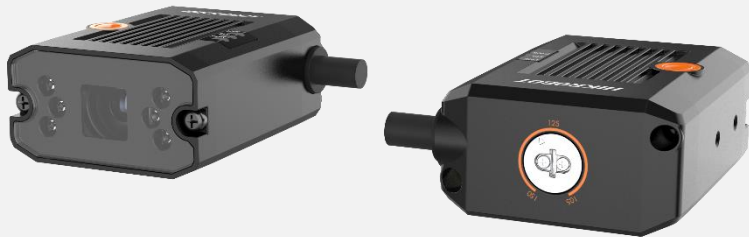


# MV-ID2013M (Long Focal Length)

## 1.3 MP Industrial Code Reader



**RoHS**



### Introduction

MV-ID2013M (Long Focal Length) 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.

### Available Model

- 16 mm focal length: MV-ID2013M-16S-RBN
- 25 mm focal length: MV-ID2013M-25S-RBN

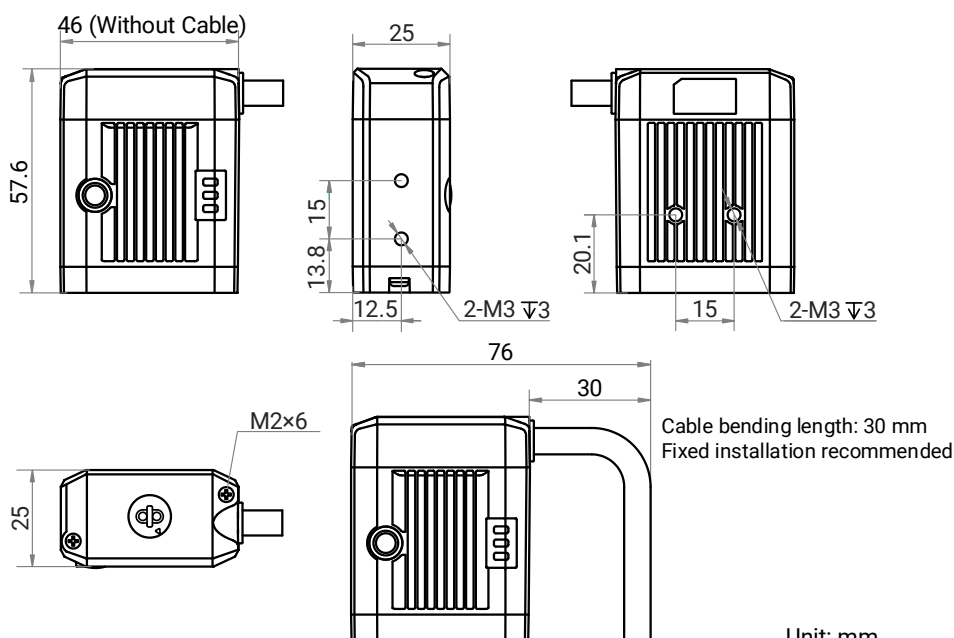
### Applicable Industry

Consumer electronics, food and pharmaceutical, electronic semiconductor, new energy, etc.

### Key Feature

- Compact design and small in size.
- Adopts focus knob for adjusting focusing manually.
- Adopts multiple I/O interfaces and plug-in power interface.
- Supports multiple communication protocols, including SmartSDK, TCP Server, Serial, FTP, TCP Client, Profinet, Melsec/SLMP, Ethernet/IP, Modbus, UDP, and Fins.

