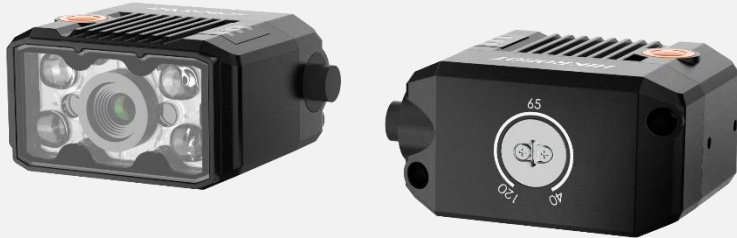# MV-ID2016M

1.6 MP Industrial Code Reader

CE RoHS KC

Introduction

MV-ID2016M 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 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.
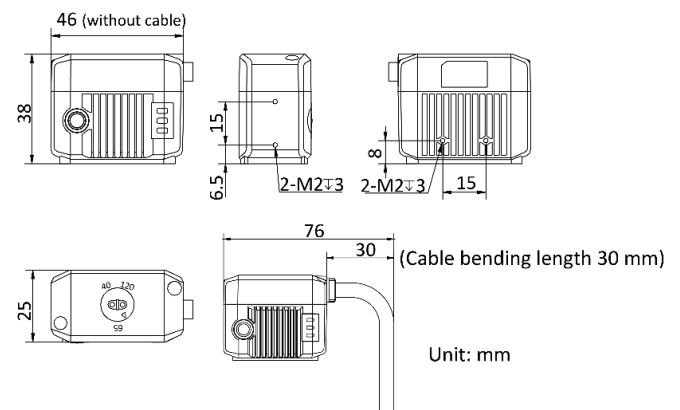
Applicable Industry

Consumer electronics, food and pharmaceutical, lithium battery, photovoltaics, etc.

Available Model

- Red light source with network interface: MV-ID2016M-06S-RBN
- Blue light source with network interface: MV-ID2016M-06S-BBN
- White light source with network interface: MV-ID2016M-06S-WBN
- Red light source with USB interface: MV-ID2016M-06S-RBN-U
- Blue light source with USB interface: MV-ID2016M-06S-BBN-U
- White light source with USB interface: MV-ID2016M-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-ID2016M-06S-RBN(-U)	MV-ID2016M-06S-BBN(-U)	MV-ID2016M-06S-WBN(-U)
Performance			
Symbologies	1D codes: Code 39, Code 93, Code 128, CodaBar, EAN 8, EAN 13, ITF 14, ITF 25, MATRIX 25, UPCA, UPCE, MSI, Code 11, Industrial 25, China Post, and Pharmacode		
	2D codes: QR Code, Data Matrix, Micro QR, and AZTEC		
	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	Device with network interface: SmartSDK, TCP Client, Serial, FTP, TCP Server, Profinet, MELSEC, Ethernet/IP, ModBus, UDP, Fins, and SLMP Device with USB interface: SmartSDK, USB		
Electrical feature			
Data interface	Device with network interface: Fast Ethernet Device with USB interface: USB2.0		
Digital I/O	Device with network interface: 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. Device with USB interface: 17-pin M12 connector provides data transmission. Device trigger via pressing button on side supported.		
Power supply	Device with network interface: 12 VDC to 24 VDC Device with USB interface: 5 VDC (USB2.0 provides power supply)		
Max. power consumption	Device with network interface: Approx. 10.6 W@24 VDC Device with USB interface: Approx. 4.6 W@5 VDC (USB2.0 provides power supply)		
Mechanical			
Focal length	6.72 mm (0.3")		
Lens mount	M10-mount, adjusting focus manually supported		
Working distance	40 mm to 120 mm (1.6" to 4.7")		
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 (0.35 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, KC		

Detection Range

Working Distance	FoV		1D Single Pixel Accuracy (mm)	2D Single Pixel Accuracy (mm)
	H (mm)	V (mm)		
40	28.91	21.03	0.023	0.062
80	57.83	42.06	0.045	0.123
120	86.74	63.09	0.068	0.185

Horizontal FoV/mm

Working Distance/mm