

MV-SC1008M

0.8 MP Mono Vision Sensor

With built-in positioning and measurement algorithms, MV-SC1008M vision sensor can detect object's existence, quantity, location, etc. It can be monitored and operated via the SCMVS client. It can output results via RS-232 and Ethernet, and cooperate with other processes via I/O. The vision sensor supports multiple result output methods and customized result text output.



Key Features

- Adopts small-size design for all types of machines and compact workstations.
- Adopts embedded hardware platform for high-speed image processing.
- Adopts built-in positioning and measurement algorithms to detect object's existence, quantity, location, etc.
- Integrated laser to allow the field-of-view to be clearly.
- Provides multiple indicators for displaying device status.
- Supports multiple communication protocols, including Modbus, EtherNet/IP, PROFINET, FTP, UDP, TCP, and Serial Port.

Available Models

- Standard distance: MV-SC1008M-05S-WBN-SR
- Near distance: MV-SC1008M-05S-WBN-NR

Typical Application

- Consumer electronics
- Food and pharmaceutical
- Automotive

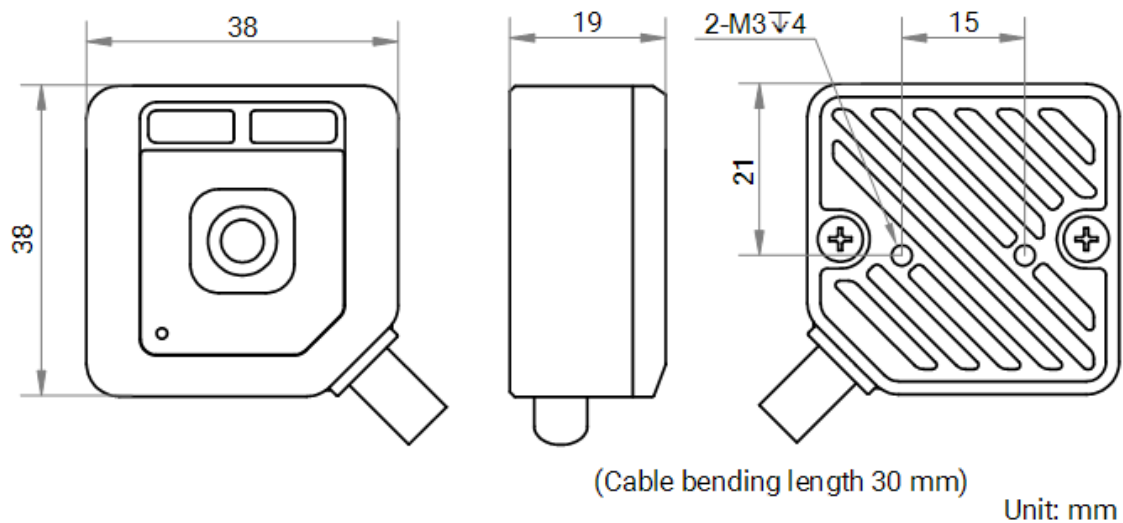


Specification

Model	MV-SC1008M-05S-WBN-SR		MV-SC1008M-05S-WBN-NR
Tool			
Vision tool	● Measurement: P2L measurement, contrast measurement, grayscale size, edge width measurement, width measurement, brightness analysis, L2L angle, diameter measurement, and line angle ● Existence: Anomaly judge, spot existence, edge existence, contour existence, circle existence, and line existence ● Count: Spot count, edge count, and contour count ● Recognition: Category recognition, and classification registration ● Logic: Calculator, logic judge, condition judge, combination judge, and format output ● Location: Fixture		
Solution capacity	Supports solution importing and exporting, and up to 8 solutions and 40 modules can be stored.		
Communication protocol	Modbus, EtherNet/IP, PROFINET, FTP, UDP, TCP client, TCP server, Serial Port, MELSEC/SLMP, FINS, Keyence KV		
Camera			
Sensor type	CMOS, global shutter		
Pixel size	2.7 μm × 2.7 μm		
Sensor size	1/5"		
Resolution	1024 × 768		
Max. frame rate	15 fps		
Gain	1 dB to 15 dB		
Exposure time	60 μs to 7000 μs		
Pixel format	Mono 8		
Mono/color	Mono		
Electrical feature			
Data interface	Fast Ethernet (100 Mbit/s)		
Digital I/O	Green terminal provides power, digital I/O, and serial port, including input signal × 1 (Line 0), output signal × 1 (Line 1), and RS-232 × 1. Supports triggering device via pressing top trigger button.		
Power supply	12 VDC to 24 VDC		
Power consumption	Avg. 1.5 W @ 12 VDC Max. 3 W @ 12 VDC		
Mechanical			
Lens mount	M5-mount		
Focal length	4.9 mm		
Working distance	240 mm	120 mm	
Lens cap	Transparent lens cap		
Light source	White LED		
Aiming system	Cross laser		

Indicator	Power indicator (PWR), result indicator (OK/NG)
Dimension	38 mm × 38 mm × 19 mm (1.5" × 1.5" × 0.7")
Weight	Approx. 40 g (0.09 lb.) without cable
Ingress protection	IP54
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)
Vibration resistance	Meets standard IEC 60068-2-6:2007. Device only: 10 Hz to 55 Hz, 1.5 mm peak-to-peak amplitude, 2 hours per axis (X, Y, Z)
Shock resistance	Meets standard IEC 60068-2-27:2008. Device only: 30 g / 11 ms, half-sine wave, 500 shocks per axis (6 directions)
General	
Client software	SCMVS
Certification	CE, KC

Dimension



Detection Range

MV-SC1008M (Unit: mm)						
Model	Lens Focal Length	Working Distance	Field of View		Single Pixel Accuracy	Diagram of Field of View
			H	V		
MV-SC1008M-05S-WBN-NR	4.89	80	45	34	0.04	
		100	57	42	0.06	
		120	68	51	0.07	
		140	79	59	0.08	
		160	90	68	0.09	
MV-SC1008M-05S-WBN-SR	4.89	200	113	85	0.11	
		220	124	93	0.12	
		240	136	102	0.13	
		260	147	110	0.14	
		280	158	119	0.15	