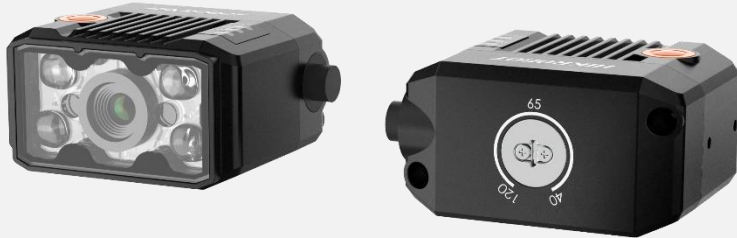


MV-ID2004M

0.4 MP Industrial Code Reader



Introduction

MV-ID2004M industrial code reader can read different types of 1-dimensional and 2-dimensional codes, and its max. reading speed reaches 41 codes/sec (network device) and 38 codes/sec (USB device) respectively. It adopts deep learning algorithm to process images with good robustness, and can recognize various codes.

Key Feature

- Built-in deep learning algorithm to read codes with good robustness.
- Compact design and small in size.
- Adopts aviation connector for single cable wiring.
- Adopts LED aiming light to help aim codes.
- Adopts focus knob for adjusting focusing manually.
- Adopts multiple IO interfaces and plug-in power interface.

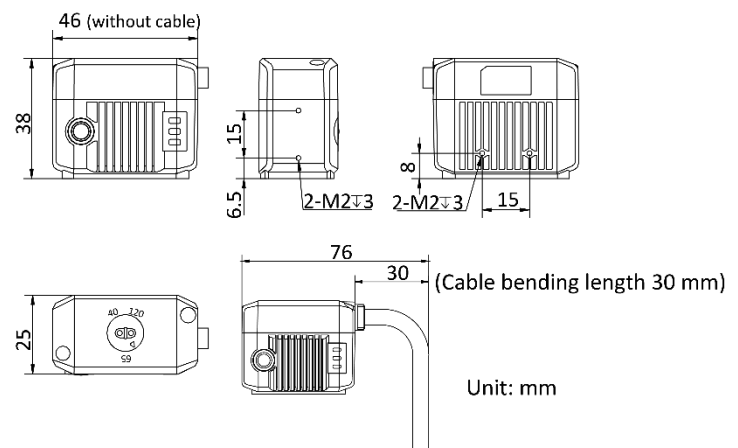
Applicable Industry

Consumer electronics, food and drug, semiconductor, new energy, etc.

Available Model

- Red light source with network interface: MV-ID2004M-06S-RBN
- Blue light source with network interface: MV-ID2004M-06S-BBN
- White light source with network interface: MV-ID2004M-06S-WBN
- Red light source with USB interface: MV-ID2004M-06S-RBN-U
- Blue light source with USB interface: MV-ID2004M-06S-BBN-U
- White light source with USB interface: MV-ID2004M-06S-WBN-U

