

MV-CL084-B1NM

8192 P CMOS 2.5 GigE Line Scan Camera



GEN< i >CAM

GigE
VISION

Introduction

MV-CL084-B1NM camera adopts CMOS sensor to provide high-quality image, and uses 2.5 GigE interface to transmit images in real time. It adopts multiple ISP image algorithms and functions, and supports external trigger modes like line trigger, frame trigger, and line + frame trigger.

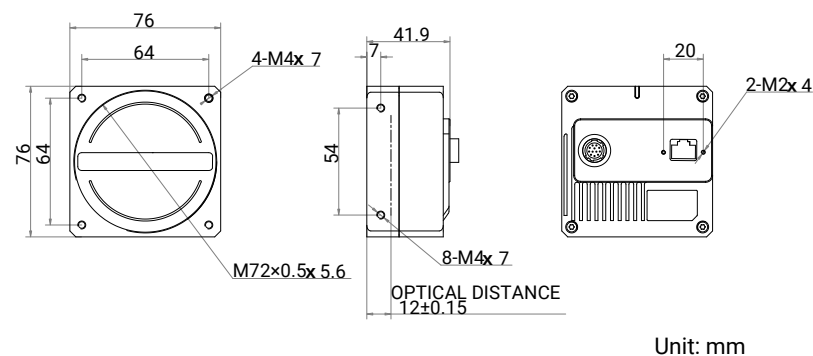
Available Model

MV-CL084-B1NM

Applicable Industry

New energy, consumer electronics, medical material, textiles, railway, material sorting, etc.

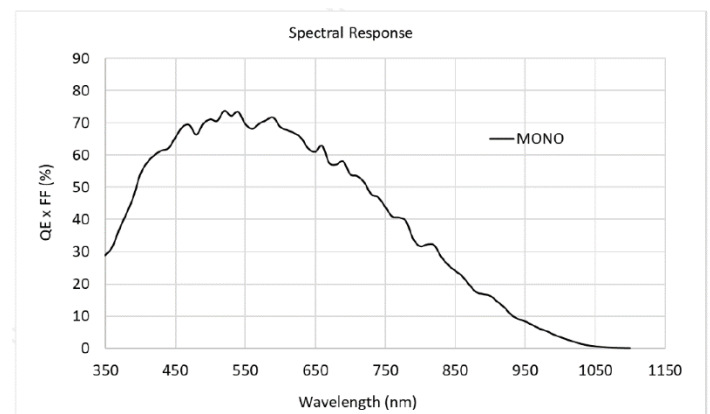
Dimension



Key Feature

- Adopts 2.5 GigE interface to transmit data, and supports max. line rate of 37.6 kHz and peak value of 75.6 kHz.
- Supports image modes of 1-Line, 2-TDI, and 4-TDI.
- Supports ISP image functions and manual adjustment of Gamma correction, FFC, LUT, black level, etc.
- Adopts bi-directional I/O hardware design.
- Compact design and flexible installation.
- Compatible with GigE Vision V2.0 and GenICam standard.

Sensor Quantum Efficiency



Specification

Model	MV-CL084-B1NM
Performance	
Sensor type	CMOS
Pixel size	7 μm $\times$ 7 μm
Resolution	8192 $\times$ 4
Image mode	Supports 1-Line, 2-TDI, 4-TDI
Max. line rate	Full resolution: 37.6 kHz @ Mono 8 (1-Line, 2-TDI), 34 kHz @ Mono 8 (4-TDI), 18.8 kHz @ Mono 10/12 (1-Line, 2-TDI, 4-TDI) Line rate after ROI: Max. 90 kHz @ Mono 8 & 1-Line (3424 P and below) Peak value: 75.6 kHz @ Mono 8 & 1-Line
Dynamic range	63.9 dB
SNR	41.6 dB
Gain	Supports 1.0 $\times$, 2.0 $\times$, 3.0 $\times$, 4.0 $\times$
Exposure time	3 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	Not supported
Trigger mode	External trigger, internal trigger
External trigger mode	Line trigger, frame trigger, line + frame trigger
Electrical feature	
Data interface	2.5 Gigabit Ethernet (2500 Mbit/s), compatible with Gigabit Ethernet (1000 Mbit/s) and Fast Ethernet (100 Mbit/s)
Digital I/O	12-pin P10 connector provides power and I/O: bi-directional configurable I/O $\times$ 4 (Line 0/1/3/4) and support single-ended/differential I/O signal
Power supply	12 VDC to 24 VDC
Power consumption	Typ. 6.7 W @ 24 VDC
Mechanical	
Lens mount	M72 *0.75, flange focal length 12 mm, connecting to F-mount, C-mount, and other lenses via adapter ring
Dimension	76 mm $\times$ 76 mm $\times$ 41.9 mm (3.0" $\times$ 3.0" $\times$ 1.6")
Weight	Approx. 350 g (0.8 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	20% RH to 80% RH (no condensation)
General	
Client software	MVS or the third-party software meeting with GigE Vision protocol
Operating system	32/64-bit Windows 7/10/11, 32/64-bit Linux
Compatibility	GigE Vision V2.0, GenICam
Certification	CE, RoHS, KC