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MV-ID3050XM

5 MP Industrial Code Reader

Introduction

With functions of image acquisition, code recognition and output, MV-ID3050XM industrial code reader can read different types of 1D codes and 2D 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.

Applicable Industry

Consumer electronics, lithium battery, tobacco, medicine, photovoltaics, automobile, PCB, etc.

Available Model

- 8 mm focal length: MV-ID3050XM-08M-RBN
- 12 mm focal length: MV-ID3050XM-12M-RBN
- 16 mm focal length: MV-ID3050XM-16M-RBN
- 25 mm focal length: MV-ID3050XM-25M-RBN

Key Feature

- Adopts built-in deep learning algorithm to read codes with good robustness.
- Adopts CMOS sensor to acquire high-quality images.
- Supports one-key auto adjustment and easy to operate.
- Adopts multiple indicators displaying device status from different sides.
- Good environmental compatibility with Illuminating system.
- Adopts IO interfaces for input and output signals.
- Modularized light source design and easy to replace.

Note

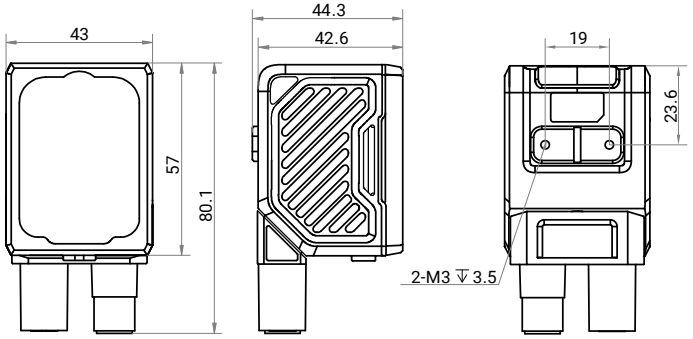
- Do not directly touch cooling parts of the device to avoid scald.
- Looking directly at the device may cause harm to the eyes. Protective measures like wearing protective glasses should be taken in the process of installation, maintenance, and debugging.

Specification

Model	MV-ID3050XM-08M-RBN	MV-ID3050XM-12M-RBN	MV-ID3050XM-16M-RBN	MV-ID3050XM-25M-RBN
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	90 codes/sec			
Sensor type	CMOS, global shutter			
Pixel size	3.45 μm × 3.45 μm			
Sensor size	1/1.45"			
Resolution	2432 × 2048			
Exposure time	6 μs to 30000 μs			
Gain	0 dB to 24 dB			
Mono/color	Mono			
Communication protocol	SmartSDK, TCP Client, TCP Server, Serial, FTP, Profinet, MELSEC/SLMP, Ethernet/IP, ModBus, Fins, UDP			
Electrical feature				
Data interface	Fast Ethernet (100 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, and RS-232 × 1 Triggering the device is supported via pressing the top button			
Power supply	24 VDC			
Max. power consumption	6.2 W @ 24 VDC (self-light source enabled)			
Mechanical				
Focal length	8 mm	12 mm	16 mm	25 mm
Lens mount	M12-mount, mechanical autofocus			
Lens cap	Transparent + polarized + diffused lens cap			
Light source	Red spot light + white diffused light source. White/blue/IR spot light is optional.			
Aiming system	Orange LED			
Indicator	Device top indicator, front code reading result feedback indicator (on projection light)			
Dimension	Straight angle: 80.1 mm × 43 mm × 44.3 mm (3.2" × 1.7" × 1.7") Right angle: 58.5 mm × 43 mm × 65.4 mm (2.3" × 1.7" × 2.6")			
Weight	Approx. 195 g (0.4 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			

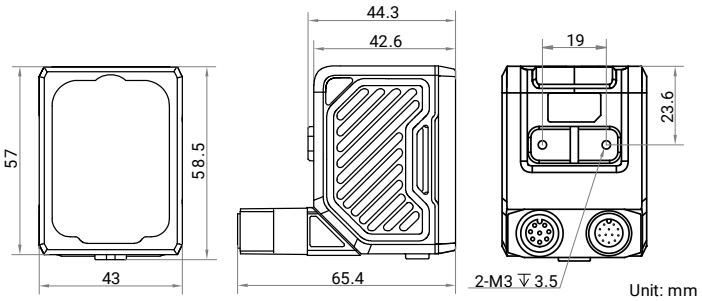
Dimension

Device (Straight Angle):



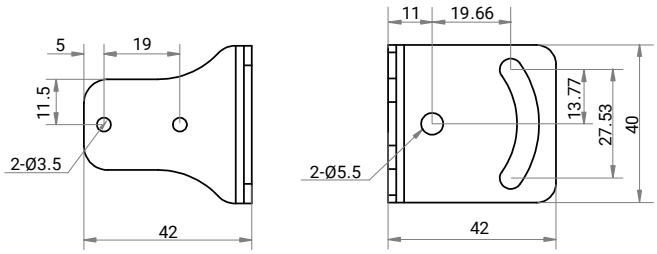
Unit: mm

Device (Right Angle):



