

MV-SC7016M

1.6 MP Smart Camera





Introduction

With built-in vision tools of deep learning, MV-SC7016M smart camera can achieve character and object recognition, object sorting, and other functions. With mechanical autofocus lens, the smart camera can meet different scenario demands. It can be monitored and operated via the web based interface, and it supports multiple result output methods, and customized result text output.

Key Feature

- Built-in vision tools of deep learning to achieve character and object recognition, object sorting, etc.
- Supports semi-automatic focus to get clearer images.
- Adopts high speed and large capacity memory medium for saving images.
- Supports multiple communication protocols, including TCP, UDP, Serial, FTP, Modbus, etc.
- Supports indicators displaying device status.

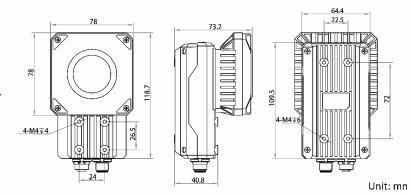
Available Model

- 12 mm focal length smart camera:
 MV-SC7016M-12S-WBN
- 15 mm focal length smart camera:
 MV-SC7016M-15S-WBN

Applicable Industry

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

Dimension









Specification

Model	MV-SC7016M-12S-WBN	MV-SC7016M-15S-WBN		
Tool				
Vision tool	Feature matching, fixture, blob, deep learning character recognition, deep learning character			
	location, deep learning classification, deep learning object detection, etc.			
Solution capacity	Supports solution importing and exporting, up to 32 solutions and 40 modules can be stored.			
Communication				
protocol	TCP, UDP, serial port, IO, Modbus, PROFINET, Ethernet/IP, and FTP.			
Camera				
Sensor type	CMOS, global shutter			
Pixel size	3.45 μm × 3.45 μm			
Sensor size	1/2.9"			
Resolution	1408 × 1024			
Max. frame rate	60 fps			
Dynamic range	71.4 dB			
SNR	41 dB			
Gain	0 dB to 15 dB			
Exposure time	16 μs to 1 sec			
Pixel format	Mono 8			
Mono/color	Mono			
Platform				
Memory	4 GB			
Storage	32 GB			
Electrical feature				
Data interface	Gigabit Ethernet interface			
Digital I/O	12-pin M12 connector provides power and I/O, including opto-isolated input (Line $0/1/2$) × 3,			
	opto-isolated output (Line $3/4/5$) × 3, and RS-232 × 1			
Power supply	12 VDC to 24 VDC			
Power consumption	Approx. 7.5 W@24 VDC (light source is disabled) Approx. 18 W@24 VDC (light source is enabled)			
Mechanical				
Lens mount	M12-mount, semi-automatic focus supported			
Focal length	12 mm (0.5")	15 mm (0.6")		
Lens cap	Transparent lens cap. Polarization lens cap is optional.			
Light source	White light. Red, blue, or NIR light is optional.			
Indicator	Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2).			
Dimension	118.7 mm × 78 mm × 73.2 mm (4.7" × 3.1" × 2.9")			
Weight	Approx. 520 g (1.1 lb.)			
Ingress protection	IP67 (under proper installation of waterproof lens cap)			
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)			
iomperature		•		
-	Storage temperature: -30 °C to 70 °C (-22 °F to 1	•		
Humidity		•		
Humidity General	Storage temperature: -30 °C to 70 °C (-22 °F to 1 20% to 95% RH, non-condensing	•		
Humidity	Storage temperature: -30 °C to 70 °C (-22 °F to 1	•		

Detection Range

Lens focal length	Installation distance	Field of view	Single pixel accuracy
12 mm (0.5")	80 mm (3.1")	33.12 mm × 24.84 mm	0.023 mm
		(1.3" × 1.0")	0.023 MM
	COO /22 CII)	248 mm × 186.3 mm	0.4722
	600 mm (23.6")	(9.8" × 7.3")	0.1722 mm
15 mm (0.6")	100 mm (3.9")	33.12 mm × 24.84 mm	0.023 mm
		(1.3" × 1.0")	
	200 mm /21 F"\	264.96 mm × 198.72 mm	0.104 2222
	800 mm (31.5")	(10.4" × 7.8")	0.184 mm

