MV-ID5030M

3.1 MP Smart Code Reader

Introduction

MV-ID5030M smart code reader can read different types of codes with reading speed up to 90 codes/sec. It adopts Hikrobot's deep learning algorithm to process images with good robustness, and can recognize various complex codes.

Key Feature

- Adopts built-in deep learning algorithm to read codes with good robustness.
- Adopts CMOS global shutter sensor to provide high quality images.
- Adopts mechanical autofocus lens to achieve automatic focusing.
- Supports code score and quality evaluation for code printing quality.
- Adopts controllable light source design providing diversified light.
- Ingress protection rating 67.

Available Model

- 8 mm focal length, M12-Mount Device: MV-ID5030M-08S-WBN
- 12 mm focal length, M12-Mount Device: MV-ID5030M-12S-WBN
- 16 mm focal length, M12-Mount Device: MV-ID5030M-16S-WBN
- 25 mm focal length, M12-Mount Device: MV-ID5030M-25S-WBN
- C-Mount Device: MV-ID5030M-00C-NNN

Applicable Industry

Lithium battery/photovoltaic, electronic semiconductors, automotive parts, food and pharmaceuticals, inbound logistics, consumer electronics, etc.

Specification

Parameter \ Model	MV-ID5030M-08S-WBN	MV-ID5030M-12S-WBN	MV-ID5030M-16S-WBN	MV-ID5030M-25S-WBN
	3.1 MP Smart Code Reader			
Performance				
Symbologies	1-dimensional codes: Code 39, Code 93 (including GS1 128), Code 128, CodaBar, EAN 8, EAN 13, UPCA, UPCE, ITF 14, ITF 25, Matrix 25, MSI, China Post, Code 11, Pharmacode and Industrial 25			
	2-dimensional codes: QR Code (including GS1 QR), Data Matrix (including GS1 DM), Micro QR, AZTEC			
	Stack codes: PDF 417			
Max. frame rate	60 fps			
Max. reading speed	90 codes/sec			
Sensor type	CMOS, global shutter			
Pixel size	2.5 μm × 2.5 μm			
Sensor size	1/2"			
Resolution	2048 × 1536			
Exposure time	16 μs to 1 sec			
Gain	1 dB to 4 dB			
Mono/color	Mono			
Communication protocol	SmartSDK, TCP Client, TCP Server, Serial, FTP, Profinet, Ethernet/IP, MELSEC, ModBus, Fins, SLMP, UDP			
Electrical feature				
Data interface	Gigabit Ethernet（1000 Mbit/s）			
Digital I/O	12-pin M12 connector provides power and I/O, including opto-isolated input (LineIn 0/1/2) × 3, opto-isolated output (LineOut 3/4/5) × 3, RS-232 input × 1, and RS-232 output × 1			
Power supply	24 VDC			
Max. power consumption	60 W @ 24 VDC (light source enabled)			
Mechanical				
Focal length	8 mm	12 mm	16 mm	25 mm
Lens mount	M12-Mount, mechanical focusing supported.			
Lens cap	Half polarization lens cap by default. Transparent and full polarization lens cap are optional.			
Light source	White light by default. Red/blue/IR light is optional.			
Indicator	Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2).			
Dimension	112.5 mm × 65.5 mm × 63.3 mm (4.4" × 2.6" × 2.5")			
Weight	Approx. 450 g (1.0 lb.)			
Ingress protection	IP67 (under proper installation of waterproof lens cap)			
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

