

MV-SC3030XC

3 MP Color Vision Sensor



Introduction

With built-in high-precision vision algorithms, MV-SC3030XC vision sensor can realize counting, existence, measurement, recognition and other 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.

Applicable Industry

Consumer electronics, food and pharmaceutical, automobile, etc.

Available Model

- 8 mm focal length: MV-SC3030XC-08M-WBN
- 12 mm focal length: MV-SC3030XC-12M-WBN
- 16 mm focal length: MV-SC3030XC-16M-WBN

Key Feature

- Adopts embedded hardware platform to realize high-speed image processing.

- Built-in high-precision positioning, measurement and recognition algorithms for counting, defects, existence, positioning and other functions.
- Supports RS-232, TCP, UDP, FTP, ModBus, PROFINET, EtherNet/IP and other communication modes.
- Adopts multiple IO interfaces for input and output signals.
- Supports viewing the device's status in real time via 360° visual indicator, convenient for debugging and maintenance.
- Rotatable cable tail design, suitable for narrow space.
- Adopts polarized, diffused, and full-transparent multiple optical lighting with good environmental adaptability.
- IP67 protection without fear of harsh industrial application environments.

Specification

Model	MV-SC3030XC-08M-WBN	MV-SC3030XC-12M-WBN	MV-SC3030XC-16M-WBN		
Tool					
Vision tool		<ul style="list-style-type: none"> Count: Spot count, edge count, pattern count, contour count, color count Defect detection: Exception detection Existence: Circle existence, line existence, spot existence, edge existence, pattern existence, contour existence Location: Match calibration, match location, position fixture Logic tool: If module, condition judge, logic judge, combination judge, string comparison, calculator Measurement: Color size, L2L angle, diameter measurement, brightness analysis, contrast measurement, width measurement, P2L measurement, greyscale size, line angle, edge width measurement Recognition: OCR, code recognition, color contrast, color recognition, classification registration, object detection registration Deep learning: DL object detection, DL classification 			
Solution capacity		Supports importing and exporting project, up to 32 projects can be stored.			
Communication protocol		RS-232, TCP, UDP, FTP, PROFINET, ModBus, EtherNet/IP, MELSEC/SLMP, FINS, Keyence KV			
Camera					
Sensor type	CMOS, global shutter				
Pixel size	3.45 µm × 3.45 µm				
Sensor size	1/1.8"				
Resolution	2048 × 1536				
Max. frame rate	40 fps				
Dynamic range	77.8 dB				
SNR	43 dB				
Gain	0 dB to 15 dB				
Exposure time	6 µs to 1 sec				
Pixel format	RGB 8, Mono 8				
Mono/color	Color				
Electrical feature					
Data interface	Fast Ethernet (100 Mbit/s)				
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 Supports triggering device via pressing top trigger button				
Power supply	24 VDC				
Power consumption	Approx. 6.5 W@24 VDC				
Mechanical					
Lens mount	M12-mount, mechanical autofocus supported				
Focal length	8 mm (0.3")	12 mm (0.5")	16 mm (0.6")		
Lens cap	Polarized + diffused + full-transparent lens cap				
Light source	White spot light source. Red/blue/IR point light source is optional				
Aiming system	Orange LED				
Indicator	360° visual indicator				
Dimension	Straight angle: 80.1 mm × 43 mm × 44.3 mm (3.2" × 1.7" × 1.7") Right angle: 58.5 mm × 43 mm × 65.4 mm (2.3" × 1.7" × 2.6")				
Weight	Approx. 190 g (0.4 lb.)				

