

MV-CL043-A1GM

4096 P CMOS GigE Line Scan Camera



GEN*i*CAM

GIG*E* VISION

Introduction

MV-CL043-A1GM camera adopts CMOS sensor to provide high-quality image and integrates multiple ISP image algorithms and functions. It supports several external trigger modes such as line trigger, frame trigger, and line + frame trigger, etc. It uses GigE interface to transmit images in real time.

Key Feature

- Supports 1-line and TDI imaging.
- Integrates multiple ISP image algorithms and functions like Gamma correction, flat correction, gain, etc.
- Adopts bi-directional I/O wiring, flexible configuration for input/output.
- Compact design and flexible installation.
- Compatible with GigE Vision V2.0 and GenICam standard.

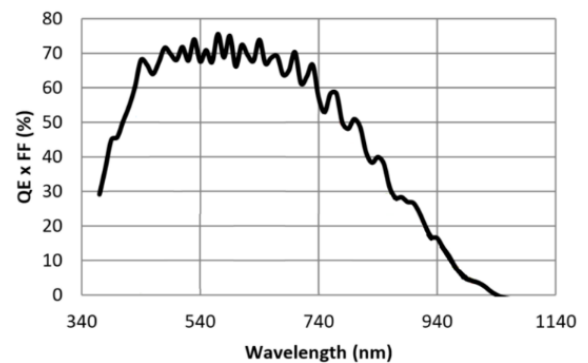
Available Model

MV-CL043-A1GM-V2

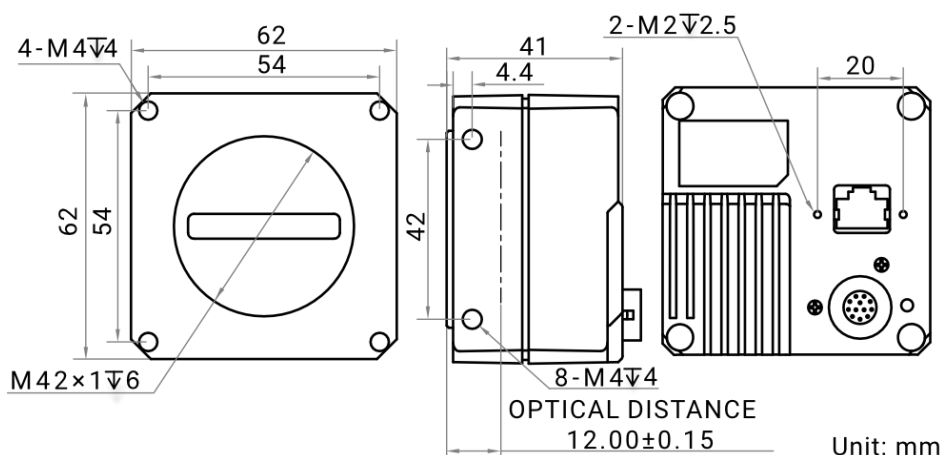
Applicable Industry

Photovoltaics, color sorting, etc.

Sensor Quantum Efficiency



Dimension



Specification

Model	MV-CL043-A1GM-V2
Performance	
Sensor type	CMOS
Pixel size	7 μm \times 7 μm
Resolution	4096 \times 3
Image mode	Supports 1-Line/2-TDI/3-TDI
Max. line rate*	28 kHz @ Mono 8, 14 kHz @ Mono 10/12
Dynamic range	66.2 dB
SNR	39 dB
Gain	1.0 \times , 2.0 \times , 4.0 \times
Exposure time	1 μs to 10 ms
Exposure mode	Off/Once/Continuous exposure mode, and supports trigger-width exposure
Mono/color	Mono
Pixel format	Mono 8/10/12
Binning	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 4
Reverse image	Supports horizontal reverse image output
Trigger mode	External trigger, internal trigger
External trigger mode	Line trigger, frame trigger, line + frame trigger
Electrical feature	
Data interface	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)
Digital I/O	12-pin P10 connector provides power and I/O: Configurable input/output \times 4 (Line 0/1/3/4) and single-ended/differential is supported.
Power supply	12 VDC to 24 VDC
Power consumption	Typ. 3.9 W @ 12 VDC
Mechanical	
Lens mount	M42*1.0, flange back length 12 mm, applicable to F-mount, C-mount and others via adapter
Dimension	62 mm \times 62 mm \times 41 mm (2.4" \times 2.4" \times 1.6")
Weight	Approx. 280 g (0.6 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: -20 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)
Humidity	5% RH to 90% RH (no condensation)
General	
Client software	MVS or the third-party software meeting with GigE Vision protocol
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux
Compatibility	GigE Vision V2.0, GenICam
Certification	CE, RoHS, KC