

# MV-CH1510-10FM

151 MP CMOS 10 GigE Area Scan Camera









### Introduction

MV-CH1510-10FM camera adopts Sony® IMX411 sensor to provide high-quality images. It uses 10 GigE interface to transmit non-compressed data in real time, and its max. frame rate can reach 6.2 fps in full resolution.

### **Key Feature**

- Supports Binning, LSC Sequencer, FFC and other ISP functions.
- Adopts 10GigE over Fiber interface to transmit data, and max. transmission distance reaches 300 m.
- Adopts TEC technology to reduce sensor temperature and ensure high-quality images under long-time exposure condition.
- Compatible with GigE Vision V2.0 Protocol, GenlCam Standard, and third-party software based on the protocol and standard.

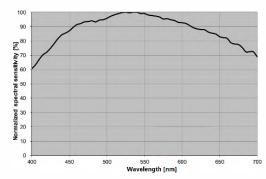
### **Available Model**

MV-CH1510-10FM-M72-TF

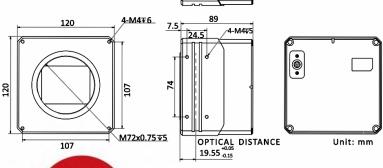
# **Applicable Industry**

PCB AOI, FPD, astronomy surveying and mapping, railway related application, etc.

## **Sensor Quantum Efficiency**



## **Dimension**





# **Specification**

| Model              | MV-CH1510-10FM                                                                                           |
|--------------------|----------------------------------------------------------------------------------------------------------|
| Camera             |                                                                                                          |
| Sensor type        | CMOS, rolling shutter                                                                                    |
| Sensor model       | Sony® IMX411                                                                                             |
| Pixel size         | 3.76 µm × 3.76 µm                                                                                        |
| Sensor size        | 66.7 mm                                                                                                  |
| Resolution         | 14208 × 10640                                                                                            |
| Max. frame rate    | 6.2 fps @14208 × 10640                                                                                   |
| Dynamic range      | 78.7 dB                                                                                                  |
| SNR                | 45 dB                                                                                                    |
| Gain               | 0 dB to 36 dB                                                                                            |
| Exposure time      | 30 μs to 10 sec                                                                                          |
| Exposure mode      | Off/Once/Continuous exposure mode, supports Global Reset and Rolling mode                                |
| Mono/Color         | Mono                                                                                                     |
| Pixel format       | Mono 8/10/10p/12/12p/16                                                                                  |
| Binning            | Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4                                   |
| Decimation         | Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4                                   |
| Reverse image      | Supports horizontal reverse image output                                                                 |
| Electrical feature |                                                                                                          |
| Data interface     | 10 Gigabit Ethernet                                                                                      |
| Digital I/O        | 12-pin Hirose connector provides power and I/O, including opto-isolated input × 1                        |
|                    | (Line 0), opto-isolated output $\times$ 1 (Line 1), bi-directional non-isolated I/O $\times$ 1 (Line 2), |
|                    | RS-232 × 1                                                                                               |
| Power supply       | 24 VDC                                                                                                   |
| Power consumption  | Typ. 11.3 W@24 VDC (non-TEC mode)                                                                        |
|                    | Typ. 49 W@24 VDC (TEC mode)                                                                              |
| Mechanical         |                                                                                                          |
| Lens mount         | M72*0.75, optical back focal length 19.55 mm (0.8")                                                      |
| Dimension          | 120 mm × 120 mm × 89 mm (4.7" × 4.7" × 3.5")                                                             |
| Weight             | Approx. 2.5 kg (5.5 lb.)                                                                                 |
| Ingress protection | IP40 (under proper lens installation and wiring)                                                         |
| Temperature        | Working temperature: 0 °C to 50 °C (32 °F to 122 °F)                                                     |
|                    | Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)                                                  |
| Humidity           | 20% to 95% RH, non-condensing                                                                            |
| General            |                                                                                                          |
| Client software    | MVS or third-party software meeting with GigE Vision Protocol                                            |
| Operating system   | 32/64-bit Windows XP/7/10                                                                                |
| Compatibility      | GigE Vision V2.0, GenlCam                                                                                |
| Certification      | CE, RoHS, KC                                                                                             |



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