

MV-ID5050M

5 MP Smart Code Reader



Introduction

MV-ID5050M smart code reader can read different types of codes with reading speed up to 90 codes/sec. It adopts Hikrobot's deep learning algorithm to process images with good robustness, and can recognize various complex codes.

Key Feature

- Adopts built-in deep learning algorithm to read codes with good robustness.
- Adopts CMOS global shutter sensor to provide high quality images.
- Adopts mechanical autofocus lens to achieve automatic focusing.
- Supports code score and quality evaluation for code printing quality.
- Adopts controllable light source design providing diversified light.
- Ingress protection rating 67.

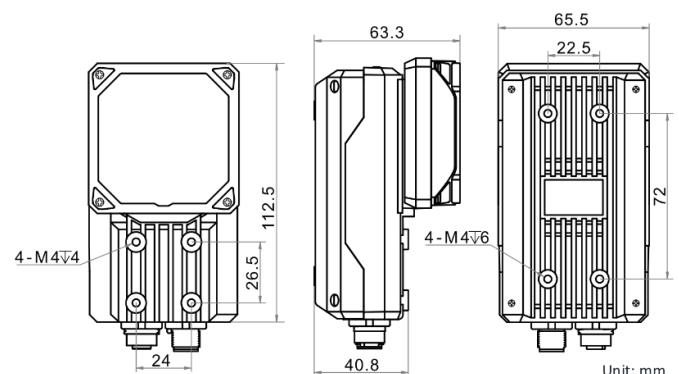
Applicable Industry

Consumer electronics, food and beverage, pharmaceutical, semiconductor, automobile, new energy, etc.

Available Model

- 8 mm focal length: MV-ID5050M-08S-WBN
- 12 mm focal length: MV-ID5050M-12S-WBN
- 16 mm focal length: MV-ID5050M-16S-WBN
- 25 mm focal length: MV-ID5050M-25S-WBN

Dimension



Specification

| Model | MV-ID5050M-08S-WBN | MV-ID5050M-12S-WBN | MV-ID5050M-16S-WBN | MV-ID5050M-25S-WBN |
|-------------------------------|---|--------------------|--------------------|--------------------|
| Performance | | | | |
| Symbologies | 1-dimensional codes: Code 39, Code 93, Code 128, CodaBar, EAN 8, EAN 13, UPCA, UPCE, ITF 14, ITF 25, Matrix 25, MSI, China Post, Code 11, and Industrial 25 | | | |
| | 2-dimensional codes: QR Code, Data Matrix | | | |
| | Stack codes: PDF 417 | | | |
| Max. frame rate | 40 fps | | | |
| Max. reading speed | 90 codes/sec | | | |
| Sensor type | CMOS, global shutter | | | |
| Pixel size | 3.2 μm \times 3.2 μm | | | |
| Sensor size | 1/1.7" | | | |
| Resolution | 2368 \times 1760 | | | |
| Exposure time | 60 μs to 1 sec | | | |
| Gain | 0 dB to 18 dB | | | |
| Mono/color | Mono | | | |
| Communication protocol | SmartSDK, TCP Client, TCP Server, Serial, FTP, Profinet, Ethernet/IP, MELSEC, ModBus, Fins, SLMP | | | |
| Electrical feature | | | | |
| Data interface | Gigabit Ethernet | | | |
| Digital I/O | 12-pin M12 connector provides power and I/O, including opto-isolated input (LineIn 0/1/2) \times 3, opto-isolated output (LineOut 3/4/5) \times 3, RS-232 input \times 1, and RS-232 output \times 1. | | | |
| Power supply | 24 VDC | | | |
| Max. power consumption | 60 W@24 VDC (light source enabled) | | | |
| Mechanical | | | | |
| Focal length | 8 mm (0.3") | 12 mm (0.5") | 16 mm (0.6") | 25 mm (1.0") |
| Lens mount | M12-mount, mechanical autofocus supported. | | | |
| Lens cap | Half polarization lens cap by default. Transparent and full polarization lens cap are optional. | | | |
| Light source | White light by default. Red/blue/IR light is optional. | | | |
| Indicator | Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2). | | | |
| Dimension | 112.5 mm \times 65.5 mm \times 63.3 mm (4.4" \times 2.6" \times 2.5") | | | |
| Weight | Approx. 450 g (1.0 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 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$) | | | |
| Humidity | 20% to 95% RH, non-condensing | | | |
| General | | | | |
| Client software | IDMVS | | | |
| Certification | CE, FCC, RoHS, KC | | | |

Detection Range

MV-ID5050M-08/12/16/25S-WBN (Unit: mm)

| Lens Focal Length | Working Distance | FoV | | 1D Single Pixel Accuracy | 2D Single Pixel Accuracy | Horizontal FoV Diagram |
|-------------------|------------------|--------|--------|--------------------------|--------------------------|------------------------|
| | | H | V | | | |
| 8 | 25 | 25.6 | 20.48 | 0.010 | 0.030 | |
| | 100 | 102.4 | 81.92 | 0.040 | 0.120 | |
| | 200 | 204.8 | 163.84 | 0.080 | 0.240 | |
| | 300 | 307.2 | 245.76 | 0.120 | 0.360 | |
| | 400 | 409.6 | 327.68 | 0.160 | 0.480 | |
| | 500 | 512 | 409.6 | 0.200 | 0.600 | |
| 12 | 60 | 40.96 | 32.77 | 0.016 | 0.048 | |
| | 100 | 68.27 | 54.61 | 0.027 | 0.080 | |
| | 200 | 136.53 | 109.23 | 0.053 | 0.160 | |
| | 300 | 204.8 | 163.84 | 0.080 | 0.240 | |
| | 400 | 273.07 | 218.45 | 0.107 | 0.320 | |
| | 500 | 341.33 | 273.07 | 0.133 | 0.400 | |
| 16 | 600 | 409.6 | 327.68 | 0.160 | 0.480 | |
| | 100 | 51.2 | 40.96 | 0.020 | 0.060 | |
| | 200 | 102.4 | 81.92 | 0.040 | 0.120 | |
| | 300 | 153.6 | 122.88 | 0.060 | 0.180 | |
| | 400 | 204.8 | 163.84 | 0.080 | 0.240 | |
| | 500 | 256 | 204.8 | 0.100 | 0.300 | |
| 25 | 600 | 307.2 | 245.76 | 0.120 | 0.360 | |
| | 230 | 75.37 | 60.29 | 0.029 | 0.088 | |
| | 300 | 98.3 | 78.64 | 0.038 | 0.115 | |
| | 400 | 131.07 | 104.86 | 0.051 | 0.154 | |
| | 500 | 163.84 | 131.07 | 0.064 | 0.192 | |
| | 600 | 196.61 | 157.29 | 0.077 | 0.230 | |

