MV-CH310-10XM

31 MP CMOS CoaXPress Area Scan Camera

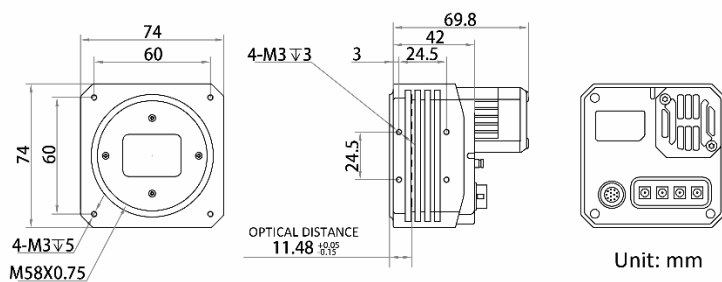GEN<i>CAM

CoaXPress®

Introduction

MV-CH310-10XM camera adopts Sony® IMX 342 sensor and provides high quality image. It transmits data via CXP-6 interface. With high dynamic range and high signal-noise ratio, it is widely applied to PCB AOI, FPD, high-accuracy measurement, etc.

Key Feature

- Resolution of 6464 × 4852, and pixel size of 3.45 μm × 3.45 μm.
- Adopts CMOS global shutter to provide high dynamic range, SNR and high quality image.
- Adopts CXP-6 interface to transmit data.
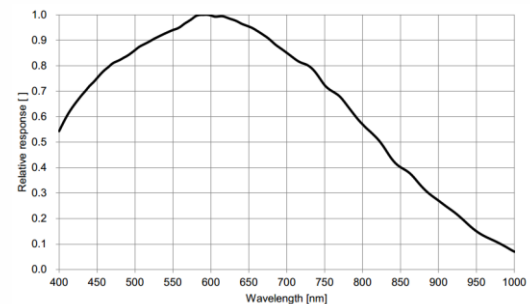- Compatible with CoaXPress Protocol, and GenlCam standard.

Available Model

- M58-mount with fan, mono: MV-CH310-10XM-M58S-NF
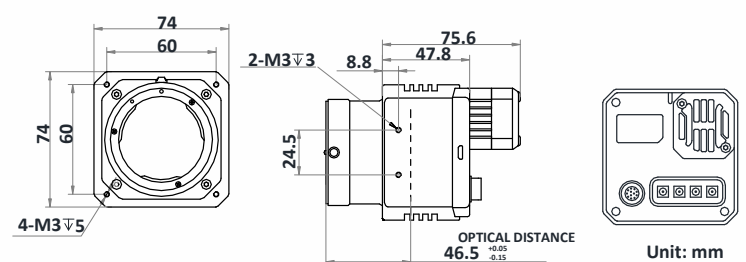- F-mount with fan, mono: MV-CH310-10XM-F-NF

Applicable Industry

PCB AOI, FPD, high-accuracy measurement, railway related application, etc.

Sensor Quantum Efficiency

Dimension

M58-mount with fan:

Unit: mm

F-mount with fan:

Unit: mm

Specification

Model	MV-CH310-10XM
Camera	
Sensor type	CMOS, global shutter
Sensor model	Sony® IMX 342
Pixel size	3.45 μm × 3.45 μm
Sensor size	APS-C
Resolution	6464 × 4852
Max. frame rate	ADC 8-bit mode: 17.9 fps @6464 × 4852
	ADC 12-bit mode: 12.1 fps @6464 × 4852
Dynamic range	73 dB
SNR	40 dB
Gain	0 dB to 20 dB
Exposure time	UltraShort exposure mode: 3 μs to 33 μs
	ADC 8-bit mode: 47 μs to 2 sec
	ADC 12-bit mode: 36 μs to 2 sec
Exposure mode	Off/ Once /Continuous exposure mode
Mono/color	Mono
Pixel format	ADC 8-bit mode: Mono 8
	ADC 12-bit mode: Mono 8 /10/12
Reverse image	Supports horizontal and vertical reverse image output
Electrical features	
Data interface	CoaXPress (DIN interface)
Digital I/O	12-pin I/O interface: opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2), and RS-232 × 1.
Power supply	9 VDC to 24 VDC
Power consumption	Typ. 9.1 W@12 VDC
Mechanical	
Lens mount	M58-mount, optical back focal length 11.48 mm (0.5")
	F-Mount, optical back focal length 46.5 mm (1.8")
Dimension	M58-mount with fan: 74 mm × 74 mm × 69.8 mm (2.9" × 2.9" × 2.7")
	F-mount with fan: 74 mm × 74 mm × 75.6 mm (2.9" × 2.9" × 3.0")
Weight	M58-mount with fan: approx. 540 g (1.2 lb.)
	F-mount with fan: approx. 650 g (1.4 lb.)
Ingress protection	IP 40 (under proper lens installation and wiring)
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)
	Storage temperature: -30 °C to 70 °C (-22 °F to 158 °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, GenlCam
Certification	CE, FCC, RoHS, KC

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