

# MV-CI013-GS-TF

## 1.3 MP Industrial Short Wave Infrared Camera



GEN<i>i>CAM

GigE  
VISION

### Introduction

MV-CI013-GS-TF camera adopts InGaAs sensor and has built-in multiple ISP functions. It uses GigE interface to transmit non-compressed images in real time, and its max. frame rate can reach 91 fps in full resolution.

### Key Feature

- Adopts InGaAs sensor and supports spectral imaging of 0.4  $\mu\text{m}$  to 1.7  $\mu\text{m}$ .
- Supports TEC to provide good cooling effect.
- Multiple ISP functions like digital noise reduction, contrast ratio, etc.
- Adopts compact structure and design to meet spatial requirements.
- Compatible with GigE Vision V2.0 Protocol, GenlCam Standard, and third-party software based on the protocol and standard.

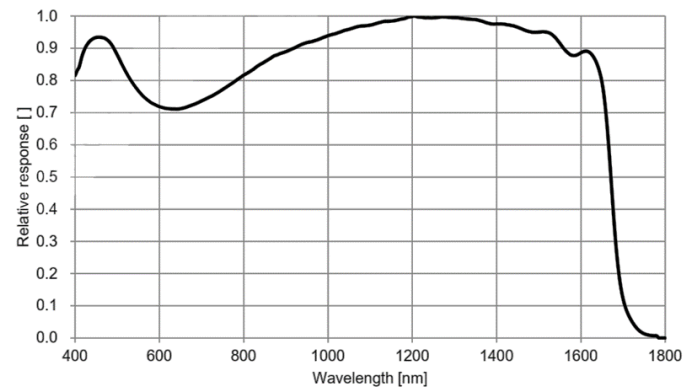
### Available Model

MV-CI013-GS-TF

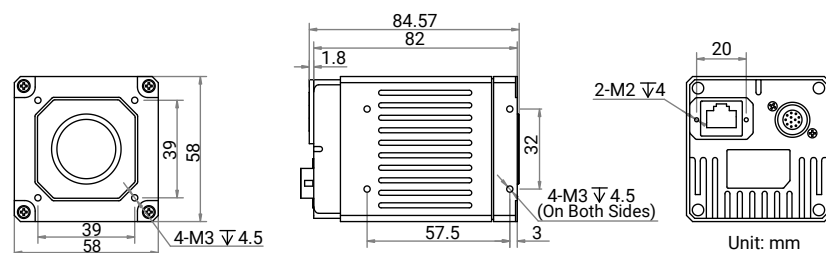
### Applicable Industry

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

### Sensor Quantum Efficiency



### Dimension



## Specification

<b>Model</b>	MV-CI013-GS-TF
<b>Performance</b>	
<b>Sensor type</b>	InGaAs
<b>Sensor model</b>	Sony® IMX990
<b>Pixel size</b>	5 μm × 5 μm
<b>Sensor size</b>	1/2"
<b>Resolution</b>	1280 × 1024
<b>Max. frame rate</b>	91 fps @ 1280 × 1024
<b>Dynamic range</b>	56 dB
<b>SNR</b>	52.2 dB
<b>Gain</b>	0 dB to 18 dB
<b>Exposure time</b>	UltraShort exposure mode: 3 μs to 7 μs Standard exposure mode: 8 μs to 0.1 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Pixel format</b>	Mono 8/10/10Packed/12/12Packed
<b>Binning</b>	Supports 1 × 1, 2 × 2, 4 × 4
<b>Decimation</b>	Supports 1 × 1, 2 × 2
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical feature</b>	
<b>Data interface</b>	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)
<b>Digital I/O</b>	12-pin P10 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2), RS-232 × 1
<b>Power supply</b>	9 VDC to 24 VDC
<b>Power consumption</b>	Typ. 11.7 W @ 12 VDC (TEC enabled)
<b>Mechanical</b>	
<b>Lens mount</b>	C-mount
<b>Installation method</b>	Installation via three-side screw holes
<b>Dimension</b>	58 mm × 58 mm × 82 mm (2.3" × 2.3" × 3.2")
<b>Weight</b>	Approx. 470 g (1.0 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	Working temperature: -30 °C to 50 °C (-22 °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>	MVS or third-party software meeting with GigE Vision Protocol
<b>Operating system</b>	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux
<b>Compatibility</b>	GigE Vision V2.0, GenICam
<b>Certification</b>	CE, RoHS, KC