

MV-ID5200M

20 MP Industrial Code Reader



RoHS



Introduction

MV-ID5200M industrial code reader can read different types of codes with reading speed up to 36 codes/sec. It adopts CMOS sensor and supports C-mount lens to achieve ultra-wide field of view and depth of field for code reading.

Key Features

- Adopts 20 MP rolling shutter sensor with high performance to provide high-quality images.
- Adopts built-in deep learning algorithm to read codes with good robustness.
- Supports multiple communication protocols, including UDP, TCP/IP, Serial, FTP, Profinet, Ethernet/IP, MELSEC, Modbus, Modbus RTU, and Fins.
- Supports drawing ROI via chessboard, and supports 1D codes, 2D codes, and stacked codes.
- Ingress protection rating 67.

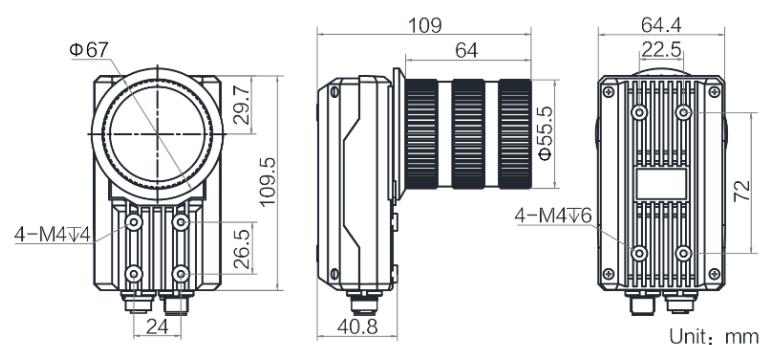
Available Model

MV-ID5200PM-00C-NNN

Applicable Industry

Consumer electronics, food and pharmaceuticals, new energy, semiconductor, automobile, etc.

Dimension



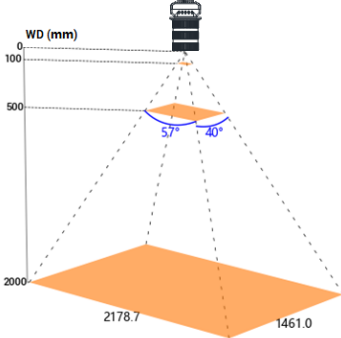
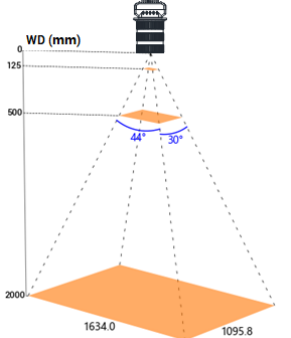
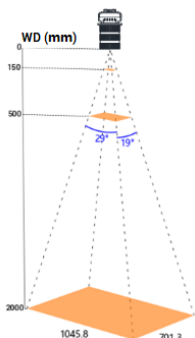
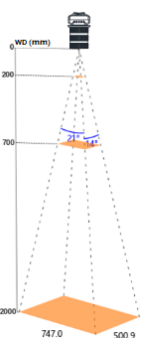
Specification

