MV-CH290-60CM
29 MP CCD CameraLink Area Scan Camera

Introduction

MV-CH290-60CM camera adopts OnSemi KAI-29050 sensor to provide high-quality image. It uses CameraLink interface to transmit non-compressed images in real time with max. frame rate reaching 4.5 fps.

Key Feature

- Resolution of 6576 × 4384 and pixel size of 5.5 μm × 5.5 μm
- High quality CCD sensor with ultra-high signal-to-noise ratio, wide dynamic range, excellent imaging quality
- Supports configuration modes of Base and Medium via the CameraLink interface
- Supports serial port communication, and communication protocol RS232
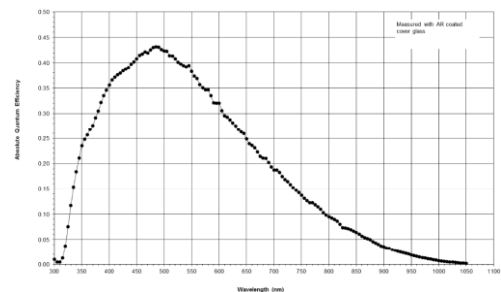- Compact construction design with mounting holes on the up and bottom panels for flexible mounting

Available Model

- Mono: M58-mount with fan: MV-CH290-60CM-M58S-NF
- Mono: F-mount with fan: MV-CH290-60CM-F-NF

Applicable Industry

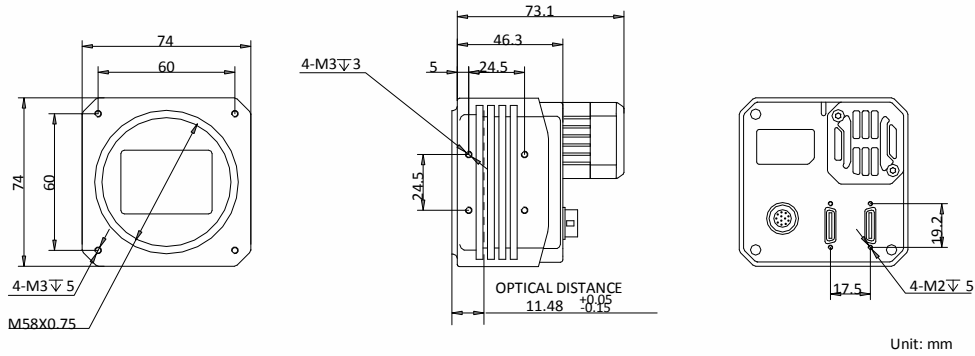SMT/ PCB AOI, FPD, railway related applications, etc.
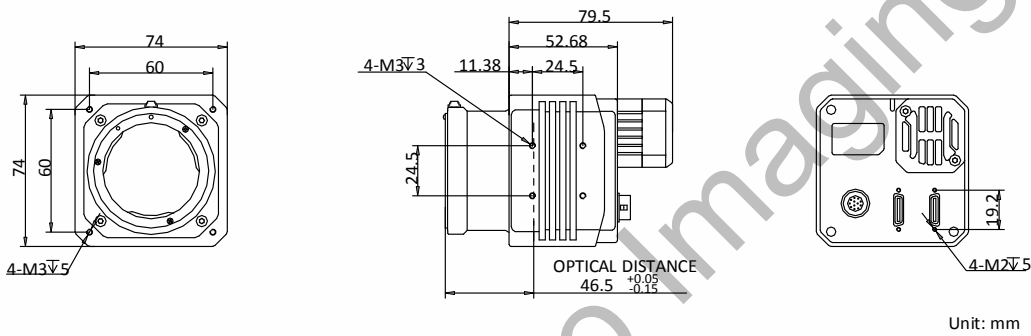
Sensor Quantum Efficiency

Specification

Model	MV-CH290-60CM		
Camera			
Sensor type	CCD, global shutter		
Sensor model	OnSemi KAI-29050		
Pixel size	5.5 μm × 5.5 μm		
Sensor size	36 mm x 24 mm		
Resolution	6576 × 4384		
Pixel clock	85 MHZ		
Configuration mode	Base		Medium
Sensor combination	1X_1Y	1X_2YE	1X2_2YE
Tap number	1 Tap	2 Taps	4 Taps
Frame rate	4.5 fps		
Pixel format	Mono 8/10/12		
Dynamic range	64 dB		
SNR	40 dB		
Gain	0 dB to 20 dB		
Exposure time	103 μs to 2 s		
Shutter mode	Off/Once/Continuous exposure mode		
Mono/color	Mono		
Binning	Supports 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4		
Decimation	Not support		
Reverse image	Supports horizontal reverse image output		
Electrical features			
Data interface	CameraLink with SDR interface		
Digital I/O	12-pin IO, opto-isolated input x 1, opto-isolated output x 1, bi-directional non-isolated I/O x 1, RS232 x 1, and full-duplex RS485 x 1		
Power supply	12 VDC @2A power adapter		
Power consumption	< 11 W@12 VDC		
Structure			
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 cooling fan: 74 mm × 74 mm × 73.1 mm (2.9" × 2.9" × 2.9") F-mount with cooling fan: 74 mm × 74 mm × 79.5 mm (2.9" × 2.9" × 3.1")		
Weight	M58-mount with cooling fan: < 450 g (1.0 lb.) F-mount with cooling fan: < 600 g (1.3 lb.)		
Ingress protection	IP40 (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, without condensation		
General			
Client software	MVS or frame grabber software meeting with GenICam protocol		
Operating system	32/64-bit Windows XP/7/10		
Compatibility	CameraLink, GenICam		
Certification	CE, FCC, RoHS, KC		

Dimension

M58-mount with fan:

Unit: mm

F-mount with fan:

Unit: mm