

MV-CL042-91FC

4096 P XoF Color Line Scan Camera



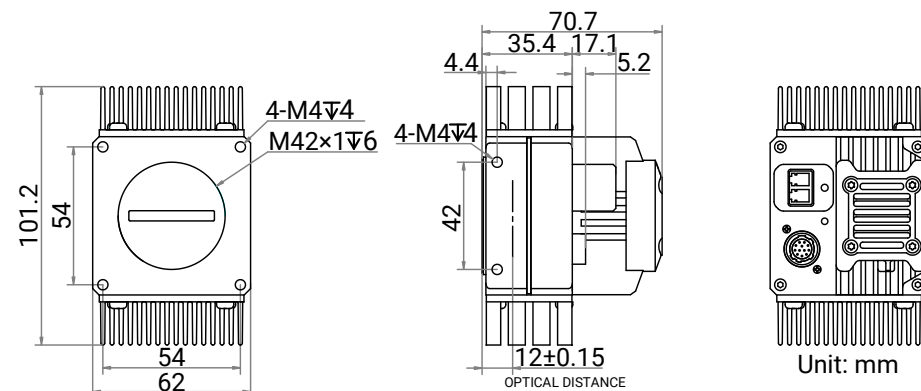
Introduction

MV-CL042-91FC camera adopts 4096 × 2 color CMOS sensor and supports transmission protocol of XoFLink, and its max. line rate reaches 100 kHz. It adopts multiple ISP image processing technologies, and is featured with high speed, high accuracy, and high performance.

Key Feature

- Adopts multiple ISP like Gamma correction, flat field correction, LUT, black level offset, etc.
- Provides one XoF fiber port with 10 GB bandwidth.
- Supports multiple exposure and acquisition methods with max. line rate of 100 kHz.
- Adopts bi-directional configurable I/O hardware design.
- Compact design and flexible installation.

Dimension



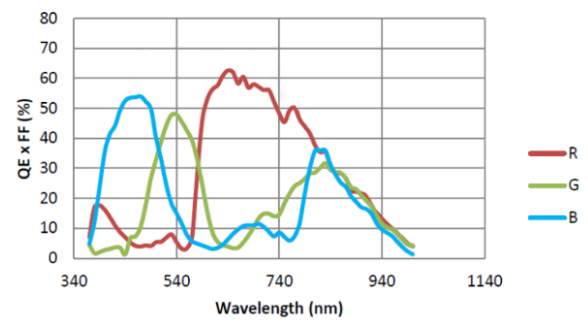
Available Model

MV-CL042-91FC

Applicable Industry

New energy, consumer electronics, textile, railway, etc.

Sensor Quantum Efficiency



Accessories

- Frame Grabber: MV-GS1002F, MV-GS1004F
- SFP+ Module: MV-AC10G-SFP
- Fiber Patch Cable: MV-AC10G-2LC-2LC-ST

Specification

Model	MV-CL042-91FC
Performance	
Sensor type	CMOS
Pixel size	7 μm \times 7 μm
Resolution	4096 \times 2
Image mode	Supports 1-Line
Max. line rate	Standard mode: 98 kHz @ RGB 8/BGR 8, 100 kHz @ Mono 8/10/12/Bayer RG 8/10/12/Bayer RBGG 8 Line rate after ROI: 100 kHz
Transmission mode	1 Link
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	3 μs to 10 ms
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Color
Pixel format	Bayer RG 8/10/12, Bayer RBGG 8, RGB 8, BGR 8, 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	LC fiber connector
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. 9 W @ 12 VDC
Mechanical	
Lens mount	M42*1.0, flange back length 12 mm, applicable to F-mount via lens adapter
Dimension	101.2 mm \times 62 mm \times 70.7 mm (4.0" \times 2.4" \times 2.8")
Weight	Approx. 300 g (0.7 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
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11
Compatibility	XoFLink, GenICam
Certification	CE, RoHS, KC