

MV-CH050-10CM

5 MP 2/3" CMOS CameraLink Area Scan Camera



GEN<i>i>CAM



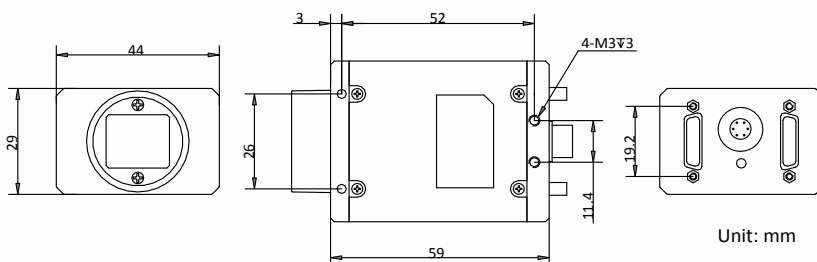
Introduction

MV-CH050-10CM camera adopts Sony IMX250 sensor to provide high-quality image. It uses CameraLink interface to transmit non-compressed images in real time with max. frame rate reaching 140 fps.

Key Feature

- Adopts global shutter CMOS sensor providing high signal-to-noise ratio, wide dynamic range, and high-quality image
- Resolution of 2432 × 2048 and pixel size of 3.45 μm × 3.45 μm
- Supports configuration modes of Base, Medium, Full and 80-bit via the CameraLink interface
- Adopts compact design with mounting holes for flexible mounting

Dimension



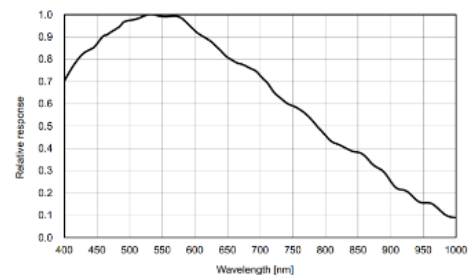
Available Model

Mono camera: MV-CH050-10CM

Applicable Industry

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

Sensor Quantum Efficiency



Specification

Model	MV-CH050-10CM			
Parameters	5 MP 2/3" CMOS CameraLink Area Scan Camera			
Camera				
Sensor type	CMOS, global shutter			
Sensor model	Sony IMX250			
Pixel size	3.45 μm \times 3.45 μm			
Sensor size	2/3"			
Resolution	2432 \times 2048			
Pixel clock	60 MHz, 70 MHz, 85 MHz			
Configuration mode	Base	Medium	Full	80-bit
Sensor combination	1X2_1Y	1X4_1Y	1X8_1Y	1X10_1Y
Tap number	2 Taps	4 Taps	8 Taps	10 Taps
Max. frame rate	140 fps @2432 \times 2048			
Pixel format	Mono 8/10/12			
Dynamic range	75.4 dB			
SNR	40 dB			
Gain	0 dB to 20 dB			
Exposure time	15 μs to 10 s			
Shutter mode	Off/Once/Continuous exposure mode			
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			
Reverse image	Supports horizontal and vertical reverse image output			
Electrical features				
Data interface	CameraLink with SDR interface			
Digital I/O	6-pin Hirose connector provides power and I/O, including opto-isolated input x 1, opto-isolated output x 1, and bi-directional non-isolated I/O x 1			
Power supply	9 VDC to 24 VDC			
Power consumption	Approx. 3.25 W@12 VDC			
Structure				
Lens mount	C-mount			
Dimension	44 mm \times 29 mm \times 59 mm (1.7" \times 1.1" \times 2.3")			
Weight	Approx. 100 g (0.2 lb.)			
Ingress protection	IP30 (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 80% RH, without condensation			
General				
Client software	MVS or frame grabber software meeting with CameraLink V2.0, GenICam Protocol			
Operating system	32/64-bit Windows XP/7/10			
Compatibility	CameraLink, GenICam			
Certification	CE, FCC, RoHS, KC			

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