HIKROBOT

MV-ID3016PM

1.6 MP Smart Code Reader

CE FC RoHS KC

Introduction

MV-ID3016PM smart code reader can read different types of codes with reading speed up to 84 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 IO interfaces for input and output signals.
- Supports multiple communication protocols, including TCP, Serial, FTP, PROFINET, etc.
- Adopts CMOS sensor to acquire image data and provide high-quality image.
- Supports RS-232 serial port and indicators displaying device status.

Available Model

6 mm focal length with manual focus: MV-ID3016PM-06S-WBN
12 mm focal length with manual focus: MV-ID3016PM-12S-WBN
14.8 mm focal length with manual focus: MV-ID3016PM-15S-WBN
6 mm focal length with mechanical autofocus: MV-ID3016PM-06M-WBN
12 mm focal length with mechanical autofocus: MV-ID3016PM-12M-WBN
14.8 mm focal length with mechanical autofocus: MV-ID3016PM-15M-WBN

Applicable Industry

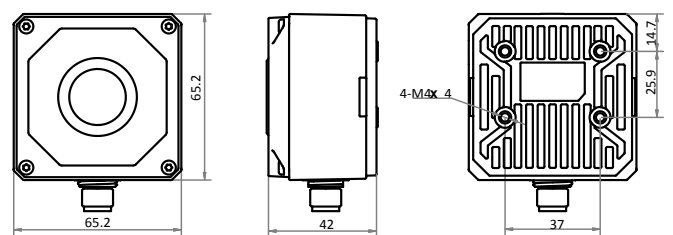Consumer electronics, food and beverage, pharmaceutical, semiconductor, automobile, etc.

Dimension

Manual focus
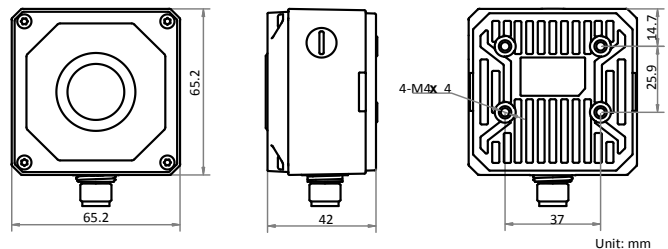
Unit: mm

Mechanical autofocus

Unit: mm

Specification

Model	MV-ID3016PM-06*-WBN	MV-ID3016PM-12*-WBN	MV-ID3016PM-15*-WBN
Performance			
Symbologies	1-dimensional codes: Code 39, Code 93, Code 128, ITF 25, CodaBar, EAN, MATRIX 25, MSI, Industrial 25, China Post, Code 11		
	2-dimensional codes: QR Code, Data Matrix		
Max. frame rate	60 fps		
Max. reading speed	84 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 40 dB		
Mono/color	Mono		
Communication protocol	SmartSDK, TCP Client, TCP Server, UDP, Serial, FTP, PROFINET, Ethernet/IP, MELSEC, ModBus		
Electrical feature			
Data interface	Fast Ethernet		
Digital I/O	17-pin M12 interface provides power supply and I/O, including non-isolated input (LineIn 0/1/2) × 3, non-isolated output (LineOut 3/4/5) × 3, RS-232 input × 1, and RS-232 output × 1. Device trigger via pressing button on top supported.		
Power supply	24 VDC		
Max. power consumption	20 W@24 VDC (self-light source enabled)		
Mechanical			
Focal length	6 mm (0.2")	12 mm (0.5")	14.8 mm (0.6")
Lens mount	M12-mount, manual focus or mechanical autofocus.		
Lens cap	Transparent lens cap. Polarization lens cap is optional.		
Light source	Spotlight white light. Spotlight red/blue/IR, and wide-angle white/red/blue light is optional.		
Indicator	Power indicator (PWR), network indicator (LNK), status indicator (STS), result indicator (OK/NG)		
Dimension	65.2 mm × 65.2 mm × 42 mm (2.6" × 2.6" × 1.7")		
Weight	Approx. 250 g (0.6 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% to 95% RH, non-condensing		
General			
Client software	IDMVS		
Certification	CE, FCC, RoHS, KC		

Detection Range

Lens Focal Length	Working Distance	FoV		1D Single Pixel Accuracy	2D Single Pixel Accuracy	Horizontal FoV Diagram
		H	H			
6	20	16.2	11.8	0.012	0.035	
	100	81	58.9	0.058	0.173	
	200	161.9	117.8	0.115	0.345	
	300	242.9	176.6	0.173	0.518	
	400	323.8	235.5	0.230	0.690	
	500	404.8	294.4	0.288	0.863	
	600	485.8	353.3	0.345	1.035	
12	60	24.3	17.7	0.017	0.052	
	100	40.5	29.4	0.029	0.086	
	200	81	58.9	0.058	0.173	
	300	121.4	88.3	0.086	0.259	
	400	161.9	117.8	0.115	0.345	
	500	202.4	147.2	0.144	0.431	
	600	242.9	176.6	0.173	0.518	
14.8	88	28.9	21	0.021	0.062	
	100	32.8	23.9	0.023	0.070	
	200	65.6	47.7	0.047	0.140	
	300	98.5	71.6	0.070	0.210	
	400	131.3	95.5	0.093	0.280	
	500	164.1	119.4	0.117	0.350	
	600	196.9	143.2	0.140	0.420	

MV-ID3016PM (Unit: mm)

Horizontal FoV Diagram