Dimension

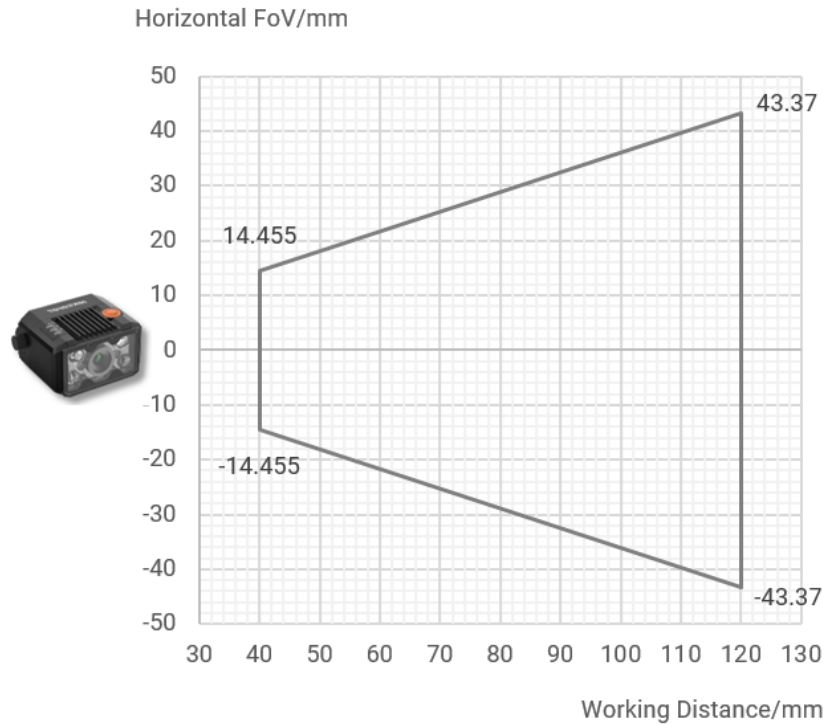


Specification

| Model | MV-ID2004M-06S-RBN(-U) | MV-ID2004M-06S-BBN(-U) | MV-ID2004M-06S-WBN(-U) |
|-------------------------------|---|------------------------|------------------------|
| Performance | | | |
| Symbologies | 1-dimensional codes: Code 39, Code 93, Code 128, ITF 14, ITF 25, CodaBar, EAN 8, EAN 13, UPCA, UPCE | | |
| | 2-dimensional codes: QR Code, Data Matrix | | |
| Max. frame rate | 60 fps | | |
| Max. reading speed | Network interface: 41 codes/sec USB interface: 38 codes/sec | | |
| Sensor type | CMOS, global shutter | | |
| Pixel size | 6.9 μm × 6.9 μm | | |
| Sensor size | 1/2.9" | | |
| Resolution | 704 × 540 | | |
| Exposure time | 16 μs to 1 sec | | |
| Gain | 0 dB to 15 dB | | |
| Mono/color | Mono | | |
| Communication protocol | Network interface: SmartSDK, TCP Client, Serial, FTP, TCP Server, Profinet, MELSEC/SLMP, Ethernet/IP, ModBus, UDP, Fins USB interface: SmartSDK, USB | | |
| Electrical feature | | | |
| Data interface | Network interface: Fast Ethernet (100 Mbit/s) USB interface: USB 3.0 | | |
| Digital I/O | Network interface: 17-pin M12 connector provides power and I/O, including non-isolated input × 1 (Line 2), non-isolated output × 1 (Line 3), bi-directional non-isolated I/O × 2 (Line 0/1), and RS-232 × 1. Device trigger via pressing button on side supported. USB interface: 17-pin M12 connector provides data transmission. Device trigger via pressing button on side supported. | | |
| Power supply | Network interface: 12 VDC to 24 VDC USB interface: 5 VDC (USB 3.0 provides power supply) | | |
| Max. power consumption | Network interface: Approx. 3.8 W @ 24 VDC USB interface: Approx. 6 W @ 5 VDC | | |
| Mechanical | | | |
| Focal length | 6.72 mm | | |
| Lens mount | M10-mount, adjusting focus manually supported | | |
| Working distance | 40 mm to 120 mm | | |
| Ambient illumination | 0 lux to 50000 lux | | |
| Light source | Red | Blue | White |
| Aiming system | Green LED | | |
| Indicator | Power indicator (PWR), network indicator (LNK), and status indicator (STS) | | |
| Dimension | 46 mm × 38 mm × 25 mm (1.8" × 1.5" × 1.0") | | |
| Weight | Approx. 160 g (0.4 lb.) | | |
| Ingress protection | IP65 | | |
| 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% RH to 95% RH (no condensation) | | |
| General | | | |
| Client software | IDMVS | | |
| Certification | CE, RoHS, KC | | |

Detection Range

| Working Distance (mm) | Field of View | | 1D Min. Resolution (mm)* | 2D Min. Resolution (mm) Δ |
|-----------------------|---------------|--------|--------------------------|----------------------------------|
| | H (mm) | V (mm) | | |
| 40 | 28.91 | 22.18 | 0.041 | 0.123 |
| 80 | 57.83 | 44.36 | 0.082 | 0.246 |
| 120 | 86.74 | 66.54 | 0.123 | 0.370 |



Note

- 1D Min. Resolution (mm)*: Field of view (long side) / resolution (long side) × number of pixels in the minimum bar width (number of pixels in the minimum bar width = 1)
- 2D Min. Resolution (mm) Δ : Field of view (long side) / resolution (long side) × number of pixels in the side length of minimum module unit (number of pixels in the side length of minimum module unit = 3)
- The device is a non-isolated device. Therefore, the device should be powered separated or you can purchase an I/O box for power supply.
- The integrated cable of the device is a static cable by default that cannot be used in moving scene, such as drag chain. Therefore, it is recommended to fix the cable during installation.