

# MV-CL162-91CM

## 16384 P Camera Link Line Scan Camera



GEN*i*CAM



### Introduction

MV-CL162-91CM camera adopts CMOS sensor to provide high quality images and uses Camera Link interface to transmit images in real time, and its basic line rate reaches 50 kHz (80-bit) in full resolution. It adopts multiple ISP technologies like noise reduction, and supports external trigger modes like line trigger, frame trigger, and trigger-width exposure.

### Key Feature

- Adopts multiple ISP technologies and supports manual adjustment for Gamma correction, FFC correction, LUT, black level, etc.
- Supports multiple exposure, image acquisition modes, and TDI function.
- Supports bi-directional I/O wiring for input/output settings.
- Compact design and flexible installation.
- Compatible with Camera Link V2.0 Protocol, GenICam Standard.

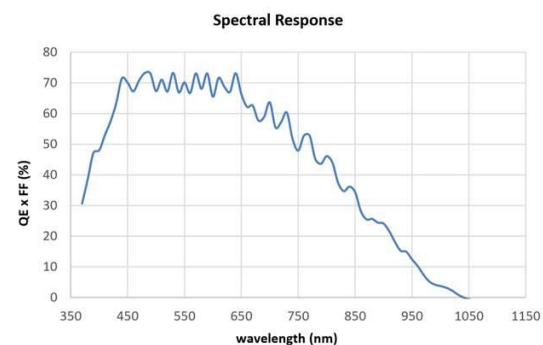
### Available Model

MV-CL162-91CM

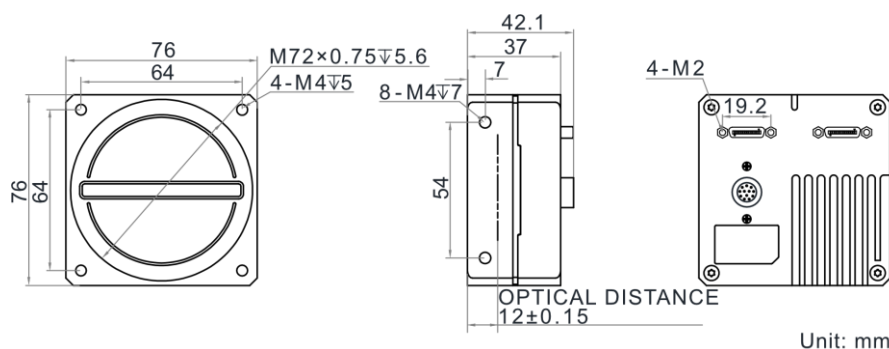
### Applicable Industry

New energy, screen detection, consumer electronics, metallurgy.

### Sensor Quantum Efficiency



### Dimension



<b>Model</b>	<b>MV-CL162-91CM</b>
<b>Performance</b>	
<b>Sensor type</b>	CMOS
<b>Pixel size</b>	3.5 $\mu\text{m}$ $\times$ 3.5 $\mu\text{m}$
<b>Resolution</b>	16384 $\times$ 2
<b>Image mode</b>	Supports 1-line, 2-TDI
<b>Max. line rate</b>	Full resolution: 10 kHz (Base), 20 kHz (Medium), 40 kHz (Full), 50 kHz (80-bit) Improve line rate via Binning: 71 kHz @ 1-line (full resolution), 60 kHz @ 2-TDI (full resolution) Improve line rate via ROI: 120 kHz @ 1-line (6820 resolution and below), 60 kHz @ 2-TDI (13650 resolution and below)
<b>Configuration mode</b>	Base, Medium, Full, 80-bit
<b>Tap geometry</b>	1 $\times$ 2, 1 $\times$ 4, 1 $\times$ 8, 1 $\times$ 10
<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>	56.7 dB
<b>SNR</b>	37 dB
<b>Gain</b>	1.0 $\times$
<b>Exposure time</b>	3 $\mu\text{s}$ to 10 ms
<b>Exposure mode</b>	Off/Once/Continuous exposure mode; supports fixed time exposure, trigger-width exposure
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/12
<b>Binning</b>	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
<b>Reverse image</b>	Supports horizontal reverse image output
<b>Trigger mode</b>	External trigger, internal trigger
<b>External trigger mode</b>	Line trigger, frame trigger, line + frame trigger
<b>Electrical features</b>	
<b>Data interface</b>	Camera Link (SDR connector); USB interface for updating firmware
<b>Digital I/O</b>	12-pin P10 connector provides power and I/O: configurable input/output $\times$ 4 (Line 0/1/3/4) and support single-ended/differential. Camera Link provides I/O (CC1/CC2/CC3/CC4).
<b>Power supply</b>	12 VDC to 24 VDC
<b>Power consumption</b>	Typ. 9.8 W @ 12 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	M72*0.75, flange back length 12 mm, applicable to F-mount via lens adapter
<b>Dimension</b>	76 mm $\times$ 76 mm $\times$ 42.1 mm (3.0" $\times$ 3.0" $\times$ 1.7")
<b>Weight</b>	Approx. 320 g (0.7 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	Working temperature: $-20$ $^{\circ}\text{C}$ to $55$ $^{\circ}\text{C}$ Storage temperature : $-30$ $^{\circ}\text{C}$ to $80$ $^{\circ}\text{C}$
<b>Humidity</b>	5% RH to 90% RH (no condensation)
<b>General</b>	
<b>Client software</b>	MVS and frame grabber software meeting with Camera Link Protocol
<b>Operating system</b>	32/64-bit Windows 7/10, 64-bit Windows 11
<b>Compatibility</b>	Camera Link V2.0, GenICam
<b>Certification</b>	CE, RoHS 2.0, KC