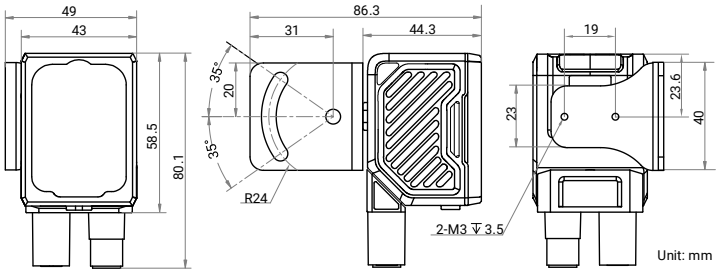
Unit: mm

Installation Bracket:



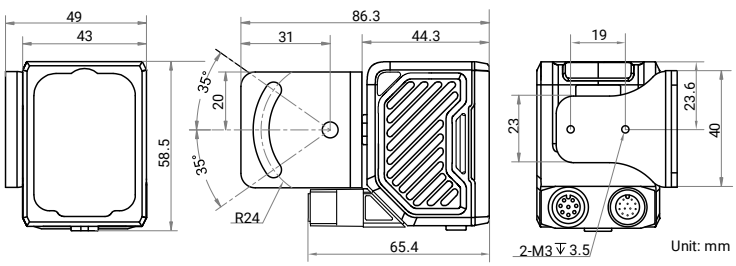
Unit: mm

Device and Installation Bracket (Straight Angle):



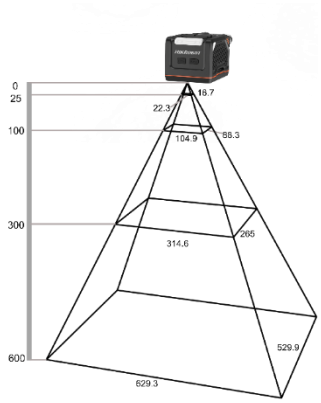
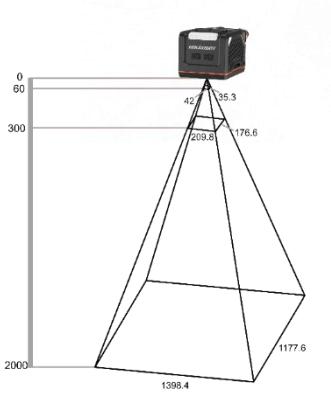
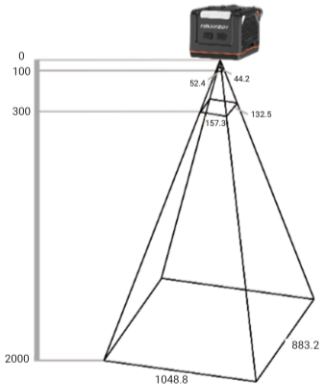
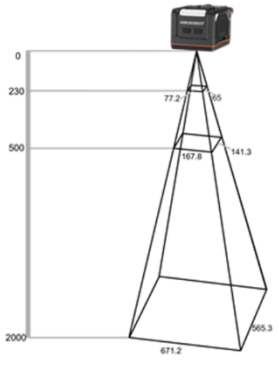
Unit: mm

Device and Installation Bracket (Right Angle):



Unit: mm

Detection Range

MV-ID3050XM (Unit: mm)						
Lens Focal Length	Working Distance	FoV		1D Min. Resolution	2D Min. Resolution	FoV Picture
		H	V			
8	25	26.2	22.1	0.01	0.03	
	100	104.9	88.3	0.04	0.13	
	300	314.6	265.0	0.13	0.39	
	600	629.3	529.9	0.26	0.78	
	1000	1048.8	883.2	0.43	1.29	
	2000	2097.6	1766.4	0.86	2.59	
12	60	42.0	35.3	0.02	0.05	
	100	69.9	58.9	0.03	0.09	
	300	209.8	176.6	0.09	0.26	
	600	419.5	353.3	0.17	0.52	
	1000	699.2	588.8	0.29	0.86	
	2000	1398.4	1177.6	0.58	1.73	
16	100	52.4	44.2	0.02	0.06	
	300	157.3	132.5	0.06	0.19	
	500	262.2	220.8	0.11	0.32	
	600	314.6	265.0	0.13	0.39	
	1000	524.4	441.6	0.22	0.65	
	2000	1048.8	883.2	0.43	1.29	
25	230	77.2	65.0	0.03	0.10	
	300	100.7	84.8	0.04	0.12	
	500	167.8	141.3	0.07	0.21	
	1000	335.6	282.6	0.14	0.41	
	2000	671.2	565.3	0.28	0.83	