

MV-CI050-Y1S-NN

5 MP Industrial Short Wave Infrared Camera



GEN< i >CAM

Introduction

MV-CI050-Y1S-NN camera adopts InGaAs sensor and has built-in multiple ISP functions. It uses CXP-12 interface to transmit non-compressed images in real time, and its max. frame rate can reach 120 fps in full resolution.

Key Features

- Adopts InGaAs sensor and supports spectral imaging of 0.4 μm to 1.7 μm .
- Supports multiple ISP functions like digital noise reduction, contrast ratio, etc.
- Adopts compact structure and design to meet spatial requirements.
- Adopts CXP-12 interface to transmit data.
- Compatible with CoaXPress Protocol, GenICam Standard, and third-party software based on the protocol and standard.

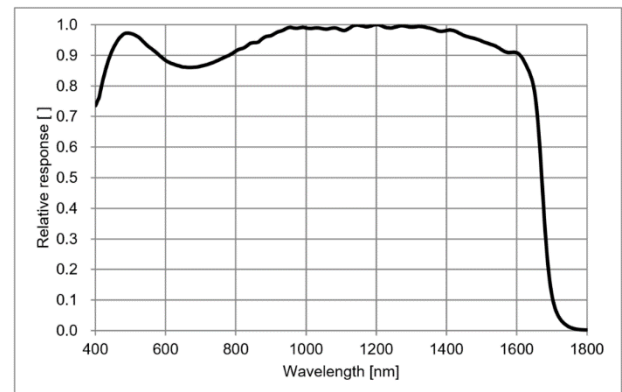
Available Model

MV-CI050-Y1S-NN

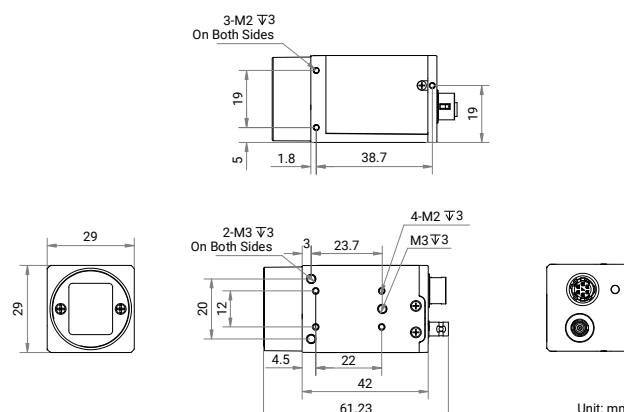
Applicable Industry

Semiconductor, glass cover plate, garbage classification, hyperspectral applications, etc.

Sensor Quantum Efficiency



Dimension



Specification

Model	MV-CI050-Y1S-NN
Performance	
Sensor type	InGaAs, global shutter
Sensor model	Sony® IMX992
Pixel size	3.45 μm × 3.45 μm
Sensor size	1/1.4"
Resolution	2592 × 2056
Max. frame rate	120 fps @ 2592 × 2056 Mono 8
Dynamic range	50.6 dB
SNR	47.7 dB
Gain	0 dB to 18 dB
Exposure time	UltraShort exposure mode: 8 μs to 14 μs SuperShort exposure mode: 15 μs to 22 μs Standard exposure mode: 23 μs to 100 ms
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8/10/12
Binning	Supports 1 × 1, 2 × 2, 3 × 3, 4 × 4
Decimation	Supports 1 × 1, 2 × 2, 4 × 4
Reverse image	Supports horizontal and vertical reverse image output
Electrical feature	
Data interface	CoaXPress with Micro-BNC interface
Digital I/O	6-pin P7 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), and bi-directional non-isolated I/O × 1 (Line 2).
Power supply	9 VDC to 24 VDC, supports PoCXP
Power consumption	Typ. 4.2 W @ 12 VDC
Mechanical	
Lens mount	C-mount
Dimension	29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")
Weight	Approx. 90 g (0.2 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: -10 °C to 40 °C (14 °F to 104 °F) Storage temperature: -30 °C to 80 °C (-22 °F to 176 °F)
Humidity	20% RH to 95% RH (no condensation)
General	
Client software	MVS or frame grabber software meeting with CoaXPress Protocol
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux
Compatibility	CoaXPress, GenICam
Certification	CE, RoHS, KC