Model	MV-ID5200M
Parameter	
Performance	
Symbologies	1D codes: Code 39, Code 93, Code 128 (GS1-128 included), CodaBar, EAN 8, EAN 13, UPCA, UPCE, ITF 14, ITF 25, Matrix 25, MSI, China Post, Code 11, Industrial 2of5, and Pharmacode 2D matrix codes: QR Code (GS1-QR included), Data Matrix (GS1-DM included), MicroQR, AZTEC, HanXin, MAXCODE 2D stacked codes: PDF417, MicroPDF417
Max. frame rate	20 fps
Max. reading speed	36 codes/sec
Sensor type	CMOS, rolling shutter, mono, 1", 2.4 μm $\times$ 2.4 μm
Resolution	5440 $\times$ 3648
Exposure time	16 μs to 500 ms
Gain	0 dB to 40 dB
Electrical feature	
Data interface	Gigabit Ethernet (1000 Mbit/s)
Communication protocol	SmartSDK, TCP Client, Serial, FTP, TCP Server, Profinet, Ethernet/IP, Melsec/SLMP, Fins, ModBus, UDP, Fins, ModBus RTU
Digital I/O	12-pin M12 connector provides power and I/O, including opto-isolated input (LineIn 0/1/2) $\times$ 3, opto-isolated output (LineOut 3/4/5) $\times$ 3, RS-232 input $\times$ 1, and RS-232 output $\times$ 1.
Power supply	12 VDC to 24 VDC
Power consumption	Avg.: 9 W @ 24 VDC Max.: 12 W @ 24 VDC
Mechanical	
Lens mount	C-mount
Lens cap	Transparent lens cap
Light source	No built-in light source
Indicator	Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2).
Shell material	Metal
Dimension	109.5 mm $\times$ 64.4 mm $\times$ 109 mm (4.3" $\times$ 2.5" $\times$ 4.3")
Weight	Approx. 470 g (1.0 lb.)
Ingress protection	IP67 (under proper installation of waterproof lens cap)
Temperature	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 $^{\circ}\text{F}$)
Humidity	20% RH to 95% RH (no condensation)
Vibration resistance	Device only: 10 Hz to 55 Hz, 1.5 mm full amplitude, 2 hours per axis (X/Y/Z) (IEC 60068-2-6:2007\GB/T 2423.10-2019) ¹
Shock resistance	Device only, 30 g/11 ms, half-sine wave, 500 shocks per axis (6 directions) (IEC 60068-2-27\GB/T 2423.5-2019) ¹
General	
Client software	IDMVS
Certification	CE, RoHS, KC

¹: After the C-mount lens is assembled, the focus ring should be secured with set screws, and UV adhesive should be applied around the focus ring for reinforcement.

Detection Range

MV-ID5200M Equipped with MVL-KF12(16/25/35)28M-12MP Lens (Unit: mm)

Lens Focal Length	Working Distance	Field of View		1D Min. Resolution *	2D Min. Resolution **	Diagram of Field of View
		H	V			
12	100	108.9	73.0	0.02	0.06	
	200	217.9	146.1	0.04	0.12	
	300	326.8	219.1	0.06	0.18	
	500	544.7	365.2	0.10	0.30	
	1000	1089.4	730.5	0.20	0.60	
	1500	1634.0	1095.8	0.30	0.90	
	2000	2178.7	1461.0	0.40	1.20	
16	125	102.1	68.5	0.02	0.06	
	200	163.4	109.6	0.03	0.09	
	300	245.1	164.4	0.05	0.14	
	500	408.5	273.9	0.08	0.23	
	1000	817.0	547.9	0.15	0.45	
	1500	1225.5	821.8	0.23	0.68	
	2000	1634.0	1095.8	0.30	0.90	
25	150	78.4	52.6	0.01	0.04	
	200	104.6	70.1	0.02	0.06	
	300	156.9	105.2	0.03	0.09	
	500	261.4	175.3	0.05	0.14	
	1000	522.9	350.6	0.10	0.29	
	1500	784.3	526.0	0.14	0.43	
	2000	1045.8	701.3	0.19	0.58	
35	200	74.7	50.1	0.01	0.04	
	300	112.0	75.1	0.02	0.06	
	500	186.7	125.2	0.03	0.10	
	700	261.4	175.3	0.05	0.14	
	1000	373.5	250.5	0.07	0.21	
	1500	560.2	375.6	0.10	0.30	
	2000	746.9	500.9	0.13	0.41	

1D Min. Resolution (mm)*: Field of view (long side) / resolution (long side) × 1.

2D Min. Resolution (mm)**: Field of view (long side) / resolution (long side) × 3.

Accessories



Included

Power Cable	Network Cable	Screws
		

Required

Power Adapter	AC Power Cable
	

Optional

Light Source	Power Cable	Network Cable
Light source for ID5000M with C-mount	● Cable with open end for static scenes: 3 m/5 m/7 m/10 m/15 m/30 m ● High-flex cable with open end: 3 m/5 m/10 m/20 m ● Cable with DB connector for static scenes: 3 m/5 m/7 m/10 m	● Cable for static scenes: 3 m/5 m/7 m/10 m/15 m/30 m ● High-flex cable: 3 m/5 m/10 m/20 m
		
Installation Bracket	Lens	
		