Specification

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Power supply	24 VDC
Max. power consumption	20 W @ 24 VDC
Mechanical	
Lens mount	C-Mount
Lens cap	Transparent
Light source	No light source included.
Indicator	Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2).
Dimension	109.5 mm × 64.4 mm × 109 mm (4.3" × 2.5" × 4.3")
Weight	Approx. 400 g (0.9 lb.)
Ingress protection	IP67 (under proper installation of waterproof lens cap)
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)
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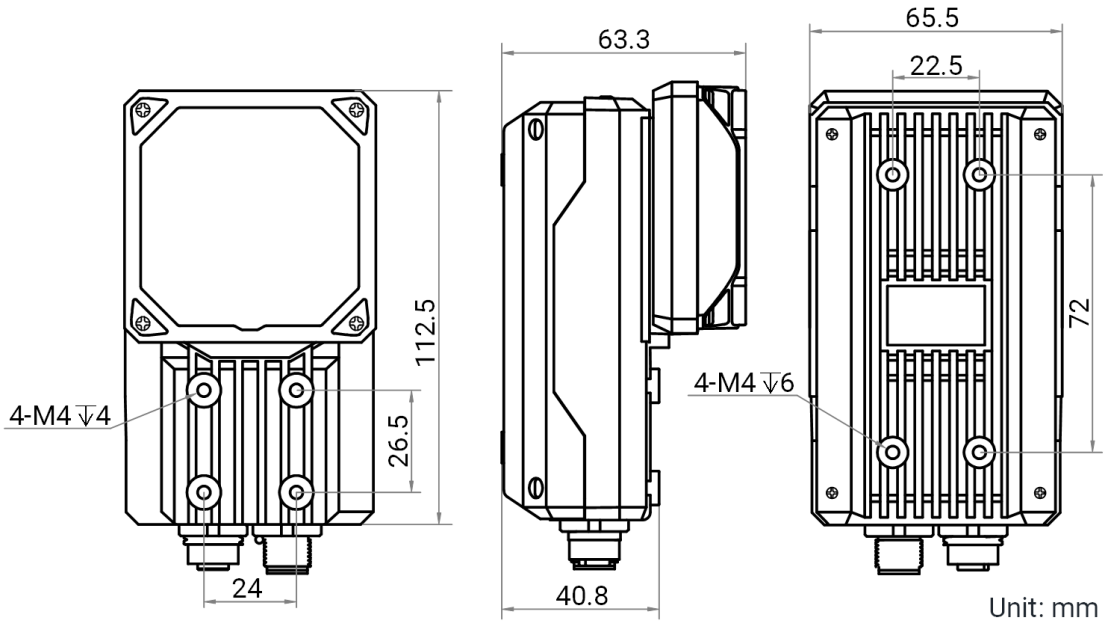
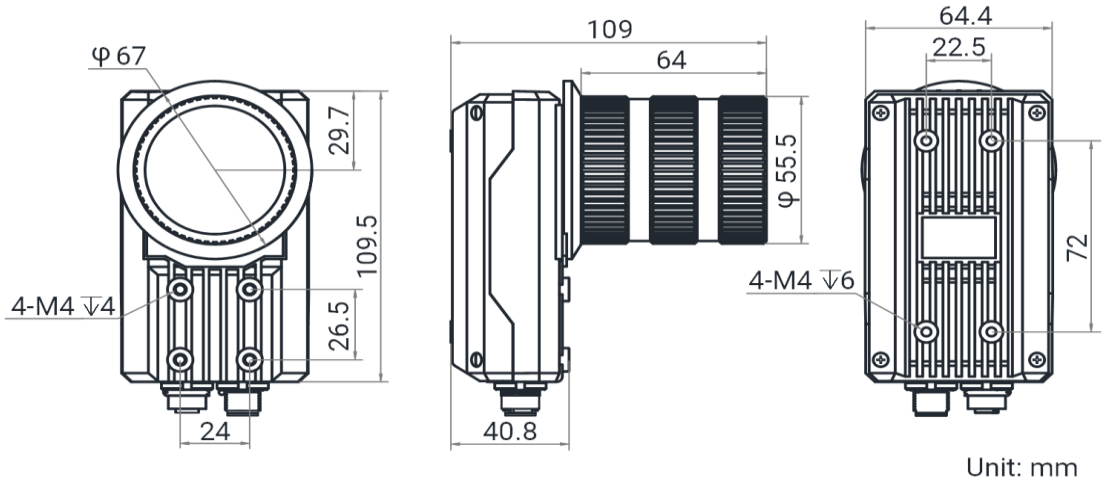
Dimension

MV-ID5030M-08/12/16/25S-WBN

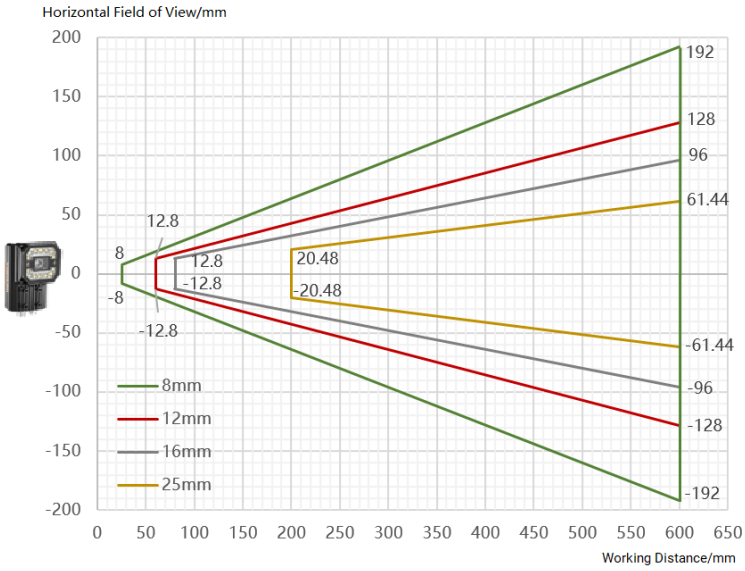


MV-ID5030M-00C-NNN



Detection Range

MV-ID5030M-08/12/16/25S-WBN（Unit: mm）						
Lens Focal Length	Working Distance	Field of View		1D Min. Resolution (mm)*	2D Min. Resolution (mm)△	Horizontal Field of View
		H	V			
8	25	16	12	0.008	0.023	
	100	64	48	0.031	0.094	
	200	128	96	0.063	0.188	
	300	192	144	0.094	0.281	
	400	256	192	0.125	0.375	
	500	320	240	0.156	0.469	
	600	384	288	0.188	0.563	
12	60	25.6	19.2	0.013	0.038	
	100	42.67	32	0.021	0.063	
	200	85.33	64	0.042	0.125	
	300	128	96	0.063	0.188	
	400	170.67	128	0.083	0.25	
	500	213.33	160	0.104	0.313	
	600	256	192	0.125	0.375	
16	80	25.6	19.2	0.013	0.038	
	100	32	24	0.016	0.047	
	200	64	48	0.031	0.094	
	300	96	72	0.047	0.141	
	400	128	96	0.063	0.188	
	500	160	120	0.078	0.234	
	600	192	144	0.094	0.281	
25	200	40.96	30.72	0.02	0.06	
	300	61.44	46.08	0.03	0.09	
	400	81.92	61.44	0.04	0.12	
	500	102.4	76.8	0.05	0.15	
	600	122.88	92.16	0.06	0.18	



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)

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