

MV-CH040-A0CM

4 MP 1" CMOS Camera Link Area Scan Camera



GEN*i*CAM



Introduction

MV-CH040-A0CM camera adopts CMOS sensor to provide high-quality images. It uses Camera Link interface to transmit non-compressed images in real time, and its max. frame rate can reach 180 fps.

Key Feature

- Supports auto or manual adjustment of gain, exposure time, Gamma correction, LUT, etc.
- Supports customized ROI and horizontal and vertical reverse image output.
- Supports hardware trigger, software trigger, free run, and supports triggering via Camera Link frame grabber.
- Supports Base, Medium, Full, 80-bit configuration mode.
- Compatible with Camera Link V2.0 Protocol and GenICam Standard.

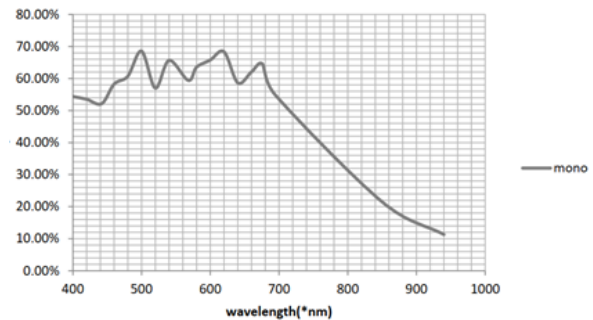
Available Model

MV-CH040-A0CM

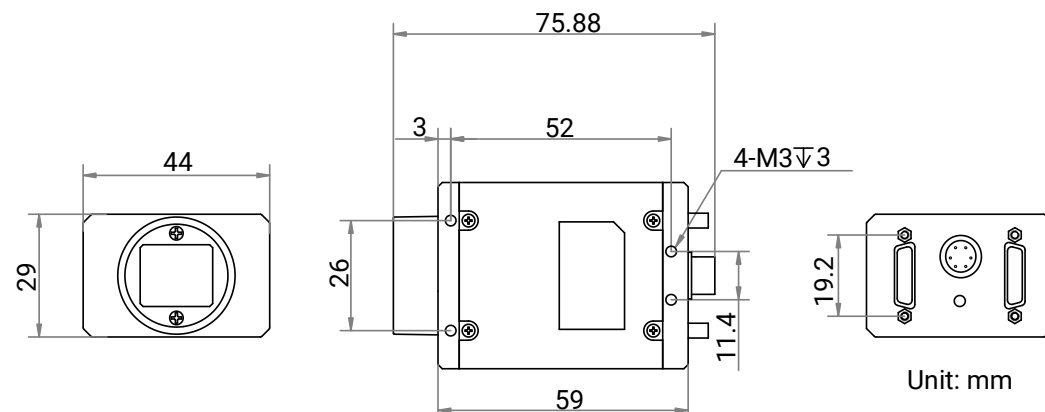
Applicable Industry

Electronic semiconductor, factory automation, medicine packing, etc.

Sensor Quantum Efficiency



Dimension



Model	MV-CH040-A0CM
Performance	
Sensor type	CMOS, global shutter
Pixel size	5.5 μm \times 5.5 μm
Sensor size	1"
Resolution	2048 \times 2048
Max. frame rate	180 fps @2040 \times 2048 Mono 8
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
Pixel clock	40 MHz, 66 MHz, 80 MHz, 85 MHz
Dynamic range	59.7 dB
SNR	39.6 dB
Gain	0 dB to 12 dB
Exposure time	28 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8/10/12
Binning	Supports 1 \times 1, 1 \times 2, 2 \times 1, 2 \times 2
Decimation	Supports 1 \times 1, 1 \times 2, 2 \times 1, 2 \times 2
Reverse image	Supports horizontal and vertical reverse image output
Electrical feature	
Data interface	Camera Link with SDR Connector
Digital I/O	6-pin P7 connector provides power and I/O, including opto-isolated input \times 1 (Line 0), opto-isolated output \times 1 (Line 1), and bi-directional non-isolated I/O \times 1 (Line 2). Camera Link interface provides I/O (CC1/CC2/CC3/CC4)
Power supply	9 VDC to 24 VDC, supports PoCL
Power consumption	Typ. 3.6 W@12 VDC
Mechanical	
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	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: -10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ 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 95% RH, non-condensing
General	
Client software	MVS or frame grabber software meeting with GenICam Protocol
Operating system	32/64-bit Windows XP/7/10, 64-bit Windows 11
Compatibility	Camera Link V2.0, GenICam
Certification	CE, RoHS, KC