MV-CH120-10CM/CC

12 MP 1.1" CMOS Camera Link Area Scan Camera
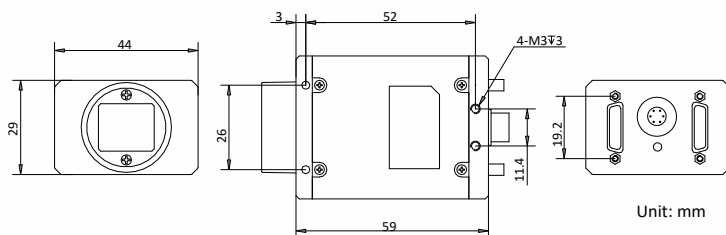
GEN<i>CAM

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.
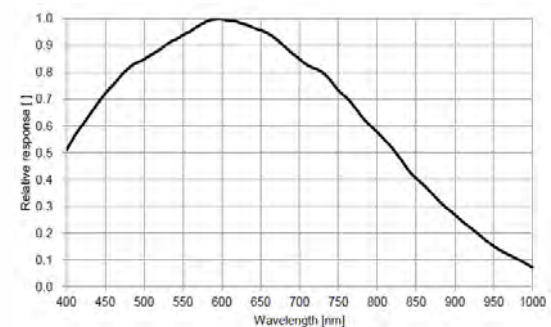
Dimension

Unit: mm

Available Model

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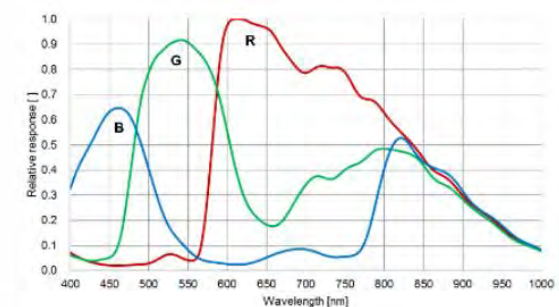- Color camera: MV-CH120-10CC

Applicable Industry

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

Sensor Quantum Efficiency

MV-CH120-10CM

MV-CH120-10CC

Specification

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