

MV-SC5016C

1.6 MP Smart Camera







Introduction

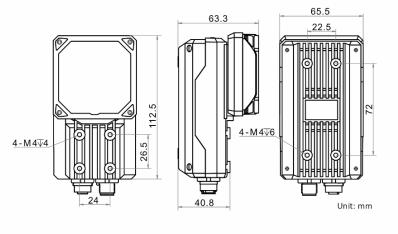
MV-SC5016C smart camera is developed based on highperformance embedded platform. It integrates vision
algorithms, logic controls, and vision detection functions.
It can be easily configured and operated via the SCMVS
client software, and it uses RS-232 and Ethernet to output
vision tool results and customized results.

Available Model

12 mm focal length: MV-SC5016C-12S-WBN

16 mm focal length: MV-SC5016C-16S-WBN

Dimension



Key Feature

- Integrates general vision algorithms to achieve location, measurement, recognition, etc.
- Supports mechanical autofocus function to achieve fast debugging and configuration.
- Big memory and storage support image savings in loop with high performance.
- Adopts multiple I/O interfaces for controlling.
- Supports multiple communication protocols.
- Supports indicators displaying device status.

Applicable Industry

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





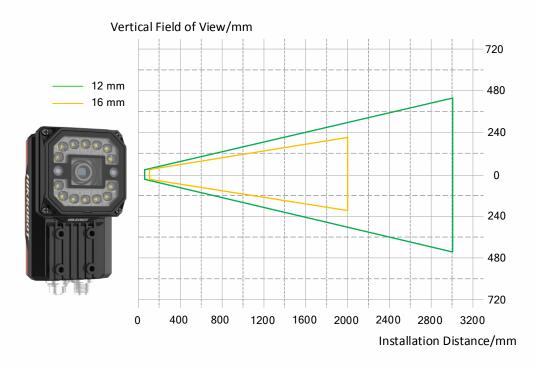
Specification

Model	MV-SC5016C-12S-WBN	MV-SC5016C-16S-WBN	
Tool			
Vision tool	 Count: Pattern count, spot count, edge count Defect detection: Exception detection Existence: Pattern existence, spot existence, edge existence, circle existence, line existence Location: Match location, match calibration Logic tool: If module, condition judge, logic judge, combination judge, character comparison, calculator Measurement: Color size, L2L angle, diameter measurement, brightness analysis, contrast measurement, width measurement, P2L measurement, greyscale size, line angle, edge width measurement 		
Solution capacity	 Recognition: Color recognition, color contrast, OCR, code recognition Supports solution importing and exporting, up to 32 solutions and 40 modules can be stored. 		
Communication protocol	RS-232, TCP, UDP, FTP, Profinet, ModBus, EtherNet/IP		
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		
Gain	0 dB to 15 dB		
Exposure time	16 μs to 1 sec		
Pixel format	Mono 8, RGB 8		
Mono/color	Color		
Platform			
Memory	8 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	24 VDC		
Power consumption	Approx. 8.5 W@24 VDC (light source disabled) Approx. 46 W@24 VDC (light source enabled)		

Mechanical				
Lens mount	M12-mount, mechanical autofocus supported.			
Focal length	12 mm (0.5")	16 mm (0.6")		
Lens cap	Transparent lens cap. Half polarization or full polarization lens cap is optional.			
Light source	White light. Red or blue light is optional.			
Indicator	Power indicator (PWR), network indicator (LNK/ACT), and user-defined indicator (U1/U2).			
Dimension	112.5 mm × 65.5 mm × 63.3 mm (4.4" × 2.6" × 2.5")			
Weight	Approx. 450 g (1.0 lb.)			
Ingress protection	IP67			
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 distance	Field of view	Single pixel accuracy	
12 mm (0.5")	60 mm (2.4")	24.29 mm × 17.66 mm	0.017 mm	
		(1.0" × 0.7")		
	3000 mm (118.1")	1214.4 mm × 883.2 mm	0.863 mm	
		(47.8" × 34.8")		
16 mm (0.6")	90 mm (3.5")	27.32 mm × 19.87 mm	0.010	
		(1.1" × 0.8")	0.019 mm	
	2000 mm (78.7")	607.2 mm × 441.6 mm	0.431 mm	
		(23.9" × 17.4")	0.43111111	





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