

# MV-CL166-91F2C

## 16 K XoF Line Scan Camera



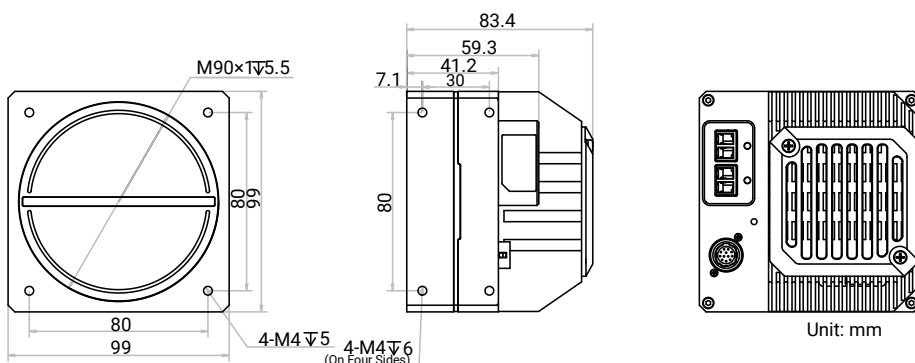
### Introduction

MV-CL166-91F2C camera adopts 16384 × 12 RGB true color CMOS sensor and supports transmission protocol of XoFLink, and its max. line rate reaches 47.3 kHz. It adopts multiple ISP image processing technologies, and is featured with high speed, high accuracy, and high performance.

### Key Feature

- Adopts multiple ISP like Gamma correction, flat field correction, LUT, black level offset, noise reduction, etc.
- Supports RGB true color, multiple exposure and acquisition methods.
- Supports image mode of 1-line, 2-TDI, 3-TDI, and 4-TDI.
- Supports transmission protocol of XoFLink with max. line rate of 47.3 kHz.
- Adopts bi-directional configurable I/O hardware design.
- Compact design and flexible installation.

### Dimension



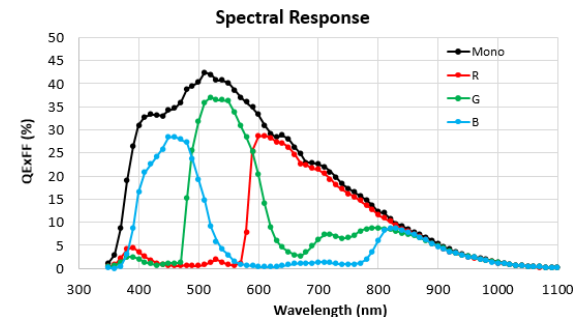
### Available Model

MV-CL166-91F2C

### Applicable Industry

PCB, printing, stone material, wood material, etc.

### Sensor Quantum Efficiency



### Accessories

- Frame Grabber: MV-GS1002F, MV-GS1004F, MV-GS1104F (without optical module)
- SFP+ Module: MV-AC10G-SFP
- Fiber Patch Cable: MV-AC10G-2LC-2LC-ST

## Specification

|                              |   |
|------------------------------|---|
| <b>Model</b>                 | <b>MV-CL166-91F2C</b>   |
| <b>Performance</b>           |   |
| <b>Sensor type</b>           | CMOS  |
| <b>Pixel size</b>            | 5 $\mu\text{m}$ $\times$ 5 $\mu\text{m}$  |
| <b>Resolution</b>            | 16384 $\times$ 12   |
| <b>Image mode</b>            | Supports 1-Line, 2-TDI, 3-TDI, 4-TDI  |
| <b>Max. line rate</b>        | 47.3 kHz (1-Line), 45.3 kHz (2-TDI), 30.6 kHz (3-TDI), 23.1 kHz (4-TDI)   |
| <b>Transmission mode</b>     | 1 Link, 2 Link  |
| <b>Dynamic range</b>         | 69.3 dB   |
| <b>SNR</b>                   | 41.4 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, and supports trigger-width exposure  |
| <b>Mono/color</b>            | Color   |
| <b>Pixel format</b>          | RGB 8, BGR 8  |
| <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 feature</b>    |   |
| <b>Data interface</b>        | 2LC fiber connector   |
| <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 single-ended/differential is supported.  |
| <b>Power supply</b>          | 24 VDC  |
| <b>Power consumption</b>     | Typ. 22.5 W @ 24 VDC  |
| <b>Mechanical</b>            |   |
| <b>Lens mount</b>            | M90*1.0, flange back length 12 mm, applicable to F-mount via lens adapter   |
| <b>Dimension</b>             | 99 mm $\times$ 99 mm $\times$ 83.4 mm (3.9" $\times$ 3.9" $\times$ 3.3")  |
| <b>Weight</b>                | Approx. 923 g (2.0 lb.)   |
| <b>Ingress protection</b>    | IP40 (under proper lens installation and wiring)  |
| <b>Temperature</b>           | Working temperature: -20 $^{\circ}\text{C}$ to 55 $^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to 131 $^{\circ}\text{F}$ )<br>Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$ ) |
| <b>Humidity</b>              | 5% RH to 90% RH (no condensation)   |
| <b>General</b>               |   |
| <b>Client software</b>       | MVS   |
| <b>Operating system</b>      | 32/64-bit Windows 7/10, 64-bit Windows 11   |
| <b>Compatibility</b>         | XoFLink, GenICam  |
| <b>Certification</b>         | CE, RoHS, KC  |