

# MV-SC2004EM-06S-WBN-Mini

0.4 MP 1/2.9" Vision Sensor



## Introduction

With built-in positioning and measurement algorithms, MV-SC2004EM-06S-WBN-Mini vision sensor can realize counting, existence, measurement detection. 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.

## Available Model

MV-SC2004EM-06S-WBN-Mini

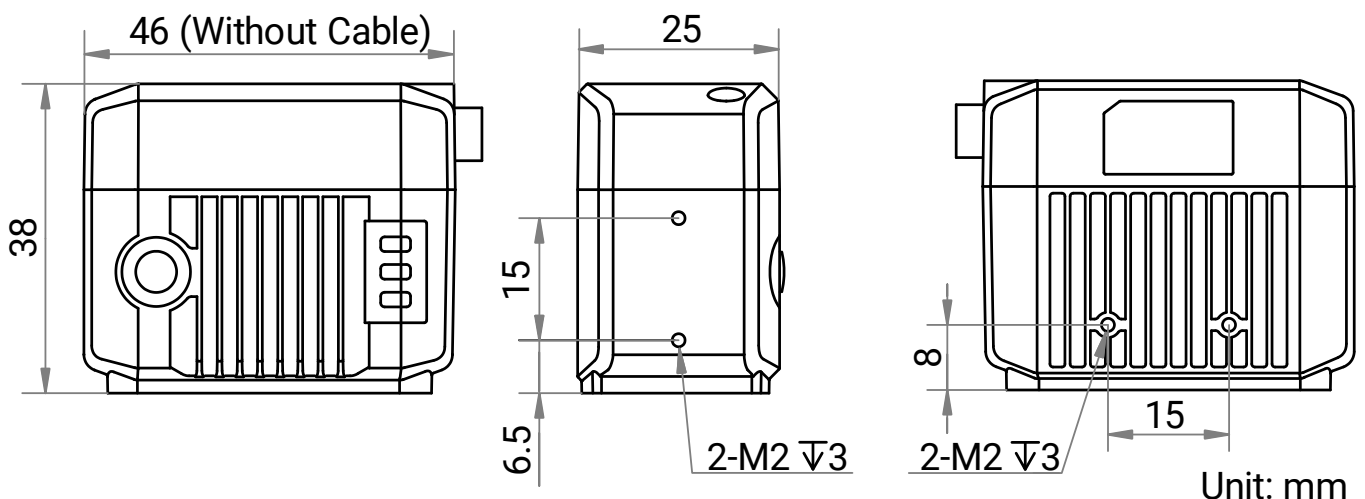
## Applicable Industry

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

## Key Features

- Adopts embedded hardware platform for high-speed image processing.
- Adopts built-in positioning and measurement algorithms for counting, existence, measurement detection.
- 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 RS-232, TCP, UDP, FTP, ModBus, PROFINET, EtherNet/IP and other communication modes.

## Dimension



<b>Model</b>	<b>MV-SC2004EM-06S-WBN-Mini</b>
<b>Tool</b>	
<b>Vision tool</b>	<ul style="list-style-type: none"> <li>● Count: Spot count, edge count, pattern count, and contour count</li> <li>● Existence: Circle existence, line existence, spot existence, edge existence, pattern existence, and contour existence</li> <li>● Location: Fixture</li> <li>● Logic tool: Condition judge, character comparison, logic judge, and calculator</li> <li>● Measurement: L2L angle, diameter measurement, brightness average value, contrast measurement, width measurement, P2L measurement, greyscale size, line angle, and edge width measurement</li> <li>● Recognition: OCR and classification registration</li> </ul>
<b>Solution capacity</b>	Supports solution importing and exporting, up to 8 solutions and 40 modules can be stored.
<b>Communication protocol</b>	RS-232, TCP, UDP, FTP, PROFINET, ModBus, EtherNet/IP, MELSEC/SLMP, FINS, Keyence KV
<b>Camera</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Pixel size</b>	6.9 μm × 6.9 μm
<b>Sensor size</b>	1/2.9"
<b>Resolution</b>	704 × 540
<b>Max. frame rate</b>	60 fps
<b>Dynamic range</b>	74 dB
<b>SNR</b>	41 dB
<b>Gain</b>	0 dB to 15 dB
<b>Exposure time</b>	16 μs to 1 sec
<b>Pixel format</b>	Mono 8
<b>Mono/color</b>	Mono
<b>Electrical features</b>	
<b>Data interface</b>	Fast Ethernet (100 Mbit/s)
<b>Digital I/O</b>	17-pin M12 connector provides power, Ethernet, serial port, and digital I/O, including non-isolated input × 1 (Line 2), non-isolated output × 1 (Line 3), configurable non-isolated I/O × 2 (Line 0/1), RS-232 × 1, and external button input × 1 (BUTTON) Output signals support NPN only.
<b>Power supply</b>	12 VDC to 24 VDC
<b>Max. power consumption</b>	11 W @ 24 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	M10-mount, adjusting focus manually supported
<b>Focal length</b>	6.72 mm
<b>Lens cap</b>	Transparent lens cap
<b>Light source</b>	White LED lamp × 4
<b>Indicator</b>	Power indicator (PWR), network indicator (LNK), and status indicator (STS)
<b>Dimension</b>	46 mm × 38 mm × 25 mm (1.8" × 1.5" × 1.0")
<b>Weight</b>	Approx. 160 g (0.4 lb.)
<b>Ingress protection</b>	IP65 (under proper installation of lens and wiring)
<b>Temperature</b>	Working temperature: 0 °C to 50 °C (32 °F to 122 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)
<b>Humidity</b>	20% RH to 95% RH (no condensation)
<b>General</b>	
<b>Client software</b>	SCMVS
<b>Certification</b>	CE, KC

## Detection Range

Focal Length	Installation Distance	Field of View	Single Pixel Accuracy
6.72 mm	40 mm	29 mm × 22 mm	0.041 mm
	120 mm	87 mm × 66 mm	0.123 mm

