

MV-SC5060XM

6 MP Mono Smart Camera

MV-SC5060XM smart camera is developed based on high-performance embedded platform with strong calculation performance. It integrates VM functions and AI deep learning algorithm, and can use more than 140 algorithms. It adopts multiple interfaces for supporting display, keyboard, mouse, etc.



Key Features

- Adopts AI deep learning algorithm to achieve OCR, object recognition, defect detection, etc.
- Integrates VM functions, and supports more than 140 algorithms.
- Adopts multiple I/O interfaces, such as multiple input/output signals.
- Supports multiple communication protocols.
- Supports indicators displaying device status for easy debugging and maintenance.
- Supports ingress protection IP67.

Available Models

- 8 mm focal length: MV-SC5060XM-08M-WBN
- 12 mm focal length: MV-SC5060XM-12M-WBN
- 16 mm focal length: MV-SC5060XM-16M-WBN

Typical Application

- Consumer electronics
- Food and pharmaceutical
- Packaging



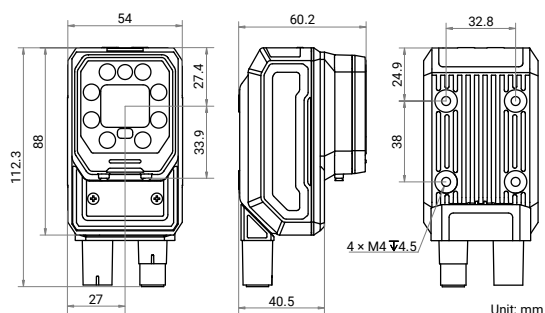
Specification

Model	MV-SC5060XM-08M-WBN	MV-SC5060XM-12M-WBN	MV-SC5060XM-16M-WBN
Tool			
Function module	Vision Master Platform (include deep learning module)		
Communication protocol	TCP, UDP, Modbus, Serial Port, PROFINET, EtherNet/IP, Fins, MC, FTP, etc.		
Camera			
Sensor type	CMOS, rolling shutter		
Pixel size	2 μm × 2 μm		
Sensor size	1/2.4"		
Resolution	3200 × 1920		
Max. frame rate	15 fps		
Gain	0 dB to 34 dB		
Exposure time	72 μs to 150 ms		
Pixel format	Mono 8		
Mono/color	Mono		
Platform			
Memory	8 GB		
Storage	64 GB		
Electrical feature			
Data interface	Gigabit Ethernet (1000 Mbit/s)		
Digital I/O	12-pin M12 connector provides power and I/O, including opto-isolated input × 3 (Line 0/1/2), opto-isolated output × 3 (Line 3/4/5), RS-232 × 1		
Power supply	24 VDC		
Power consumption	Avg. 12.3 W @ 24 VDC (with included light source on) Max. 48 W @ 24 VDC (with included light source on)		
Mechanical			
Focal length	8 mm	12 mm	16 mm
Lens mount	M12-mount, mechanical focus		
Lens cap	Half polarization lens cap by default. Transparent or full polarization lens cap is optional.		
Light source	White light source by default. Red, blue, or IR light source is optional		
Indicator	Power indicator (PWR), network indicator (LNK), and user-defined indicator (U1/U2)		
Dimension	Straight angle: 112.3 mm × 54 mm × 60.2 mm (4.4" × 2.1" × 2.4") Right angle: 88.7 mm × 54 mm × 82.5 mm (3.5" × 2.1" × 3.2")		
Weight	Approx. 370 g (0.8 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)		
Vibration resistance	Meets standard IEC 60068-2-6:2007. Device only (without installation bracket): 10 Hz to 55 Hz, 1.5 mm peak-to-peak amplitude, 2 hours per axis (X, Y, Z)		

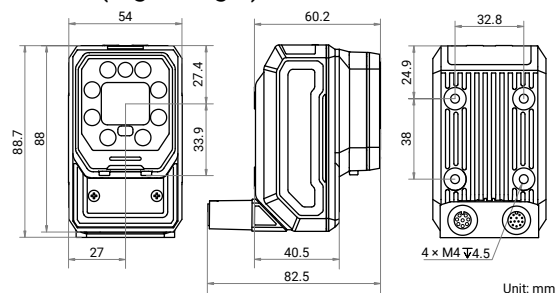
Shock resistance	Meets standard IEC 60068-2-27:2008. Device only (without installation bracket): 30 g / 11 ms, half-sine wave, 500 shocks per axis (6 directions)
General	
Certification	CE, KC

Dimension

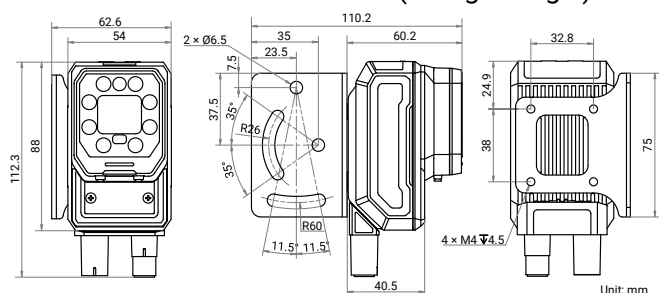
Device (Straight Angle):



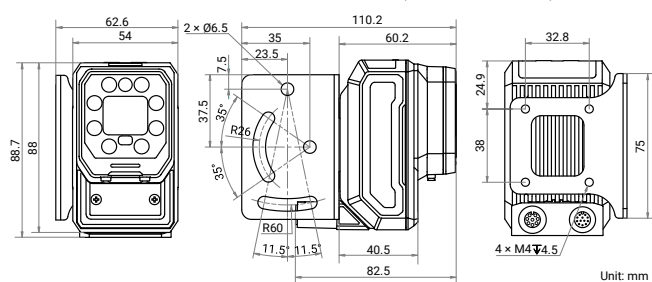
Device (Right Angle):



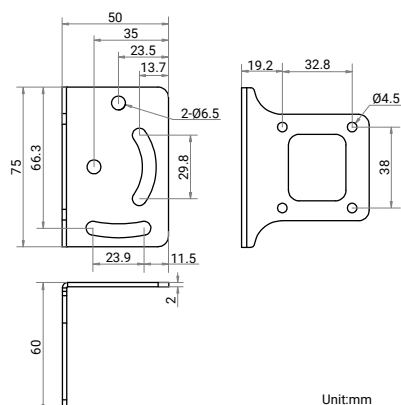
Device and Installation Bracket (Straight Angle):



Device and Installation Bracket (Right Angle):



Installation Bracket:



Detection Range

MV-SC5060XM-08/12/16M-WBN (Unit: mm)					
Lens Focal Length	Working Distance	Field of View		Single Pixel Accuracy	Field of View Diagram
		H	V		
8	25	20	12	0.01	
	100	78	47	0.02	
	200	157	94	0.05	
	300	235	141	0.07	
	600	471	282	0.15	
	1000	784	471	0.25	
	2000	1569	941	0.49	
12	60	32	19	0.01	
	100	53	32	0.02	
	200	106	63	0.03	
	300	159	95	0.05	
	600	317	190	0.10	
	1000	529	317	0.17	
	2000	1058	635	0.33	
16	100	40	24	0.01	
	150	60	36	0.02	
	300	120	72	0.04	
	400	160	96	0.05	
	600	240	144	0.08	
	1000	400	240	0.13	
	2000	800	480	0.25	