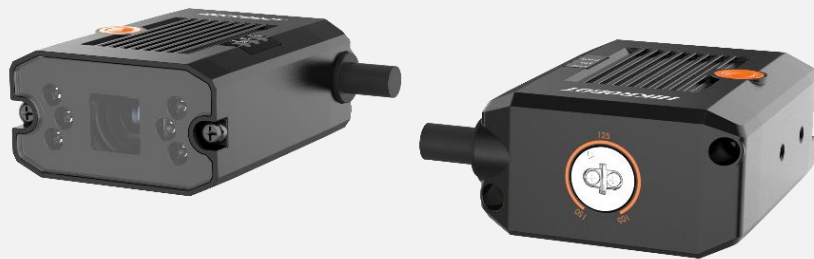# MV-ID2016M (Long Focal Length)

1.4 MP Industrial Code Reader

CE RoHS KC

Introduction

MV-ID2016M (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-ID2016M-16S-RBN
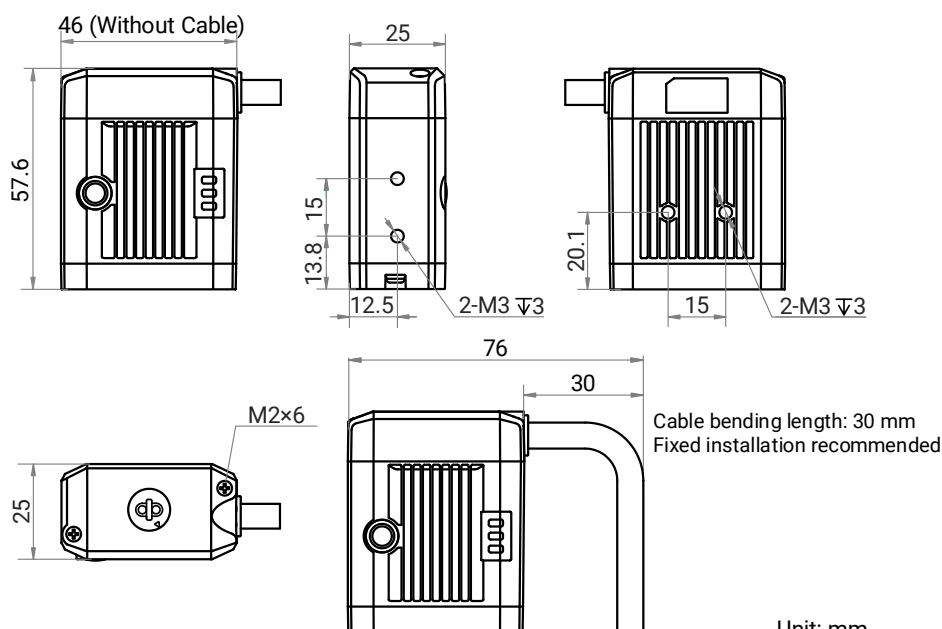- 25 mm focal length: MV-ID2016M-25S-RBN

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 IO 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

46 (Without Cable)
57.6
25
15
13.8
12.5
2-M3 ⍌3
20.1
15
2-M3 ⍌3
M2×6
25
76
30
Cable bending length: 30 mm
Fixed installation recommended
Unit: mm

Specification

Model	MV-ID2016M-16S-RBN	MV-ID2016M-25S-RBN
Performance		
Symbologies	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	
Max. frame rate	60 fps	
Max. reading speed	45 codes/sec	
Sensor type	CMOS, global shutter	
Pixel size	3.45 µm × 3.45 µm	
Sensor size	1/2.9"	
Resolution	1408 × 1024	
Exposure time	16 µs to 1 sec	
Gain	0 dB to 15 dB	
Mono/color	Mono	
Communication protocol	SmartSDK, TCP Server, Serial, FTP, TCP Client, Profinet, Melsec/SLMP, Ethernet/IP, Modbus, UDP, and 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), configurable bi-directional non-isolated I/O × 2 (Line 0/1), and RS-232 × 1. Device trigger via pressing button on side supported.	
Power supply	12 VDC to 24 VDC	
Max. power consumption	Approx. 24 W @ 24 VDC	
Mechanical		
Focal length	16 mm	25 mm
Lens mount	M12-mount, adjusting focus manually supported	
Working distance	105 mm to 150 mm	170 mm to 200 mm
Ambient illumination	0 lux to 50000 lux	
Light source	Red	
Aiming system	Not supported	
Indicator	Power indicator (PWR), network indicator (LNK), and status indicator (STS)	
Dimension	46 mm × 25 mm × 57.6 mm (1.8" × 1.0" × 2.3")	
Weight	Approx. 215 g (0.5 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

Focal Length (mm)	Working Distance (mm)	Field of View		1D Min. Resolution (mm)*	2D Min. Resolution (mm)△
		H (mm)	V (mm)		
16	105	31.88	23.18	0.025	0.068
	110	33.40	24.29	0.026	0.071
	115	34.91	25.39	0.027	0.074
	120	36.43	26.50	0.028	0.078
	125	37.95	27.60	0.030	0.081
	130	39.47	28.70	0.031	0.084
25	170	33.03	24.02	0.026	0.070
	175	34.00	24.73	0.027	0.072
	180	34.97	25.44	0.027	0.075
	185	35.95	26.14	0.028	0.077
	195	37.89	27.56	0.030	0.081
	200	38.86	28.26	0.030	0.083

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

2D Min. Resolution (mm)△: Field of view (long side) / resolution (long side) × 3

Horizontal Field of View/mm

Working Distance/mm
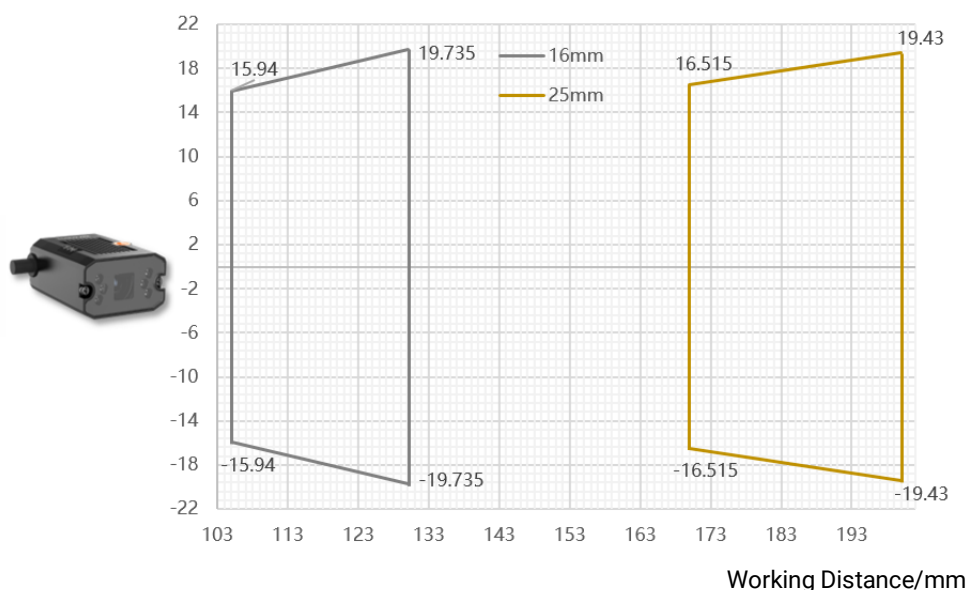
Note

- 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.