

# MV-CH120-10CM/CC

12 MP 1.1" CMOS Camera Link Area Scan Camera



GEN*<i>i</i>*CAM

CAMERA  
Link

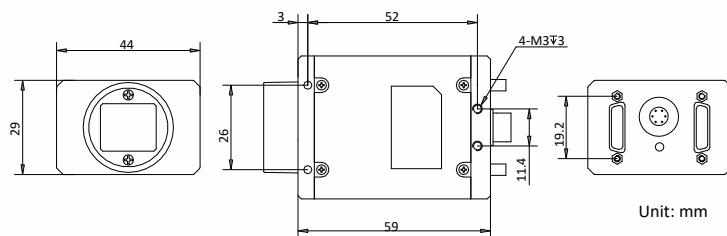
## Introduction

MV-CH120-10CM/CC camera adopts Sony® IMX253 sensor to provide high-quality image. It uses Camera Link interface to transmit non-compressed images in real time with max. frame rate reaching 69.8 fps in full resolution.

## Key Feature

- Adopts global shutter CMOS sensor providing wide dynamic range and high-quality image.
- Supports configuration modes of Base, Medium, Full and 80-bit via the Camera Link interface.
- Adopts compact design with mounting holes for flexible mounting.
- Compatible with Camera Link V2.0 Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

## Dimension



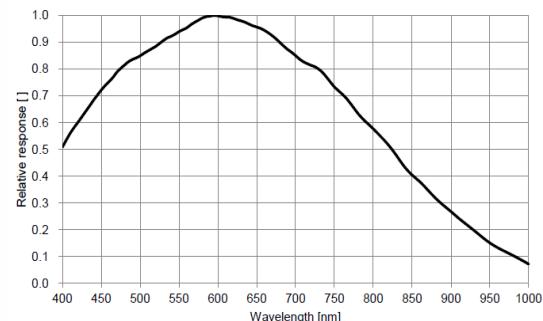
## Available Model

- Mono camera: MV-CH120-10CM
- Color camera: MV-CH120-10CC

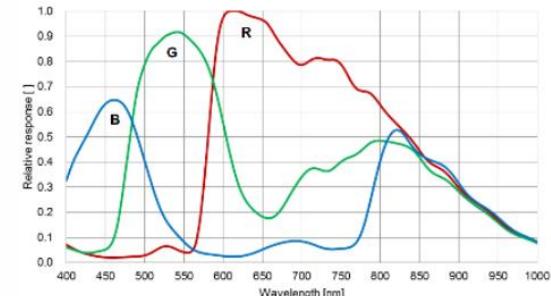
## Applicable Industry

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

## Sensor Quantum Efficiency



MV-CH120-10CM



MV-CH120-10CC



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## Specification

Model	MV-CH120-10CM		MV-CH120-10CC
<b>Camera</b>			
<b>Sensor type</b>	CMOS, global shutter		
<b>Sensor model</b>	Sony® IMX253		
<b>Pixel size</b>	3.45 µm × 3.45 µm		
<b>Sensor size</b>	1.1"		
<b>Resolution</b>	4096 × 3000 (Base/Medium/Full), 3840 × 3000 (80-bit)		
<b>Max. frame rate</b>	50.9 fps (Base/Medium/Full) 69.8 fps (80-bit)	51.4 fps (Base/Medium/Full) 68.1 fps (80-bit)	
<b>Configuration mode</b>	Base, Medium, Full, 80-bit		
<b>Tap geometry</b>	1X2_1Y, 1X4_1Y, 1X8_1Y, 1X10_1Y		
<b>Tap number</b>	2 Taps, 4 Taps, 8 Taps, 10 Taps	1 Tap, 2 Taps, 4 Taps, 8 Taps, 10 Taps	
<b>Pixel clock</b>	60 MHz, 70 MHz, 85 MHz	40 MHz, 60 MHz, 70 MHz, 85 MHz	
<b>Dynamic range</b>	71.6 dB		
<b>SNR</b>	39.7 dB		
<b>Gain</b>	0 dB to 24 dB		
<b>Exposure time</b>	1 µs to 10 sec		
<b>Exposure mode</b>	Off/Once/Continuous exposure mode		
<b>Mono/color</b>	Mono	Color	
<b>Pixel format</b>	Mono 8/10/12	Bayer RG 8/10/12, RGB 8	
<b>Binning</b>	Not support		
<b>Decimation</b>	Not support		
<b>Reverse image</b>	Supports horizontal and vertical reverse image output		
<b>Electrical feature</b>			
<b>Data interface</b>	Camera Link with SDR interface		
<b>Digital I/O</b>	6-pin Hirose connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).		
<b>Power supply</b>	9 VDC to 24 VDC		
<b>Power consumption</b>	Typ. 4.7 W@12 VDC	Typ. 4.68 W@12 VDC	
<b>Mechanical</b>			
<b>Lens mount</b>	C-mount		
<b>Dimension</b>	44 mm × 29 mm × 59 mm (1.7" × 1.1" × 2.3")		
<b>Weight</b>	Approx. 100 g (0.2 lb.)		
<b>Ingress protection</b>	IP30 (under proper lens installation and wiring)		
<b>Temperature</b>	Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)		
<b>Humidity</b>	20% to 80% RH, non-condensing		
<b>General</b>			
<b>Client software</b>	MVS or frame grabber software meeting with GenICam Protocol		
<b>Operating system</b>	32/64-bit Windows XP/7/10		
<b>Compatibility</b>	Camera Link V2.0, GenICam		
<b>Certification</b>	CE, FCC, RoHS, KC		



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