

MV-CL042-91GC

4096 P CMOS GigE Line Scan Camera



GEN*i*CAM

GigE
VISION

Introduction

MV-CL042-91GC 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 and its max. line rate can reach 80 kHz in the high-bandwidth mode.

Key Feature

- Supports image high-bandwidth mode, TDI, trigger-width exposure, etc.
- Supports manual adjustment for Gamma correction, PRNU correction, LUT, black level offset, etc.
- Adopts bi-directional I/O connection, flexible configuration for Input/Output.
- Compact design and flexible installation.
- Compatible with GigE Vision V2.0 and GenICam standard.

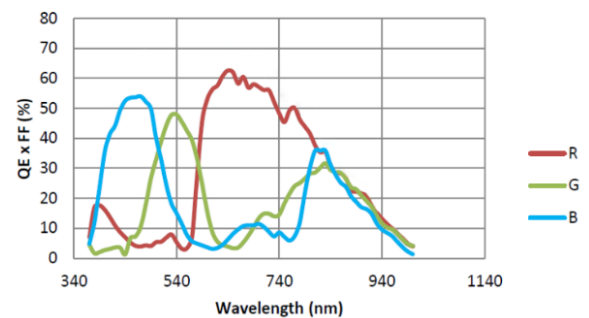
Available Model

MV-CL042-91GC

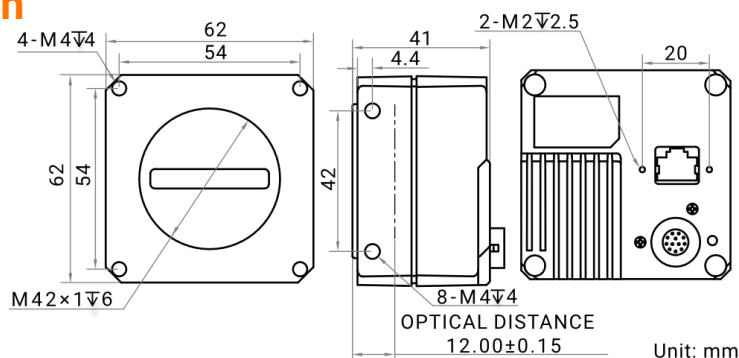
Applicable Industry

Printing, textiles, railway, logistics, metallurgy, food, pharmaceutical manufacturing, material sorting, etc.

Sensor Quantum Efficiency



Dimension



Specification

Model	MV-CL042-91GC
Camera	
Sensor type	CMOS
Pixel size	7 μm $\times$ 7 μm
Resolution	4096 $\times$ 2
Max. line rate*	Standard mode: 28 kHz @ Bayer RG 8/Bayer RBGG 8/Mono 8, 14 kHz @ Bayer RG 10/12/Mono 10/12, 9 kHz @ RGB 8/BGR 8 High-bandwidth mode: 80 kHz @ Bayer RBGG 8, 40 kHz @ Bayer RG 8/RGB 8
Dynamic range	65.6 dB
SNR	40 dB
Gain	1.0 $\times$, 1.4 $\times$, 1.6 $\times$, 2.4 $\times$, 3.2 $\times$
Exposure time	5 μs to 10 ms
Exposure mode	Off/Once/Continuous exposure mode, and supports trigger-width exposure
Mono/color	Color
Pixel format	Mono 8/10/12, Bayer RG 8/10/12, RGB 8, BGR 8, Bayer RBGG 8
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, supports PoE
Power consumption	Typ. 6.6 W @ 12 VDC
Mechanical	
Lens mount	M42*1.0, flange back length 12 mm, applicable to F-mount, C-mount and others via lens 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 55 $^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to 131 $^{\circ}\text{F}$) 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

*The actual line rate after enabling high-bandwidth mode depends on images of objects, and max. line rate in high-bandwidth mode is for reference only.