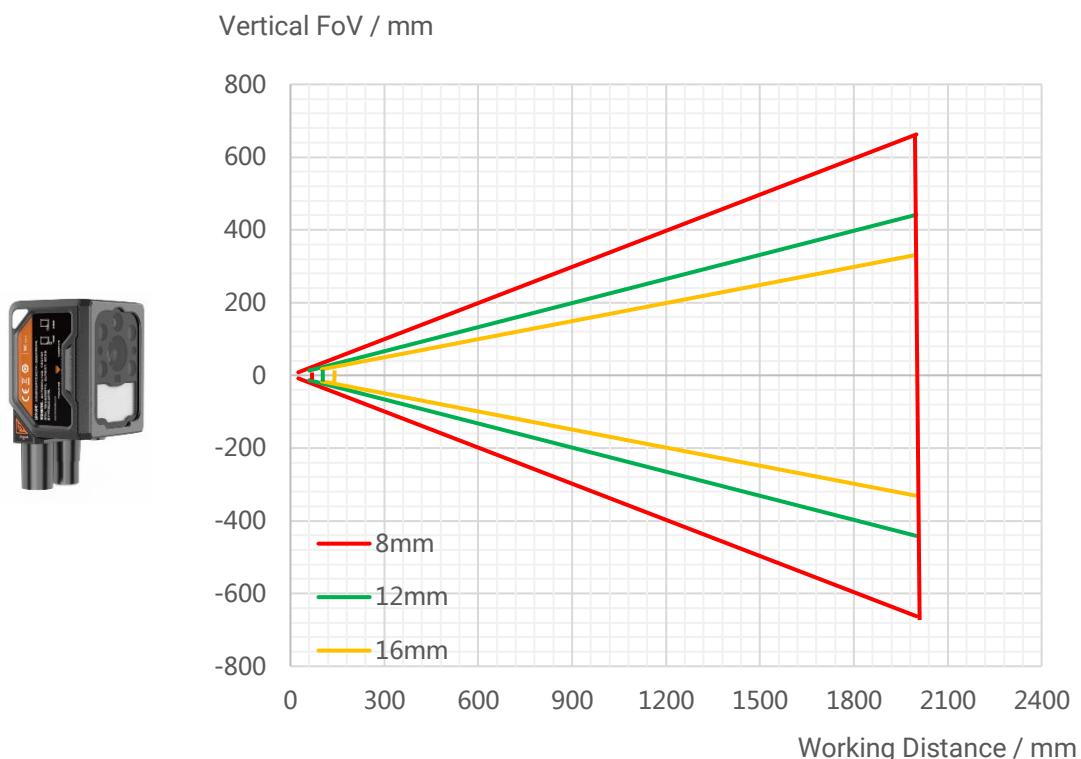
Specification

HIKROBOT

Model	MV-SC3030XC-08M-WBN	MV-SC3030XC-12M-WBN	MV-SC3030XC-16M-WBN
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% to 95% RH, non-condensing		
General			
Client software	SCMVS		
Certification	CE, KC		

Detection Range

Lens focal length	Installation distance	Field of View	Single Pixel Accuracy
8 mm	25 mm	22.08 mm × 16.56 mm	0.011 mm
	2000 mm	1766.40 mm × 1324.80 mm	0.863 mm
12 mm	60 mm	35.33 mm × 26.50 mm	0.017 mm
	2000 mm	1177.60 mm × 883.20 mm	0.575 mm
16 mm	100 mm	44.16 mm × 33.12 mm	0.022 mm
	2000 mm	883.20 mm × 662.40 mm	0.431 mm



