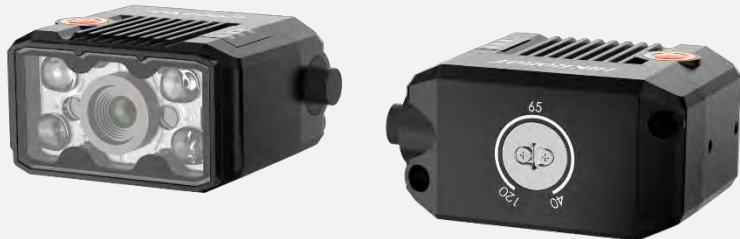# MV-ID2004M

0.4 MP Smart Code Reader

CE   RoHS

Introduction

MV-ID2004M smart 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.
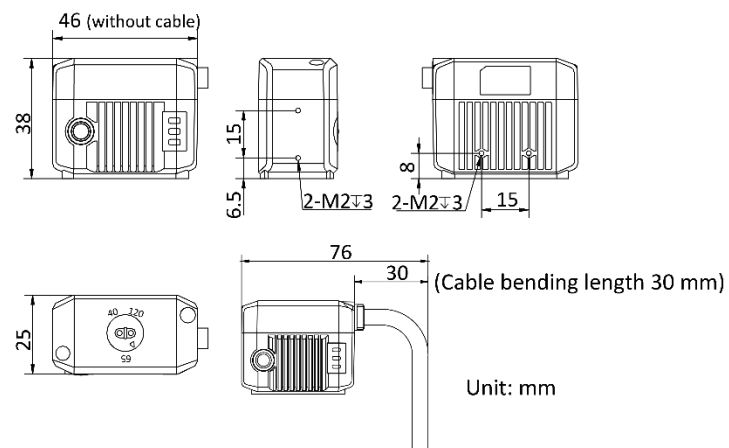- Supports multiple communication protocols, including TCP, Serial, FTP, Profinet, etc.

Applicable Industry

Consumer electronics, food and beverage, pharmaceutical, 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
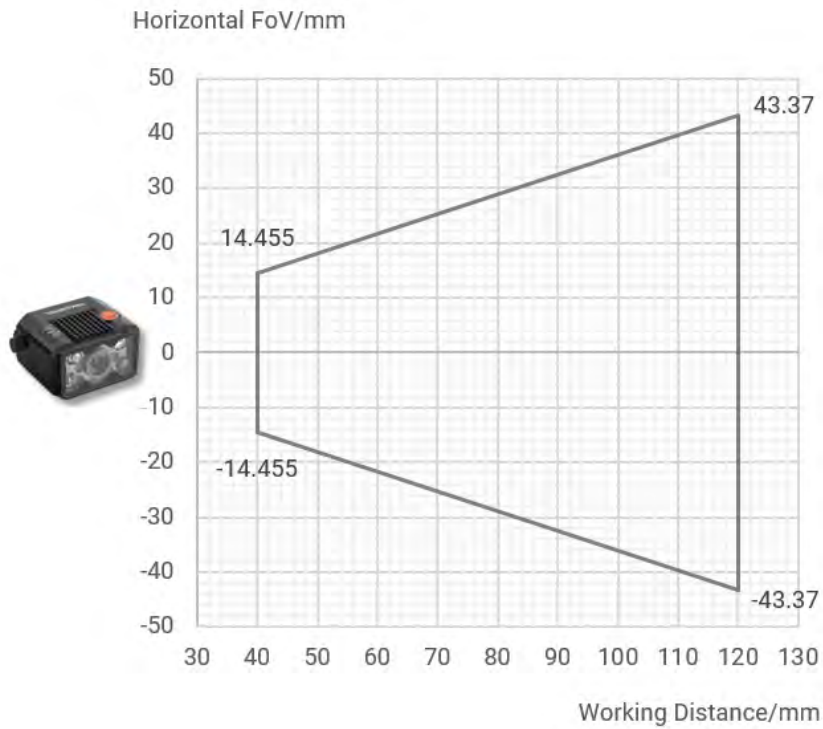- White light source with USB interface: MV-ID2004M-06S-WBN-U

Dimension

46 (without cable)
38
15
6.5
2-M2↧3   2-M2↧3   15
8
76
30 (Cable bending length 30 mm)
25
Unit: mm

Specification

Model	MV-ID2004M-06S-*BN	MV-ID2004M-06S-*BN-U
Performance		
Symbologies	1-dimensional codes: Code 39, Code 93, Code 128, ITF 14, ITF 25, CodaBar, EAN, UPCA, UPCE	
	2-dimensional codes: QR Code, Data Matrix	
Max. frame rate	60 fps	
Max. reading speed	41 codes/sec	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	SmartSDK, TCP Client, Serial, FTP, TCP Server, Profinet, MELSEC, Ethernet/IP, ModBus, UDP, Fins, SLMP	SmartSDK, USB
Optics		
Focal length	6 mm (0.2")	
Working distance	40 mm to 120 mm (1.6" to 4.7"), adjusting focus manually supported	
Ambient illumination	0 lux to 50000 lux	
Light source	Red LED, blue LED, white LED	
Aiming system	Green LED	
Electrical feature		
Data interface	Fast Ethernet	USB3.0
Digital I/O	17-pin M12 connector provides power and I/O, including configurable bi-directional none-isolated I/O × 4: input (Line 0/1) and output (Line 2/3) by default, RS-232 × 1. Device trigger via pressing button on side supported.	17-pin M12 connector provides data transmission. Device trigger via pressing button on side supported.
Power supply	12 VDC to 24 VDC	5 VDC (USB3.0 provides power supply)
Max. power consumption	Approx. 10.6 W@24 VDC	Approx. 4.6 W@5 VDC (USB3.0 provides power supply)
Mechanical		
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 (0.35 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% to 95% RH, non-condensing	
General		
Client software	IDMVS	
Certification	CE, RoHS	

Detection Range

Working Distance	FoV		1D Single Pixel Accuracy (mm)	2D Single Pixel Accuracy (mm)
	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