

# MV-CH250-20CM

## 25 MP CMOS Camera Link Area Scan Camera



GEN*i*CAM



### Introduction

MV-CH250-20CM camera adopts OnSemi PYTHON25K sensor and Camera Link interface to provide high quality and non-compressed images in real time. It max. frame rate reaches up to 31.3 fps in full resolution.

### Key Feature

- Resolution of 5120 × 5120 and pixel size of 4.5 μm × 4.5 μm.
- Adopts global shutter CMOS sensor providing wide dynamic range and high-quality image.
- Supports configuration modes of Full and 80-bit via the Camera Link interface.
- Adopts compact design with mounting holes for flexible mounting.

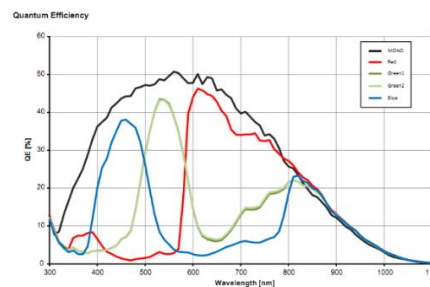
### Available Model

MV-CH250-20CM-M58S-NN

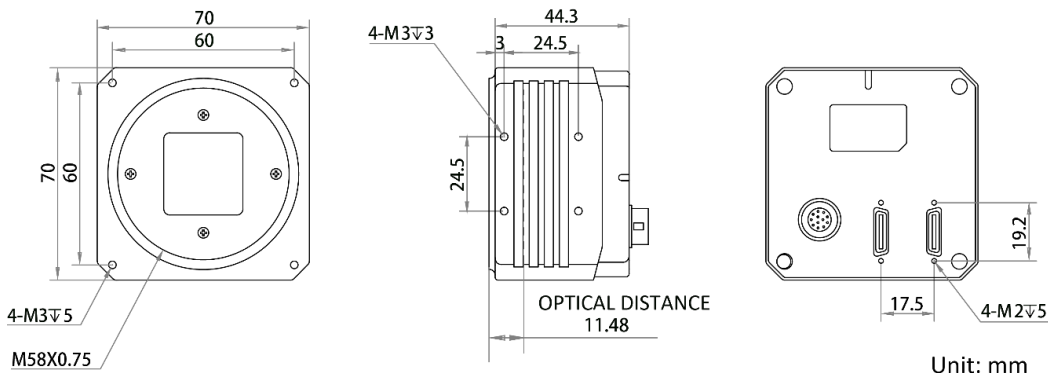
### Applicable Industry

SMT/ PCB AOI, FPD, high-accuracy measurement, etc.

### Sensor Quantum Efficiency



### Dimension



## Specification

<b>Model</b>	<b>MV-CH250-20CM</b>
<b>Camera</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Sensor model</b>	OnSemi PYTHON25K
<b>Pixel size</b>	4.5 $\mu\text{m}$ $\times$ 4.5 $\mu\text{m}$
<b>Sensor size</b>	23 mm $\times$ 23 mm
<b>Resolution</b>	5120 $\times$ 5120
<b>Configuration mode</b>	Full, 80-bit
<b>Tap geometry</b>	8X_1Y, 10X_1Y
<b>Tap number</b>	8 Taps, 10 Taps
<b>Max. frame rate</b>	31.3 fps @ 5120 $\times$ 5120
<b>Pixel clock</b>	60 MHz, 70 MHz, 85 MHz
<b>Dynamic range</b>	59 dB
<b>SNR</b>	41 dB
<b>Gain</b>	0 dB to 32 dB
<b>Exposure time</b>	45 $\mu\text{s}$ to 10 sec
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8
<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 and vertical reverse image output
<b>Electrical feature</b>	
<b>Data interface</b>	Camera Link with SDR interface
<b>Digital I/O</b>	12-pin P10 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; Camera Link connector provides I/O (CC1/CC2/CC3/CC4).
<b>Power supply</b>	9 VDC to 24 VDC
<b>Power consumption</b>	Typ. 9.4 W @ 24 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	M58*0.75, flange back length 11.48 mm
<b>Dimension</b>	70 mm $\times$ 70 mm $\times$ 44.3 mm (2.8" $\times$ 2.8" $\times$ 1.7")
<b>Weight</b>	Approx. 380 g (0.8 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% RH to 95% RH (no condensation)
<b>General</b>	
<b>Client software</b>	MVS or frame grabber software meeting with GenICam 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, KC