

# MV-SC2016PC

1.6 MP Vision Sensor





### Introduction

With built-in position and measurement algorithm, MV-SC2016PC vision sensor can detect object's presence, position, dimension, etc. It can be monitored and operated via web based interface. The vision sensor can output detection results via RS-232, Ethernet, etc., and cooperate with other devices via IO. It supports multiple result output methods and customized result text output.

### **Key Feature**

- Adopts embedded hardware platform for highspeed image processing.
- Adopts built-in position and measurement algorithm to detect object's presence, position, dimension, etc.
- Multiple IO interfaces for input and output signals.
- Multiple indicators for displaying device status.
- Adopts light cup to ensure uniform brightness in the illuminated area.
- Supports multiple communication protocols, including TCP, UDP, Serial, IO, Modbus, PROFINET, Ethernet/IP, FTP, etc.

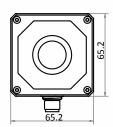
### **Available Model**

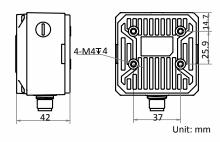
- 6 mm focal length vision sensor: MV-SC2016PC-06S-WBN
- 12.4 mm focal length vision sensor:
  MV-SC2016PC-12S-WBN
- 14.8 mm focal length vision sensor:
  MV-SC2016PC-15S-WBN

### Applicable Industry

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

#### **Dimension**









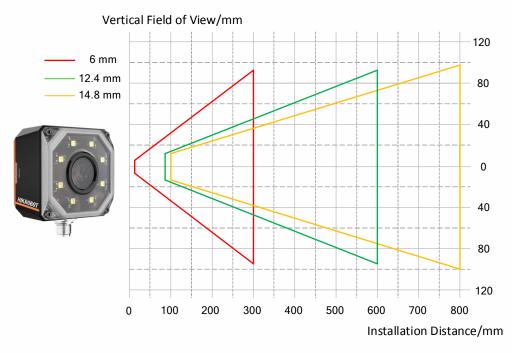




Model	MV-SC2016PC-06S-WBN	MV-SC2016PC-12S-WBN	MV-SC2016PC-15S-WBN			
Tool						
Vision tool	Feature matching, fixture, find line, find circle, measure brightness, blob, detect distance,					
	measure line to line, measure point and line, N point calibration, coordinate conversion, color					
	extraction, color measurement, color transformation, color distinguish, etc.					
Solution capacity	Supports solution importing and exporting, up to 32 solutions and 40 modules can be stored.					
Communication protocol	RS-232, TCP, UDP, FTP, PROFINET, Modbus TCP, 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	RGB 8, Mono 8					
Mono/color	Color					
Platform						
Memory	2 GB					
Storage	4 GB					
Electrical feature						
Data interface	17-pin M12 connector provides power, Ethernet, digital IO, and serial port					
Ethernet	Fast Ethernet					
Digital I/O	Input signal $\times$ 2 (Line 0/1), output signal $\times$ 3 (Line 5/6/7), bi-directional I/O $\times$ 3 (Line 2/3/4), and					
	button input × 1. Output signa	l can be set as NPN or PNP				
Power supply	12 VDC to 24 VDC					
Power consumption	8.6 W@12 VDC					
Mechanical						
Lens mount	M12-mount, manual focus sup	pported				
Focal length	6 mm (0.2")	12.4 mm (0.5")	14.8 mm (0.6")			
Lens cap	Transparent lens cap. Polarization or infrared filter lens cap is optional					
Light source	LED × 8: white (by default)/red/blue/NIR,					
	LED × 48: white/red/blue					
Indicator	Power indicator (PWR), network indicator (LNK), status indicator (STS), and result indicator					
	(OK/NG)					
Dimension	65.2 mm x 65.2 mm x 42 mm (2.6" x 2.6" x 1.7")					
Weight	Approx. 240 g (0.6 lb.)					
Ingress protection	IP67 (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	o 70 °C (-22 °F to 158 °F)				
Humidity	20% to 95% RH, non-condensi	ng				
General						
Client software	Via web based interface, Smar	tView				
Certification	CE ECC KC	CE, FCC, KC				

## **Detection Range**

Lens focal length	Installation distance	Field of view	Single pixel accuracy
6 mm (0.2")	20 mm (0.8")	16.56 mm × 12.42 mm	0.023 mm
		(0.7" × 0.5")	
	300 mm (11.8")	248.4 mm × 186.3 mm	0.345 mm
		(9.8" × 7.3")	
12.4 mm (0.5")	80 mm (3.1")	33.12 mm × 24.84 mm	0.046 mm
		(1.3" × 1.0")	
	600 mm (23.6")	248 mm × 186.3 mm	0.345 mm
		(9.8" × 7.3")	
14.8 mm (0.6")	100 mm (3.9")	33.12 mm × 24.84 mm	0.046 mm
		(1.3" × 1.0")	
	800 mm (31.5")	264.96 mm × 198.72 mm	0.368 mm
		(10.4" × 7.8")	





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