

MV-SC6120M-00C

12 MP Mono Smart Camera

MV-SC6120M-00C smart camera is developed based on high-performance embedded platform with strong calculation performance. It integrates VM functions and AI deep learning algorithm, and can use more than 140 algorithms. It adopts multiple interfaces for supporting external light source, display, mouse, etc.



Key Features

- Adopts AI deep learning algorithm to achieve OCR, object recognition, defect detection, etc.
- Integrates VM functions, and supports more than 140 algorithms.
- Adopts multiple interfaces, and supports multiple-channel I/O, light source, display, etc.
- Adopts high-performance CPU with faster calculation performance and high efficiency.
- Supports multiple communication protocols.
- Supports indicators displaying device status for easy debugging and maintenance.
- Supports ingress protection IP67.

Available Model

- MV-SC6120M-00C-NNNV2.0

Typical Application

- Consumer electronics
- Food and pharmaceutical
- Packaging
- Positioning and grabbing



Specification

Model	MV-SC6120M-00C-NNN
Tool	
Function module	Vision Master Platform (include deep learning module)
Communication protocol	TCP, UDP, MODBUS, Serial Port, PROFINET, EtherNet/IP, Fins, MC, FTP, etc.
Camera	
Sensor type	CMOS, global shutter
Pixel size	3.45 μm $\times$ 3.45 μm
Sensor size	1.1"
Resolution	4096 $\times$ 2944
Max. frame rate	45 fps
Gain	0 dB to 37 dB
Exposure time	45 μs to 1 sec
Pixel format	Mono 8
Mono/color	Mono
Platform	
Memory	8 GB
Storage	64 GB
Electrical feature	
Data interface	Gigabit Ethernet (1000 Mbit/s)
Digital I/O	17-pin M12 connector provides power and I/O, including opto-isolated input $\times$ 2 (Line 0/1), opto-isolated output $\times$ 2 (Line 4/5), configurable non-isolated input/output $\times$ 2 (Line 2/3), RS-232 $\times$ 1, and light source output (max. 30 W) $\times$ 1
Extended interface	VGA $\times$ 1, and USB host $\times$ 1
Power supply	24 VDC
Power consumption	Avg. 12.5 W @ 24 VDC (without external light source) Avg. 42.5 W @ 24 VDC (with external light source) Max. 18 W @ 24 VDC (without external light source) Max. 48 W @ 24 VDC (with external light source)
Mechanical	
Lens mount	C-mount
Lens cap	Transparent lens cap
Light source	Not included
Indicator	Power indicator (PWR), network indicator (LNK), status indicator (STS), and user-defined indicator (U1/U2)
Dimension	116.3 mm $\times$ 68.6 mm $\times$ 101.8 mm (4.6" $\times$ 2.7" $\times$ 4.0")
Weight	Approx. 530 g (1.2 lb.)
Ingress protection	IP67 (under proper installation of waterproof lens cap)
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% RH to 95% RH (no condensation)

Vibration resistance	Meets standard IEC 60068-2-6:2007. Device only (without installation bracket): 10 Hz to 55 Hz, 1.5 mm peak-to-peak amplitude, 2 hours per axis (X, Y, Z)*
Shock resistance	Meets standard IEC 60068-2-27:2008. Device only (without installation bracket): 30 g / 11 ms, half-sine wave, 500 shocks per axis (6 directions)*
General	
Certification	CE, KC

* After attaching the C-mount lens to camera, tighten the focus ring with set screws and reinforce it by applying UV adhesive around the ring.

Dimension

