

# MV-CH500-61CM

50 MP CCD Camera Link Area Scan Camera



GEN<i>i</i>CAM



## Introduction

MV-CH500-61CM camera adopts OnSemi KAI-50140 sensor to provide high-quality image. It uses Camera Link interface to transmit non-compressed images in real time with max. frame rate reaching 4 fps. The camera adopts TEC to keep the camera's sensor temperature around environment temperature.

## Key Feature

- Resolution of 10440 × 4800 and pixel size of 4.5 μm × 4.5 μm.
- Adopts global shutter CCD sensor providing wide dynamic range and high-quality image.
- Supports configuration modes of Base and Medium via the Camera Link interface.
- Adopts compact design with mounting holes for flexible mounting.

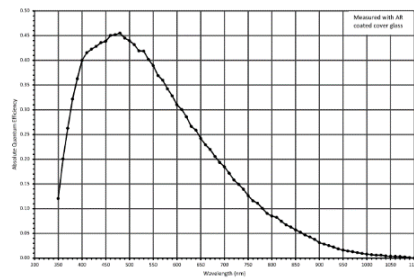
## Available Model

MV-CH500-61CM-M58S-TF

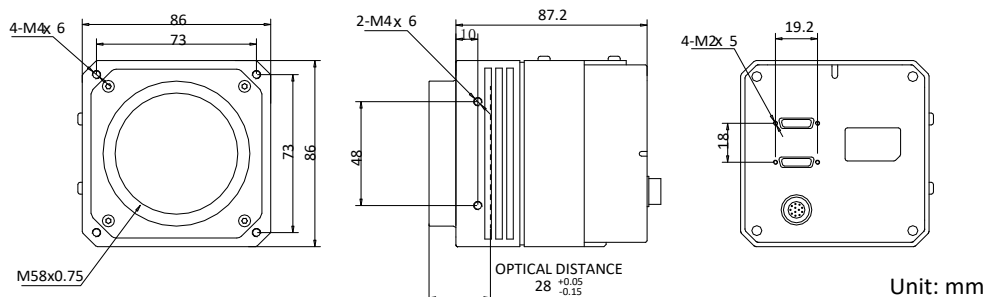
## Applicable Industry

FPD, electronics and semiconductor inspection, research and scientific imaging, microscopy and metrology, etc.

## Sensor Quantum Efficiency



## Dimension



# Specification

<b>Model</b>	<b>MV-CH500-61CM</b>
<b>Camera</b>	
<b>Sensor type</b>	CCD, global shutter
<b>Sensor model</b>	OnSemi KAI-50140
<b>Pixel size</b>	4.5 $\mu\text{m}$ $\times$ 4.5 $\mu\text{m}$
<b>Sensor size</b>	46.98 mm $\times$ 21.6 mm
<b>Resolution</b>	10440 $\times$ 4800
<b>Configuration mode</b>	Base, Medium
<b>Tap geometry</b>	1X_2YE, 1X2_2YE
<b>Tap number</b>	2 Taps, 4 Taps
<b>Max. frame rate</b>	4 fps @10440 $\times$ 4800
<b>Pixel clock</b>	85 MHz
<b>Dynamic range</b>	60 dB
<b>SNR</b>	40 dB
<b>Gain</b>	0 dB to 20 dB
<b>Exposure time</b>	102 $\mu\text{s}$ to 10 sec
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/12
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Binning</b>	Not support
<b>Decimation</b>	Not support
<b>Reverse image</b>	Supports horizontal reverse image output
<b>Electrical feature</b>	
<b>Data interface</b>	Camera Link with SDR interface
<b>Digital I/O</b>	12-pin Hirose connector provides power and I/O, including opto-isolated input $\times$ 1 (Line 0), opto-isolated output $\times$ 1 (Line 1), bi-directional non-isolated I/O $\times$ 1 (Line 2), RS-232 $\times$ 1
<b>Power supply</b>	22 VDC to 26 VDC
<b>Power consumption</b>	Typ. 18 W@24 VDC (non-TEC cooling mode)
	Typ. 70 W@24 VDC (TEC cooling mode)
<b>Mechanical</b>	
<b>Lens mount</b>	M58*0.75, optical back focal length 28 mm (1.1")
<b>Dimension</b>	86 mm $\times$ 86 mm $\times$ 87.2 mm (3.4" $\times$ 3.4" $\times$ 3.4")
<b>Weight</b>	Approx. 1300 g (2.9 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<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
<b>Compatibility</b>	Camera Link Vision, GenICam
<b>Certification</b>	CE, FCC, RoHS, KC