

MV-SC2016EM

1.6 MP 1/2.9" Vision Sensor



Introduction

With built-in positioning and measurement algorithms, MV- SC2016EM vision sensor can detect object's existence, count patterns and spots, 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 IO. The ● vision sensor supports multiple result output methods and customized result text output.

Key Features

- Adopts embedded hardware platform for highspeed image processing.
- Adopts built-in positioning and measurement algorithms to detect object's existence, count patterns and spots, etc.
- Multiple IO interfaces for input and output signals.
- Multiple indicators for displaying device status.
- Adopts light source to ensure uniform brightness in the illuminated area.
- Supports multiple communication protocols, including Serial Port, TCP, UDP, FTP, Profinet, Modbus, Ethernet/IP, etc.

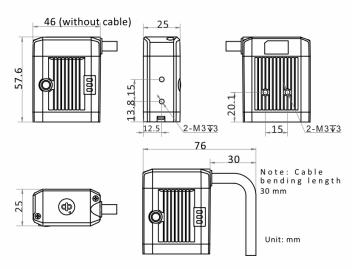
Available Model

- 8 mm focal length: MV-SC2016EM-08S-WBN
- 12.4 mm focal length: MV-SC2016EM-12S-WBN
- 14.8 mm focal length: MV-SC2016EM-15S-WBN

Applicable Industry

Consumer electronics, food and medical industry, automobile, etc.

Dimension





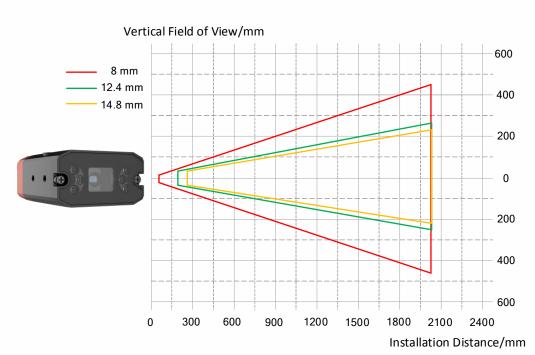


Specification

Model	MV-SC2016EM-08S-WBN MV-SC2016EM	-12S-WBN	MV-SC2016EM-15S-WBN			
Tool						
Vision tool	Existence: Pattern existence, spot existence					
	 Count: Pattern count, spot count Measurement: Brightness average value, contrast measurement 					
Solution capacity	Supports solution importing and exporting, up to 8 solutions and 40 modules can be stored.					
Communication protocol	Serial Port, TCP, UDP, FTP, Profinet, Modbus, Ethernet/IP					
Camera	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					
Electrical features						
Data interface	Fast Ethernet					
Digital I/O	17-pin M12 connector provides power, Ethernet, serial port, digital I/O, including configurable I/O × 2 (Line 0/1), input signal × 1 (Line 2), output signal × 1 (Line 3), and RS-232×1. Device trigger via pressing button supported.					
Power supply	12 VDC to 24 VDC					
Max. power	Approx. 22 W@24 VDC					
consumption						
Mechanical						
Lens mount	M12-mount, adjusting focus manually suppo	rted				
Focal length	8 mm (0.3") 12.4 mm (0.5")		14.8 mm (0.6")			
Lens cap	Transparent lens cap					
Light source	White LED lamp					
Indicator	Power indicator (PWR), network indicator (LNK), and status indicator (STS).					
Dimension	46 mm × 57.6 mm × 25 mm (1.8" × 2.3" × 1.0")					
Weight	Approx. 220 g (0.5 lb.)					
Ingress protection	IP65 (under proper installation of lens and wiring)					
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	SCMVS					
Certification	CE, FCC, KC					

Detection Range

Lens focal length	Installation	Field of view	Single	pixel
	distance		accuracy	
8 mm (0.3")	80 mm (3.1")	47.62 mm × 34.64 mm (1.9" × 1.4")	0.034 mm	
	2000 mm (79.7")	1190.59 mm × 865.88 mm (46.9" ×	0.846 mm	
	2000 mm (78.7")	34.1")	0.040 11111	
12.4 mm (0.5")	200 mm (7.9")	78.35 mm × 56.98 mm (3.1" × 2.2")	0.056 mm	
	2000 mm (78.7")	783.48 mm × 569.81 mm (30.8" ×	0.556 mm	
		22.4")		
14.8 mm (0.6")	270 mm (10.6")	88.62 mm × 64.45 mm (3.5" × 2.5")	0.063 mm	
	2000 mm (78.7")	656.43 mm × 477.41 mm (25.8" ×	0.466 mm	
		18.8")	0.400 111111	





Hangzhou Hikrobot Co., Ltd. en.hikrobotics.com