

MV-CL083-92GC V2.0

8192 P CMOS GigE Line Scan Camera



GEN< i >CAM

GigE
VISION

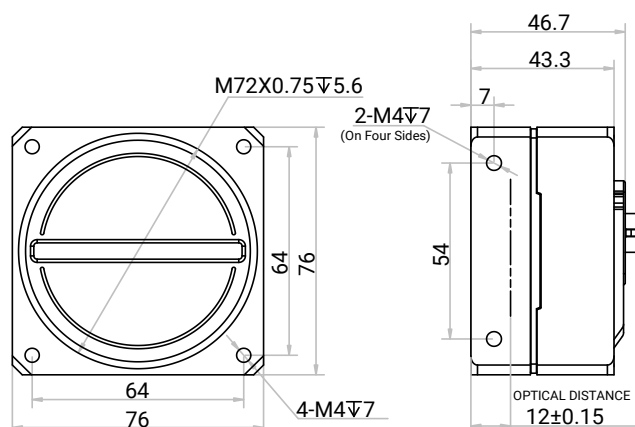
Introduction

MV-CL083-92GC V2.0 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 Features

- 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.

Dimension



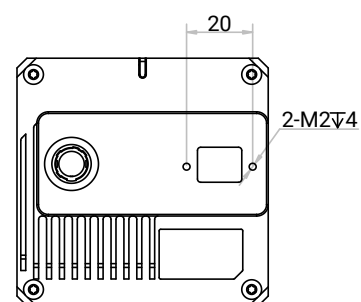
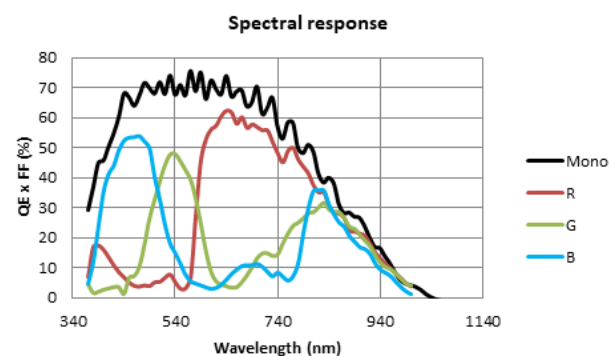
Available Model

MV-CL083-92GC V2.0

Applicable Industry

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

Sensor Quantum Efficiency



Unit: mm

Specification

Model	MV-CL083-92GC V2.0
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 back length 12 mm, applicable to F-mount, 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% 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, 32/64-bit Linux
Compatibility	GigE Vision V2.0, GenICam
Certification	CE, RoHS, KC