

MV-CL083-92GC

8192 P CMOS GigE Line Scan Camera



GEN<i>i</i>CAM

GIGEVISION

Introduction

MV-CL083-92GC camera adopts 8192 × 3 line RGB true color CMOS sensor with pixel size of 7 μm × 7 μm, supports RGB true color imaging, and integrates multiple latest ISP image algorithms and functions, and supports external trigger modes like line trigger, frame trigger, and trigger-width exposure. It uses GigE interface to transmit images in real time, and supports high bandwidth function to increase max. line rate.

Key Feature

- Supports high bandwidth image compression mode, trigger-width exposure, RGB true color imaging, etc.
- Rich ISP image algorithms and supports manual adjustment for Gamma correction, flat field correction, LUT, black level, etc.
- Adopts bi-directional I/O hardware design.
- Compact design and flexible installation.
- Compatible with GigE Vision V2.0, GenICam standard.

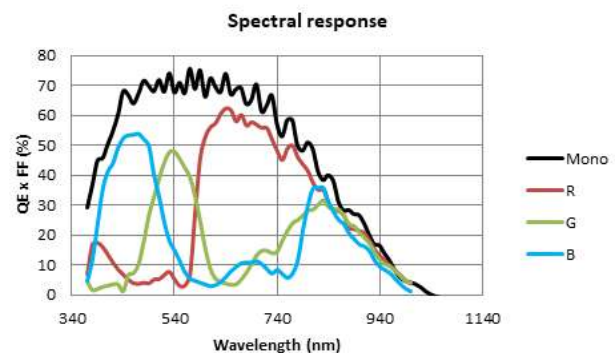
Available Model

MV-CL083-92GC

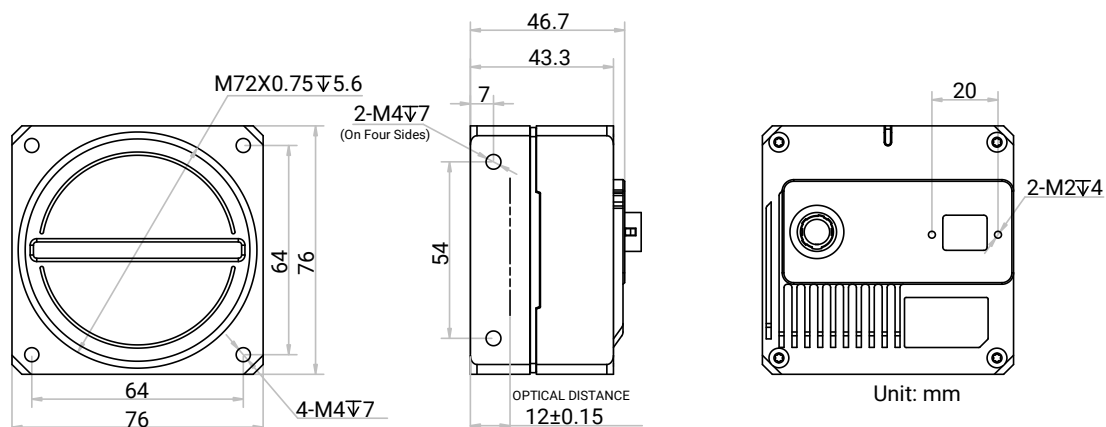
Applicable Industry

New energy, screen detection, consumer electronics, PCB, food & pharmaceuticals, material sorting, etc.

Sensor Quantum Efficiency



Dimension



Specification

Model	MV-CL083-92GC
Performance	
Sensor type	CMOS
Pixel size	7 μm \times 7 μm
Resolution	8192 \times 3
Image mode	Supports 1-line
Max. line rate	Standard mode: 14.1 kHz @Bayer-RG-8/Mono-8, 7.7 kHz @Bayer-RG-10, 4.7 kHz @RGB-8/BGR-8 High-bandwidth mode: 33 kHz @Bayer-RG-/Mono 8, 23.2 kHz @Bayer-RG-10, 12.5 kHz @RGB-8/BGR-8
Dynamic range	63.4 dB
SNR	40.8 dB
Gain	1.0 \times
Exposure time	3 μs to 10 ms
Exposure mode	Off/ Once/ Continuous exposure mode, and supports trigger-width exposure
Mono/color	Color
Pixel format	Bayer RG 8/10, RGB 8, BGR 8, Mono 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, compatible with Fast Ethernet
Digital I/O	12-pin P10 connector provides power and I/O: configurable input or output \times 4 (Line 0/1/3/4) and supports single-ended/differential
Power supply	12 VDC to 24 VDC
Power consumption	Typ. 7.7 W@12 VDC
Mechanical	
Lens mount	M72 *0.75, flange focal length: 12 mm (0.5"), applicable to F/C-mount and others via adapter
Dimension	76 mm \times 76 mm \times 46.7 mm (3.0" \times 3.0" \times 1.8")
Weight	Approx. 400 g (0.9 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% to 90% RH, non-condensing
General	
Client software	MVS or the third-party software meeting with GigE Vision protocol
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux, and 64-bit MacOS
Compatibility	GigE Vision V2.0, GenICam
Certification	CE, RoHS, KC