MP ENGINEERING SYSTEM CO.,LTD

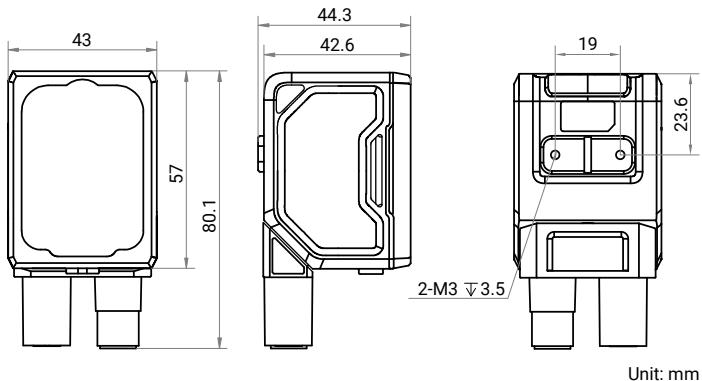
Website : www.mpen.co.th

LINE OA : @mpeniot Tel. 02 101 9495 , 065 693 6515 , 065 539 8965

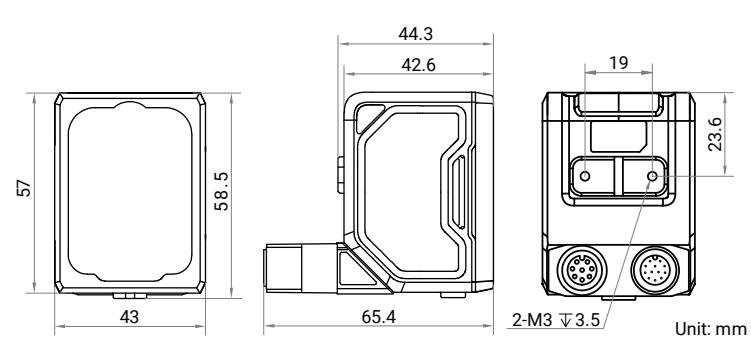
MP
Engineering System

Dimension

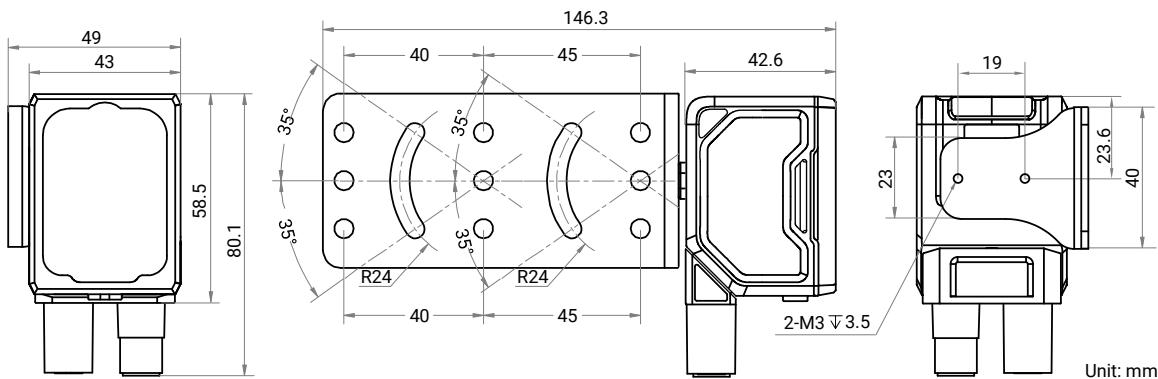
Device (Straight Angle):



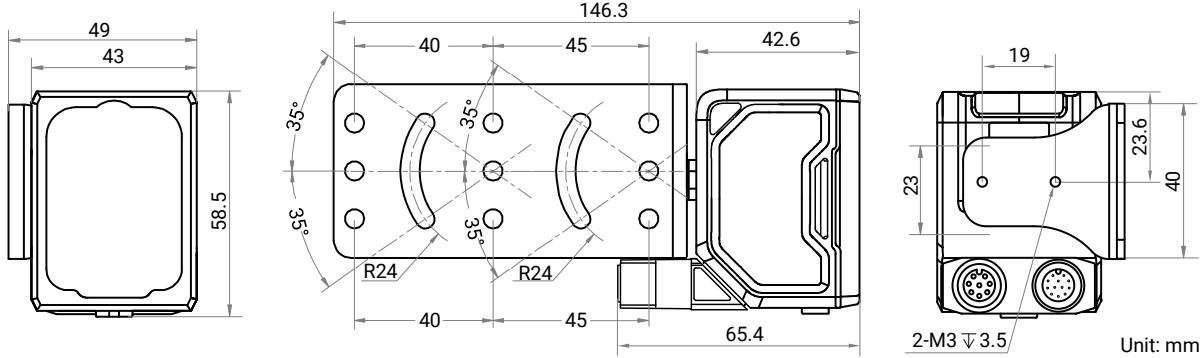
Device (Right Angle):



Device and Installation Bracket (Straight Angle):



Device and Installation Bracket (Right Angle):



Installation Bracket:

