

MV-CH650-90XM

65 MP CMOS CoaXPress Area Scan Camera



GEN*i*CAM

CoaXPress®

Introduction

MV-CH650-90XM camera adopts Gpixel GMAX3265 sensor and CoaXPress interface to provide high-quality and non-compressed images in real time. Its max. frame rate reaches up to 31.5 fps in full resolution.

Key Feature

- Resolution of 9216 × 7000, and pixel size of 3.2 μm × 3.2 μm.
- Adopts global shutter CMOS to provide high dynamic range, SNR, and high-quality image.
- Adopts CoaXPress interface to transmit data.
- Supports Off, Once, and Continuous exposure mode.
- Compatible with CoaXPress Protocol, GenICam Standard, and third-party software based on the protocol and standard.

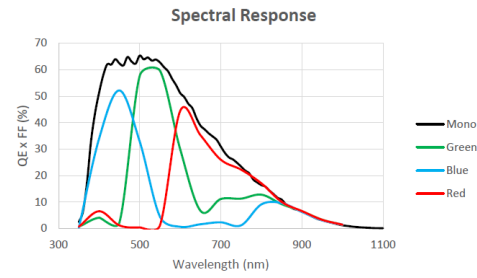
Available Model

- Mono: M58-mount with fan: MV-CH650-90XM-M58S-NF
- Mono: F-mount with fan: MV-CH650-90XM-F-NF

Applicable Industry

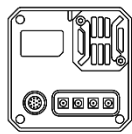
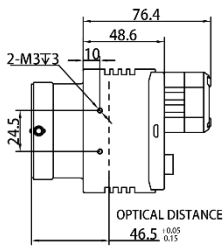
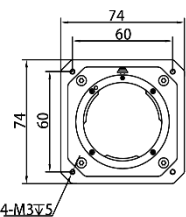
PCB AOI, FPD, high-accuracy measurement, etc.

Sensor Quantum Efficiency



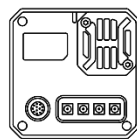
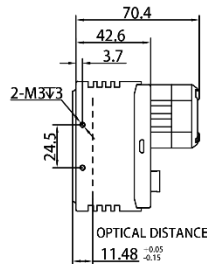
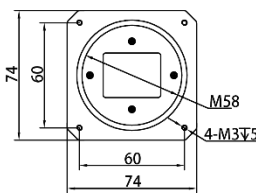
Dimension

F-mount with fan:



Unit: mm

M58-mount with fan:



Unit: mm

Specification

Model	MV-CH650-90XM
Camera	
Sensor type	CMOS, global shutter
Sensor model	Gpixel GMAX3265
Pixel size	3.2 μm \times 3.2 μm
Sensor size	29.9 mm \times 22.4 mm
Resolution	9216 \times 7000
Max. frame rate	31.5 fps @9216 \times 7000
Dynamic range	66 dB
SNR	40 dB
Gain	1.25x to 6x
Exposure time	14 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
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
Decimation	Not support
Reverse image	Supports horizontal and vertical reverse image output
Electrical features	
Data interface	CoaXPress with DIN interface
Digital I/O	12-pin Hirose connector provides I/O: opto-isolated input \times 1 (Line 0), opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 1 (Line 2), and RS-232 \times 1.
Power supply	9 VDC to 24 VDC
Power consumption	Typ. 12 W@12 VDC
Mechanical	
Lens mount	F-Mount: optical back focal length 46.5 mm (1.8") M58-Mount: optical back focal length 11.48 mm (0.5")
Dimension	F-Mount with fan: 74 mm \times 74 mm \times 76.4 mm (2.9" \times 2.9" \times 3.0") M58-Mount with fan: 74 mm \times 74 mm \times 70.4 mm (2.9" \times 2.9" \times 2.8")
Weight	F-Mount with fan: approx. 500 g (1.1 lb.) M58-Mount with fan: approx. 470 g (1.0 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)
Humidity	20% to 95% RH, non-condensing
General	
Client software	Frame grabber software meeting with CoaXPress Protocol
Operating system	32/64-bit Windows 7/10 with 8 GB memory or above
Compatibility	CoaXPress, GenICam
Certifications	CE, FCC, RoHS, KC