

## MV-SC5050XM-00C

### 5 MP Mono Smart Camera

MV-SC5050XM-00C smart camera is developed based on high-performance embedded platform with strong calculation performance. It integrates VM functions and AI deep learning algorithm, and can use more than 140 algorithms. It adopts multiple interfaces for supporting display, keyboard, mouse, etc.



### Key Features

- Adopts AI deep learning algorithm to achieve OCR, object recognition, defect detection, etc.
- Integrates VM functions, and supports more than 140 algorithms.
- Adopts multiple I/O interfaces, such as multiple input/output signals.
- Supports multiple communication protocols.
- Supports indicators displaying device status for easy debugging and maintenance.
- Supports ingress protection IP67.

### Available Model

- MV-SC5050XM-00C-NNN

### Typical Application

- Consumer electronics
- Food and pharmaceutical
- Packaging



## Specification

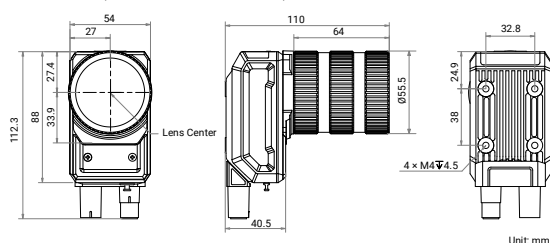
|                           |                                                                                                                                                                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Model</b>              | MV-SC5050XM-00C-NNN                                                                                                                                                                                                                               |
| <b>Tool</b>               |                                                                                                                                                                                                                                                   |
| Function module           | Vision Master Platform (include deep learning module)                                                                                                                                                                                             |
| Communication protocol    | TCP, UDP, Modbus, Serial Port, PROFINET, EtherNet/IP, Fins, MC, FTP, etc.                                                                                                                                                                         |
| <b>Camera</b>             |                                                                                                                                                                                                                                                   |
| Sensor type               | CMOS, global shutter                                                                                                                                                                                                                              |
| Pixel size                | 3.45 $\mu\text{m}$ $\times$ 3.45 $\mu\text{m}$                                                                                                                                                                                                    |
| Sensor size               | 1/1.45"                                                                                                                                                                                                                                           |
| Resolution                | 2432 $\times$ 2048                                                                                                                                                                                                                                |
| Max. frame rate           | 60 fps                                                                                                                                                                                                                                            |
| Gain                      | 0 dB to 37 dB                                                                                                                                                                                                                                     |
| Exposure time             | 15 $\mu\text{s}$ to 1 sec                                                                                                                                                                                                                         |
| Pixel format              | Mono 8                                                                                                                                                                                                                                            |
| Mono/color                | Mono                                                                                                                                                                                                                                              |
| <b>Platform</b>           |                                                                                                                                                                                                                                                   |
| Memory                    | 8 GB                                                                                                                                                                                                                                              |
| Storage                   | 64 GB                                                                                                                                                                                                                                             |
| <b>Electrical feature</b> |                                                                                                                                                                                                                                                   |
| Data interface            | Gigabit Ethernet (1000 Mbit/s)                                                                                                                                                                                                                    |
| Digital I/O               | 12-pin M12 connector provides power and I/O, including opto-isolated input $\times$ 3 (Line 0/1/2), opto-isolated output $\times$ 3 (Line 3/4/5), RS-232 $\times$ 1                                                                               |
| Power supply              | 24 VDC                                                                                                                                                                                                                                            |
| Power consumption         | Avg. 10 W @ 24 VDC<br>Max. 14.4 W @ 24 VDC                                                                                                                                                                                                        |
| <b>Mechanical</b>         |                                                                                                                                                                                                                                                   |
| Lens mount                | C-mount                                                                                                                                                                                                                                           |
| Lens cap                  | Transparent lens cap                                                                                                                                                                                                                              |
| Light source              | Not included                                                                                                                                                                                                                                      |
| Indicator                 | Power indicator (PWR), network indicator (LNK), and user-defined indicator (U1/U2)                                                                                                                                                                |
| Dimension                 | Straight angle: 112.3 mm $\times$ 54 mm $\times$ 110 mm (4.4" $\times$ 2.1" $\times$ 4.3")<br>Right angle: 88.7 mm $\times$ 54 mm $\times$ 110 mm (3.5" $\times$ 2.1" $\times$ 4.3")                                                              |
| Weight                    | Approx. 370 g (0.8 lb.)                                                                                                                                                                                                                           |
| Ingress protection        | IP67 (under proper installation of waterproof lens cap)                                                                                                                                                                                           |
| Temperature               | Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$ )<br>Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ ) |
| Humidity                  | 20% RH to 95% RH (no condensation)                                                                                                                                                                                                                |
| Vibration resistance      | Meets standard IEC 60068-2-6:2007.<br>Device only (without installation bracket): 10 Hz to 55 Hz, 1.5 mm peak-to-peak amplitude, 2 hours per axis (X, Y, Z)*                                                                                      |

|                  |                                                                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shock resistance | Meets standard IEC 60068-2-27:2008.<br>Device only (without installation bracket): 30 g / 11 ms, half-sine wave, 500 shocks per axis (6 directions)* |
| <b>General</b>   |                                                                                                                                                      |
| Certification    | CE, KC                                                                                                                                               |

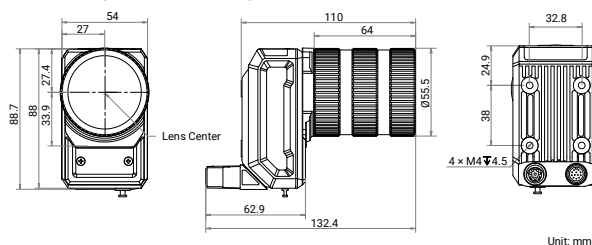
\* After attaching the C-mount lens to camera, tighten the focus ring with set screws and reinforce it by applying UV adhesive around the ring.

## Dimension

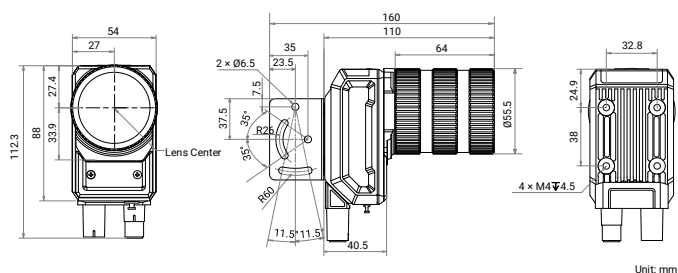
Device (Straight Angle):



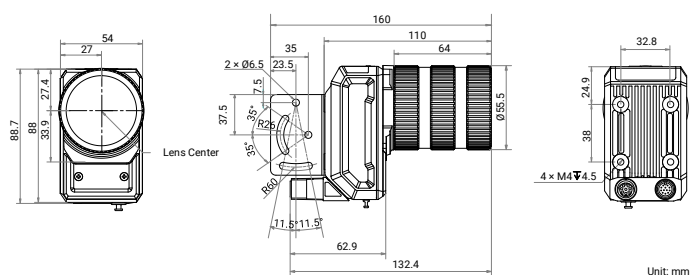
Device (Right Angle):



Device and Installation Bracket (Straight Angle):



Device and Installation Bracket (Right Angle):



Installation Bracket:

