# MV-ID2013M

**1.3 MP Industrial Code Reader**

## Introduction

MV-ID2013M industrial code reader can read different types of 1-dimensional and 2-dimensional codes, and its max. reading speed reaches 45 codes/sec. 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 LED aiming light to help aim codes.
- Adopts focus knob for adjusting focusing manually.
- Adopts multiple IO interfaces and plug-in power interface.

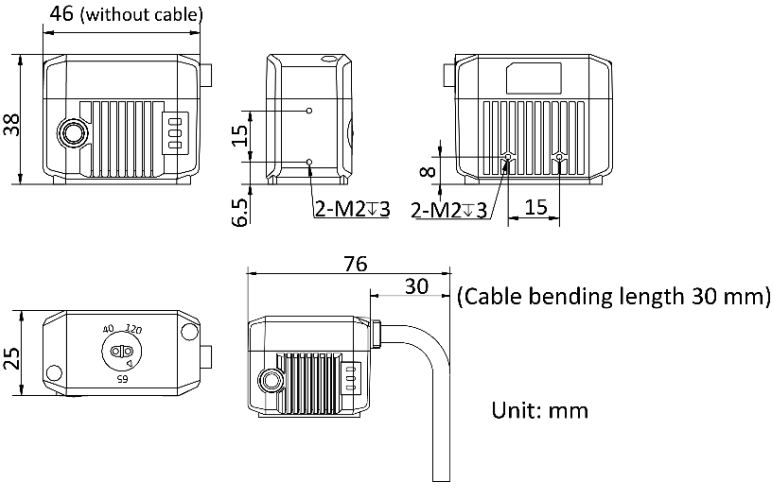
## Applicable Industry

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

## Available Model

- Red light source: MV-ID2013M-06S-RBN
- Red light source with polarized lens cap: MV-ID2013M-06S-RBP
- Red light source with filter: MV-ID2013M-06S-RBN-YAG
- Red light source with filter and polarized lens cap: MV-ID2013M-06S-RBP-YAG
- Blue light source: MV-ID2013M-06S-BBN
- White light source: MV-ID2013M-06S-WBN
- White light source with polarized lens cap: MV-ID2013M-06S-WBP

## Dimension

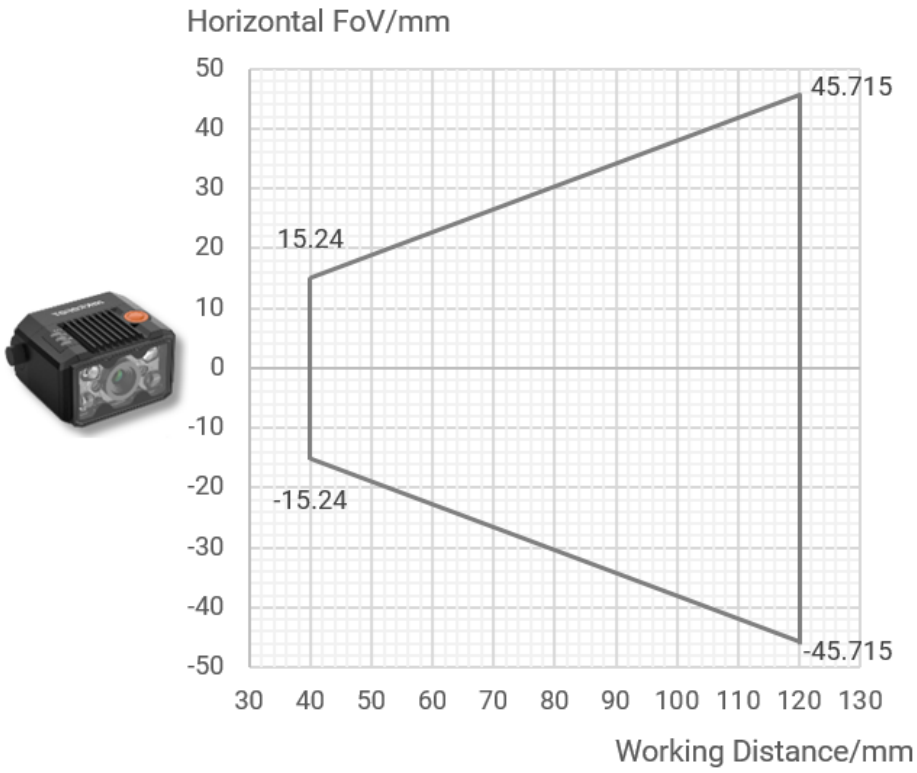


# Specification

| Model | MV-ID2013M-06S-RBN(-YAG) | MV-ID2013M-06S-RBP(-YAG) | MV-ID2013M-06S-BBN | MV-ID2013M-06S-WBN | MV-ID2013M-06S- WBP |
|---|---|---|---|---|---|
| ***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** | 45 codes/sec | | | | |
| **Sensor type** | CMOS, global shutter | | | | |
| **Pixel size** | 4 μm × 4 μm | | | | |
| **Sensor size** | 1/2.7" | | | | |
| **Resolution** | 1280 × 1024 | | | | |
| **Exposure time** | 35 μs to 1 sec | | | | |
| **Gain** | 0 dB to 15 dB | | | | |
| **Mono/color** | Mono | | | | |
| **Communication protocol** | SmartSDK, TCP Client, Serial, FTP, TCP Server, Profinet, MELSEC/SLMP, Ethernet/IP, ModBus, UDP, Fins | | | | |
| ***Electrical feature*** | | | | | |
| **Data interface** | Fast Ethernet (100 Mbit/s) | | | | |
| **Digital I/O** | 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<br>Device trigger via pressing button on side supported. | | | | |
| **Power supply** | 12 VDC to 24 VDC | | | | |
| **Max. power consumption** | Approx. 10.6 W @ 24 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 | Red (Polarized) | Blue | White | White (Polarized) |
| **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)<br>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)△ |
|---|---|---|---|---|
| | H (mm) | V (mm) | | |
| 40 | 30.48 | 24.38 | 0.024 | 0.071 |
| 80 | 60.95 | 48.76 | 0.048 | 0.143 |
| 120 | 91.43 | 73.14 | 0.071 | 0.214 |




## 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)△: 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.