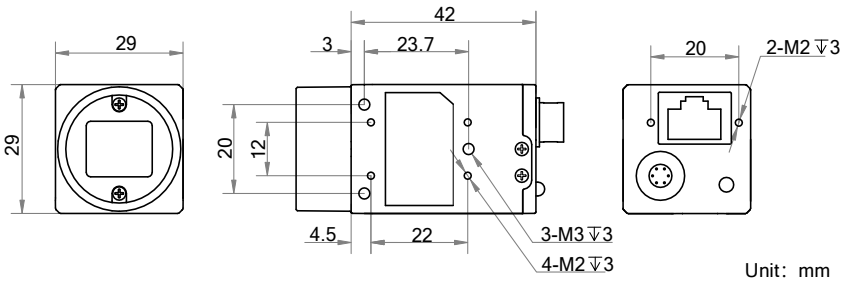


MV-CA023-10GM



MV-CA023-10GC

Dimension



Unit: mm

Specification

Model	MV-CA023-10GM	MV-CA023-10GC
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	
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, 2 × 1, 1 × 4, 4 × 1, 2 × 2, 2 × 4, 4 × 2, 4 × 4	
Decimation	Supports 1 × 1, 1 × 2, 2 × 1, 1 × 4, 4 × 1, 2 × 2, 2 × 4, 4 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Image buffer	128 MB	
Electrical feature		
Data interface	Gigabit Ethernet, compatible with Fast Ethernet	
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), bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	12 VDC, supports PoE	
Power consumption	Typ. 2.9 W @ 12 VDC	Typ. 3.1 W @ 12 VDC
Mechanical		
Lens mount	C-mount	
Dimension	29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")	
Weight	Approx. 68 g (0.15 lb.)	
Ingress protection	IP30 (under proper 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% RH to 80% RH (no condensation)	
General		
Client software	MVS or third-party software meeting with GigE Vision Protocol	
Operating system	32/64-bit Windows 7/10, 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, FCC, RoHS, KC	