

# MV-ID3050PM

## 4.2 MP Smart Code Reader



### Introduction

MV-ID3050PM smart code reader can read different types of codes with reading speed up to 60 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 multiple IO interfaces for input and output signals.
- Adopts 14 LED lamps to provide polarized and non-polarized modes.
- Adopts 2 LED aiming lamps for easy installation and code aiming.
- Indicators on device display device status and code reading results.

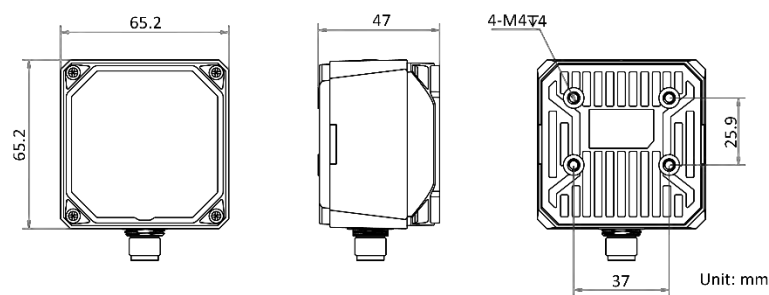
### Applicable Industry

Consumer electronics, food and beverage, pharmaceutical, semiconductor, automobile, etc.

### Available Model

- 8 mm focal length: MV-ID3050PM-08M-WBN
- 12 mm focal length: MV-ID3050PM-12M-WBN
- 16 mm focal length: MV-ID3050PM-16M-WBN
- 25 mm focal length: MV-ID3050PM-25M-WBN

### Dimension



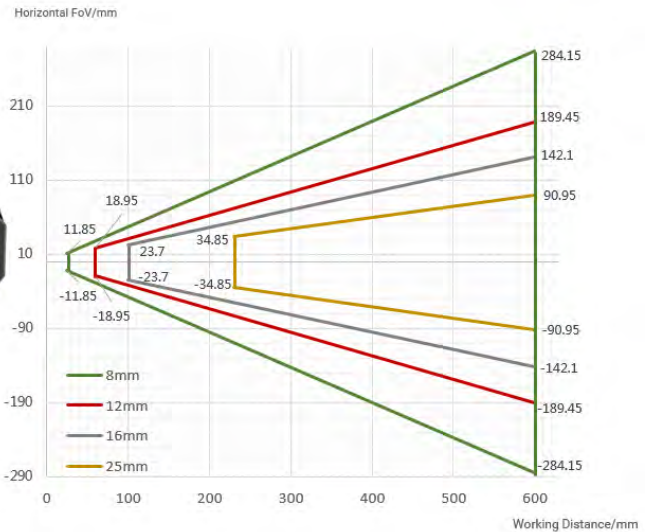
## Specification

Model	MV-ID3050PM-08M-WBN	MV-ID3050PM-12M-WBN	MV-ID3050PM-16M-WBN	MV-ID3050PM-25M-WBN
<b>Performance</b>				
<b>Symbologies</b>	1-dimensional codes: Code 39, Code 93, Code 128, CodaBar, EAN 8, EAN 13, UPCA, UPCE, ITF 14, ITF 25, Matrix 25, MSI, China Post, Code 11 and Industrial 25			
	2-dimensional codes: QR Code, Data Matrix			
	Stack codes: PDF 417			
<b>Max. frame rate</b>	30 fps			
<b>Max. reading speed</b>	60 codes/sec			
<b>Sensor type</b>	CMOS, global shutter			
<b>Pixel size</b>	3.2 $\mu\text{m}$ $\times$ 3.2 $\mu\text{m}$			
<b>Sensor size</b>	1/1.7"			
<b>Resolution</b>	2368 $\times$ 1760			
<b>Exposure time</b>	60 $\mu\text{s}$ to 1 sec			
<b>Gain</b>	0 dB to 18 dB			
<b>Mono/color</b>	Mono			
<b>Communication protocol</b>	SmartSDK, TCP Client, TCP Server, Serial, FTP, Profinet, Ethernet/IP, MELSEC, ModBus, Fins, SLMP			
<b>Electrical feature</b>				
<b>Data interface</b>	Fast Ethernet			
<b>Digital I/O</b>	17-pin M12 interface provides power supply and I/O, including non-isolated input (LineIn 0/1/2) $\times$ 3, non-isolated output (LineOut 3/4/5) $\times$ 3, RS-232 input $\times$ 1, and RS-232 output $\times$ 1. Device trigger via pressing button on top supported.			
<b>Power supply</b>	24 VDC			
<b>Max. power consumption</b>	10.6 W@24 VDC (light source enabled)			
<b>Mechanical</b>				
<b>Focal length</b>	8 mm (0.3")	12 mm (0.5")	16 mm (0.6")	25 mm (1.0")
<b>Lens mount</b>	M12-mount, mechanical autofocus supported.			
<b>Lens cap</b>	Half polarized front cover by default. Polarized and transparent ones are optional.			
<b>Light source</b>	White light by default. Red/blue/IR light is optional.			
<b>Indicator</b>	Power indicator (PWR), network indicator (LNK), status indicator (STS), result indicator (OK/NG)			
<b>Dimension</b>	65.2 mm $\times$ 65.2 mm $\times$ 47 mm (2.6" $\times$ 2.6" $\times$ 1.9")			
<b>Weight</b>	Approx. 280 g (0.6 lb.)			
<b>Ingress protection</b>	IP67 (under proper installation of waterproof lens cap)			
<b>Temperature</b>	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$ ) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ )			
<b>Humidity</b>	20% to 95% RH, non-condensing			
<b>General</b>				
<b>Client software</b>	IDMVS			
<b>Certification</b>	CE, FCC, RoHS, KC			

## Detection Range

MV-ID3050PM (Unit: mm)

Lens Focal Length	Working Distance	FoV		1D Single Pixel Accuracy	2D Single Pixel Accuracy	Horizontal FoV Diagram
		H	V			
8	25	23.7	17.6	0.01	0.03	
	100	94.7	70.4	0.04	0.12	
	200	189.4	140.8	0.08	0.24	
	300	284.2	211.2	0.12	0.36	
	400	378.9	281.6	0.16	0.48	
	500	473.6	352	0.2	0.6	
600	568.3	422.4	0.24	0.72		
12	60	37.9	28.2	0.016	0.048	
	100	63.1	46.9	0.027	0.08	
	200	126.3	93.9	0.053	0.16	
	300	189.4	140.8	0.08	0.24	
	400	252.6	187.7	0.107	0.32	
	500	315.7	234.7	0.133	0.4	
16	600	378.9	281.6	0.16	0.48	
	100	47.4	35.2	0.02	0.06	
	200	94.7	70.4	0.04	0.12	
	300	142.1	105.6	0.06	0.18	
	400	189.4	140.8	0.08	0.24	
	500	236.8	176	0.1	0.3	
25	600	284.2	211.2	0.12	0.36	
	230	69.7	51.8	0.029	0.088	
	300	90.9	67.6	0.038	0.115	
	400	121.2	90.1	0.051	0.154	
	500	151.6	112.6	0.064	0.192	
600	181.9	135.2	0.077	0.23		



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