

# 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.

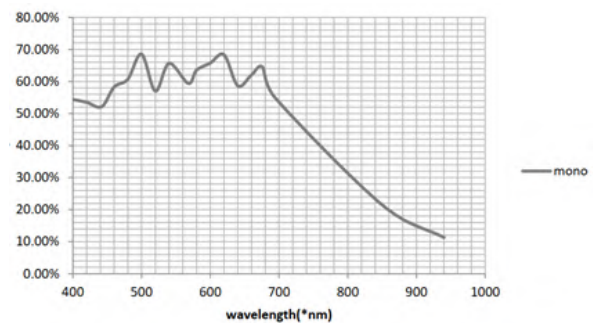
## Available Model

MV-CH040-A0CM

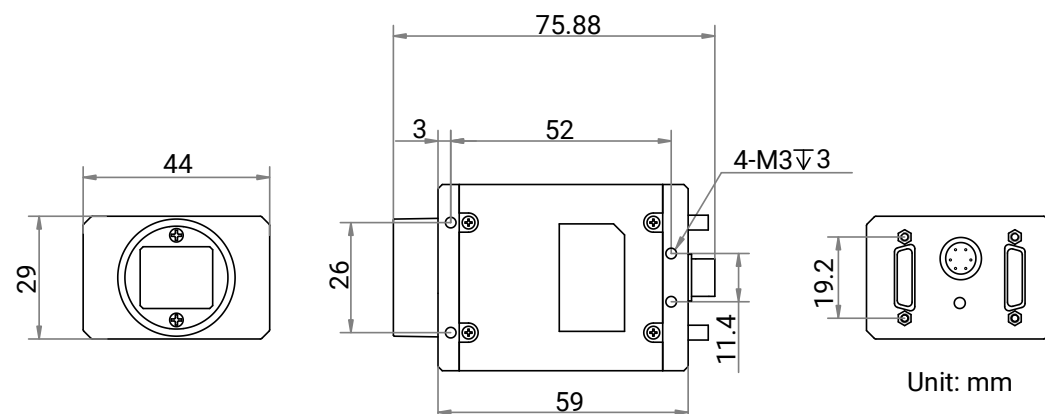
## Applicable Industry

Electronic semiconductor, factory automation, medicine packing, etc.

## Sensor Quantum Efficiency



## Dimension



<b>Model</b>	<b>MV-CH040-A0CM</b>
<b>Performance</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Pixel size</b>	5.5 $\mu\text{m}$ $\times$ 5.5 $\mu\text{m}$
<b>Sensor size</b>	1"
<b>Resolution</b>	2048 $\times$ 2048
<b>Max. frame rate</b>	180 fps @2040 $\times$ 2048 Mono 8
<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
<b>Pixel clock</b>	40 MHz, 66 MHz, 80 MHz, 85 MHz
<b>Dynamic range</b>	59.7 dB
<b>SNR</b>	39.6 dB
<b>Gain</b>	0 dB to 12 dB
<b>Exposure time</b>	28 $\mu\text{s}$ to 10 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/12
<b>Binning</b>	Supports 1 $\times$ 1, 1 $\times$ 2, 2 $\times$ 1, 2 $\times$ 2
<b>Decimation</b>	Supports 1 $\times$ 1, 1 $\times$ 2, 2 $\times$ 1, 2 $\times$ 2
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical feature</b>	
<b>Data interface</b>	Camera Link with SDR Connector
<b>Digital I/O</b>	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)
<b>Power supply</b>	9 VDC to 24 VDC, supports PoCL
<b>Power consumption</b>	Typ. 3.6 W@12 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	C-mount
<b>Dimension</b>	44 mm $\times$ 29 mm $\times$ 59 mm (1.7" $\times$ 1.1" $\times$ 2.3")
<b>Weight</b>	Approx. 100 g (0.2 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% to 95% 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, 64-bit Windows 11
<b>Compatibility</b>	Camera Link V2.0, GenICam
<b>Certification</b>	CE, RoHS, KC