

### MV-SC7060M

6.0 MP Smart Camera









#### Introduction

With built-in vision tools of deep learning, MV-SC7060M smart camera can achieve character and object recognition, object sorting, and other functions. With mechanical autofocus lens, the smart camera can meet different scenario demands. It can be monitored and operated via the web based interface, and it supports multiple result output methods, and customized result text output.

#### **Key Feature**

- Built-in vision tools of deep learning to achieve character and object recognition, object sorting, etc.
- Supports semi-automatic focus to get clearer images.
- Adopts high speed and large capacity memory medium for saving images.
- Supports multiple communication protocols, including TCP, UDP, Serial, FTP, Modbus, etc.
- Supports indicators displaying device status.

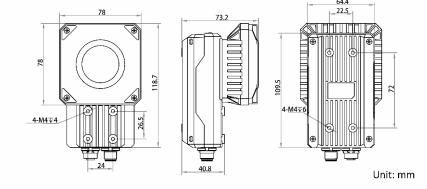
#### **Available Model**

- 8 mm focal length smart camera: MV-SC7060M-08S-WBN
- 12 mm focal length smart camera: MV-SC7060M-12S-WBN

### **Applicable Industry**

Consumer electronics, food and beverage, pharmaceutical, automobile, etc.

### **Dimension**







# **Specification**

| Model              | MV-SC7060M-08S-WBN  | MV-SC7060M-12S-WBN |  |
|--------------------|---|--------------------|--|
| Tool               |   |                    |  |
| Vision tool        | Feature matching, fixture, blob, deep learning character recognition, deep learning         |                    |  |
|                    | character location, deep learning classification, deep learning object detection, etc.      |                    |  |
| Solution capacity  | Supports solution importing and exporting, up to 32 solutions and 40 modules can be stored. |                    |  |
|                    |   |                    |  |
| Communication      |   |                    |  |
| protocol           | TCP, UDP, serial port, IO, Modbus, PROFINET, Ethernet/IP, and FTP.                          |                    |  |
| Camera             |   |                    |  |
| Sensor type        | CMOS, rolling shutter   |                    |  |
| Pixel size         | 2.4 μm × 2.4 μm   |                    |  |
| Sensor size        | 1/1.8"  |                    |  |
| Resolution         | 3072 × 2048   |                    |  |
| Max. frame rate    | 30 fps  |                    |  |
| Dynamic range      | 71.3 dB   |                    |  |
| SNR                | 41.3 dB   |                    |  |
| Gain               | 0 dB to 15 dB   |                    |  |
| Exposure time      | 16 µs to 1 sec  |                    |  |
| Pixel format       | Mono 8  |                    |  |
| Mono/color         | Mono  |                    |  |
| Platform           |   |                    |  |
| Memory             | 4 GB  |                    |  |
| Storage            | 32 GB   |                    |  |
| Electrical feature |   |                    |  |
| Data interface     | Gigabit Ethernet interface  |                    |  |
| Digital I/O        | 12-pin M12 connector provides power and I/O, including opto-isolated input (Line 0/1/2)     |                    |  |
|                    | × 3, opto-isolated output (Line 3/4/5) × 3, and RS-232 × 1                                  |                    |  |
| Power supply       | 12 VDC to 24 VDC  |                    |  |
| Power consumption  | Approx. 7.5 W@24 VDC (light source is disabled)   |                    |  |
|                    | Approx. 18 W@24 VDC (light source is enabled)   |                    |  |
| Mechanical         |   |                    |  |
| Lens mount         | M12-mount, semi-automatic focus supporte  |                    |  |
| Focal length       | 8 mm (0.3")   | 12 mm (0.5")       |  |
| Lens cap           | Transparent lens cap. Polarization lens cap is optional.                                    |                    |  |
| Light source       | White light. Red, blue, or NIR light is optional.   |                    |  |
| Indicator          | Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2).     |                    |  |
| Dimension          | 118.7 mm × 78 mm × 73.2 mm (4.7" × 3.1" × 2.9")   |                    |  |
| Weight             | Approx. 520 g (1.1 lb.)   |                    |  |
| Ingress protection | IP67 (under proper installation of waterproof lens cap)                                     |                    |  |
| 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    | Via web based interface   |                    |  |
| Certification      | CE, FCC, KC   |                    |  |



## **Detection Range**

| Lens focal length | Installation distance | Field of view       | Single pixel accuracy |  |
|-------------------|-----------------------|---------------------|-----------------------|--|
| 8 mm (0.3")       | 30 mm (1.2")          | 27.68 mm × 18.45 mm | 0.009 mm              |  |
|                   |                       | (1.1" × 0.7")       | 0.009 11111           |  |
|                   | 600 mm (23.6")        | 553.5 mm × 369 mm   | 0.18 mm               |  |
|                   |                       | (21.8" × 14.5")     |                       |  |
| 12 mm (0.5")      | 80 mm (3.1")          | 49.2 mm × 32.8 mm   | 0.016 mm              |  |
|                   |                       | (1.9" × 1.3")       |                       |  |
|                   | 1000 mm (39.3")       | 615 mm × 410 mm     | 0.2 mm                |  |
|                   |                       | (24.2" × 16.1")     | 0.2 111111            |  |

