

# MV-CH310-10XM-F-NF

31 MP CMOS CoaXPress Area Scan Camera



GEN*<i>i>*CAM

CoaXPress®

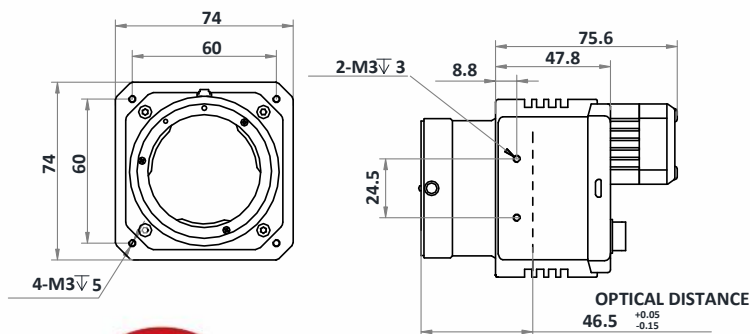
## Introduction

MV-CH310-10XM-F-NF 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 6464 × 4852, and pixel size 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 GenICam standard

## Dimension



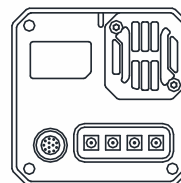
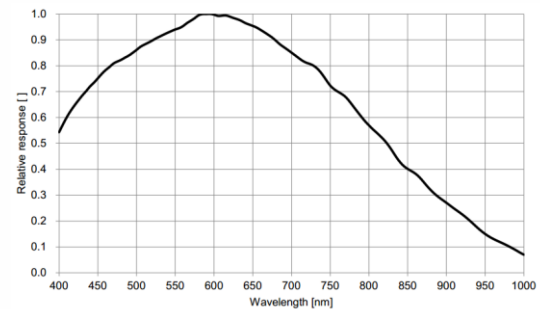
## Available Model

Mono camera: MV-CH310-10XM-F-NF

## Applicable Industry

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

## Sensor Quantum Efficiency



Unit: mm



## Specification

<b>Model</b>	<b>MV-CH310-10XM-F-NF</b>
<b>Camera</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Sensor model</b>	Sony IMX 342
<b>Pixel size</b>	3.45 $\mu\text{m}$ $\times$ 3.45 $\mu\text{m}$
<b>Sensor size</b>	APS-C
<b>Resolution</b>	6464 $\times$ 4852
<b>Max. frame rate</b>	ADC 8bit mode: 17.9 fps @6464 $\times$ 4852 ADC 12bit mode: 12.1 fps @6464 $\times$ 4852
<b>Mono/color</b>	Mono
<b>Pixel format</b>	ADC 8bit mode: Mono 8; ADC 12bit mode: Mono 8 / 10/ 12
<b>Dynamic range</b>	73 dB
<b>SNR</b>	40 dB
<b>Gain</b>	0 dB to 20 dB
<b>Exposure time</b>	UltraShort exposure mode: 3 $\mu\text{s}$ to 33 $\mu\text{s}$
	ADC 8bit mode: 47 $\mu\text{s}$ to 2 s
	ADC 12bit mode: 36 $\mu\text{s}$ to 2 s
<b>Shutter mode</b>	Off/ Once /Continuous exposure mode
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical features</b>	
<b>Data interface</b>	CoaXPress (DIN interface)
<b>Digital I/O</b>	12-pin I/O interface; opto-isolated input x1 (Line 0), opto-isolated output x1 (Line 1), bi-directional non-isolated I/O x 1 (Line 2), RS-232 x1, and RS-485 interface x 1
<b>Power supply</b>	9 VDC to 26 VDC
<b>Power consumption</b>	< 9.1 W@12 VDC
<b>Structure</b>	
<b>Lens mount</b>	F-Mount, optical back focal length 46.5 mm (1.8")
<b>Dimension</b>	74 mm $\times$ 74 mm $\times$ 75.6 mm (2.9" $\times$ 2.9" $\times$ 3.0")
<b>Weight</b>	Approx. 650 g (1.4 lb.)
<b>Ingress protection</b>	IP 40 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% to 95% RH, without condensation
<b>General</b>	
<b>Client software</b>	Frame grabber software meeting with CoaXPress Protocol
<b>Operating system</b>	32/64-bit Windows 7/10 with 8 GB memory or above
<b>Compatibility</b>	CoaXPress, GenICam
<b>Certification</b>	CE, FCC, RoHS

**HIKROBOT**

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