

MV-SC2016EM-06S-WBN-Mini

1.6 MP 1/2.9" Vision Sensor



Introduction

With built-in positioning and measurement algorithms, MV-SC2016EM-06S-WBN-Mini 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 high-speed 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.

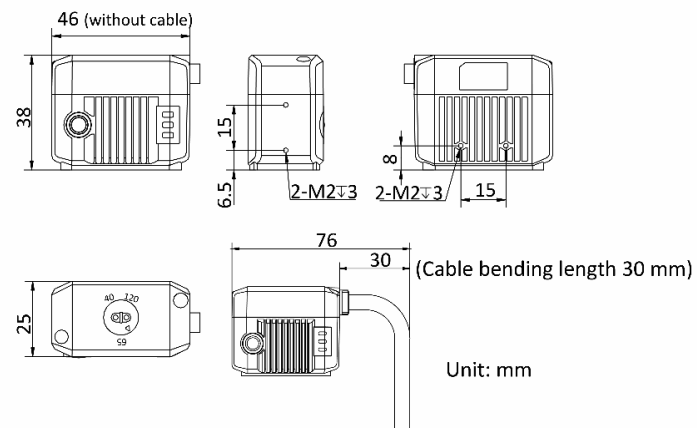
Available Model

MV-SC2016EM-06S-WBN-Mini

Applicable Industry

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

Dimension



Specification

Model	MV-SC2016EM-06S-WBN-Mini
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	
Sensor type	CMOS, global shutter
Pixel size	3.45 μm $\times$ 3.45 μm
Sensor size	1/2.9"
Resolution	1408 $\times$ 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, and digital I/O, including configurable I/O $\times$ 4 (Line 0/1/2/3). Device trigger via pressing button supported. Output signals support NPN only.
Power supply	12 VDC to 24 VDC
Max. power consumption	Approx. 7.5 W@12 VDC
Mechanical	
Lens mount	M10-mount, adjusting focus manually supported
Focal length	6 mm (0.2")
Lens cap	Transparent lens cap.
Light source	White LED lamp $\times$ 4
Indicator	Power indicator (PWR), network indicator (LNK), and status indicator (STS).
Dimension	46 mm $\times$ 38 mm $\times$ 25 mm (1.8" $\times$ 1.5" $\times$ 1.0")
Weight	Approx. 160 g (0.35 lb.)
Ingress protection	IP65 (under proper installation of lens and wiring)
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)
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
6 mm (0.2")	40 mm (1.6")	29 mm × 22 mm (1.1" × 0.9")	0.021 mm
	120 mm (4.7")	87 mm × 66 mm (3.4" × 2.6")	0.062 mm