### Dimension



Unit: mm

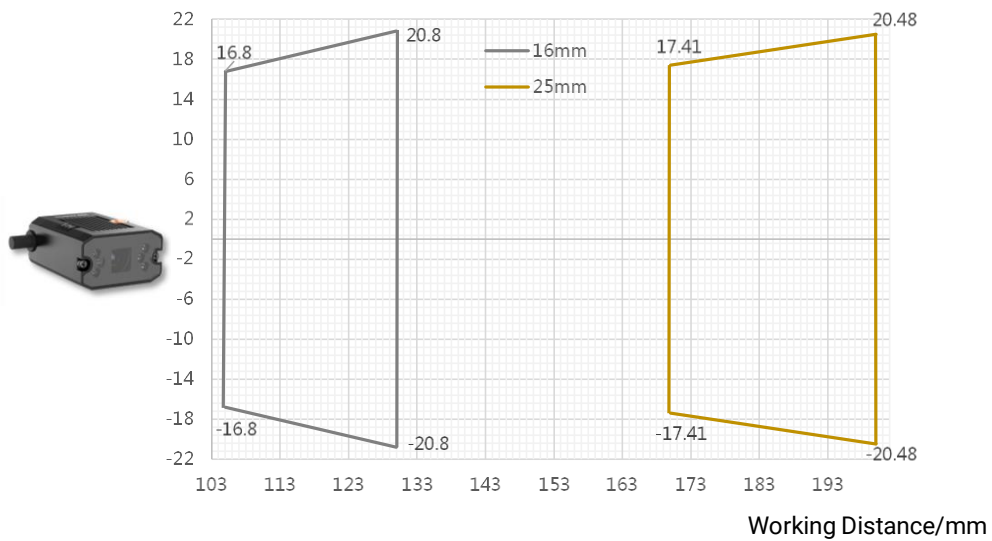
## Specification

Model	MV-ID2013M-16S-RBN	MV-ID2013M-25S-RBN
<b>Performance</b>		
<b>Symbologies</b>	1-dimensional codes: Code 39, Code 93, Code 128 (include GS1-128), ITF 14, ITF 25, CodaBar, EAN 8, EAN 13, UPCA, UPCE, Matrix 25, MSI, China Post, Code 11, Industrial 2of5, Pharmacode	
	2-dimensional codes: QR Code (include GS1-QR), Data Matrix (include GS1-DM), MicroQR, AZTEC, HanXin	
	Stacked codes: PDF 417	
<b>Max. frame rate</b>	60 fps	
<b>Max. reading speed</b>	45 codes/sec	
<b>Sensor type</b>	CMOS, global shutter	
<b>Pixel size</b>	4 $\mu\text{m}$ $\times$ 4 $\mu\text{m}$	
<b>Sensor size</b>	1/2.7"	
<b>Resolution</b>	1280 $\times$ 1024	
<b>Exposure time</b>	40 $\mu\text{s}$ to 1 sec	
<b>Gain</b>	0 dB to 15 dB	
<b>Mono/color</b>	Mono	
<b>Communication protocol</b>	SmartSDK, TCP Server, Serial, FTP, TCP Client, Profinet, Melsec/SLMP, Ethernet/IP, Modbus, UDP, and Fins	
<b>Electrical feature</b>		
<b>Data interface</b>	Fast Ethernet (100 Mbit/s)	
<b>Digital I/O</b>	17-pin M12 connector provides power and I/O, including non-isolated input $\times$ 1 (Line 2), non-isolated output $\times$ 1 (Line 3), configurable bi-directional non-isolated I/O $\times$ 2 (Line 0/1), RS-232 $\times$ 1. Supports device triggering via pressing button on side.	
<b>Power supply</b>	12 VDC to 24 VDC	
<b>Max. power consumption</b>	Approx. 24 W @ 24 VDC	
<b>Mechanical</b>		
<b>Focal length</b>	16 mm	25 mm
<b>Lens mount</b>	M12-mount, adjusting focus manually supported	
<b>Working distance</b>	105 mm to 150 mm	170 mm to 200 mm
<b>Ambient illumination</b>	0 lux to 50000 lux	
<b>Light source</b>	Red	
<b>Aiming system</b>	Not supported	
<b>Indicator</b>	Power indicator (PWR), network indicator (LNK), and status indicator (STS).	
<b>Dimension</b>	46 mm $\times$ 25 mm $\times$ 57.6 mm (1.8" $\times$ 1.0" $\times$ 2.3")	
<b>Weight</b>	Approx. 215 g (0.5 lb.)	
<b>Ingress protection</b>	IP65	
<b>Temperature</b>	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 $^{\circ}\text{F}$ )	
<b>Humidity</b>	20% RH to 95% RH (no condensation)	
<b>General</b>		
<b>Client software</b>	IDMVS	
<b>Certification</b>	CE, RoHS, KC	

Focal Length (mm)	Working Distance (mm)	Field of View		1D Min. Resolution (mm)*	2D Min. Resolution (mm)Δ
		H (mm)	V (mm)		
16	105	33.60	26.88	0.026	0.079
	110	35.20	28.16	0.028	0.083
	115	36.80	29.44	0.029	0.086
	120	38.40	30.72	0.030	0.090
	125	40.00	32.00	0.031	0.094
	130	41.60	33.28	0.033	0.098
25	170	34.82	27.85	0.027	0.082
	175	35.84	28.67	0.028	0.084
	180	36.86	29.49	0.029	0.086
	185	37.89	30.31	0.030	0.089
	195	39.94	31.95	0.031	0.094
	200	40.96	32.77	0.032	0.096

1D Min. Resolution (mm)\*: Field of view (long side) / resolution (long side) × 1  
 2D Min. Resolution (mm)Δ: Field of view (long side) / resolution (long side) × 3

Horizontal Field of View/mm



## Note

- 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.
- It is recommended to provide separate power supply to the device when the device is in use.
- When the device firmware is V3.3.0.R 241012,240924e0,00 and above, all codes in the symbologies can be recognized.