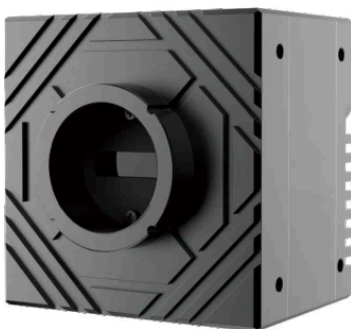


# Short-wave infrared line scan camera (IL)

LS-MV-IL series · Line scan cameras · 2 models



Industrial line scan camera for large-format inspection and high-speed assembly line inspection, with GigE interface, 1K resolution and up to 20KHz line frequency (LS-MV-IL10GE). It integrates a variety of ISP image algorithms and supports external triggering modes such as line triggering and frame triggering.

## Features

- InGaAs chip, supports 900-1700nm band
- Line frequency up to 20K, freely set by software
- Supports encoder signal frequency division and frequency doubling, accurate matching with the motion platform
- Supports encoder synchronous trigger, photoelectric sensor and encoder combination synchronous trigger and other trigger modes
- Hardware support for horizontal pixel ROI and automatic splicing of any line in the vertical direction (not exceeding the specified limit)

## Applications

- Large-format inspection
- High-speed assembly line inspection

## Common specifications

|                        |                                            |
|------------------------|--------------------------------------------|
| Sensor type            | InGaAs                                     |
| Sensor size            | 12.8 x 0.025mm (photosensitive area)       |
| Camera type            | Mono                                       |
| Pixel size             | 12.5μm x 12.5μm                            |
| Pixel fill ratio (%)   | 100                                        |
| Data bit width         | 8/12bit (camera output to user data width) |
| AD width               | 12bit                                      |
| Peak detection rate    | $\geq 1 \times 10^{12}$                    |
| Peak sensitivity (A/W) | $\geq 0.8$                                 |

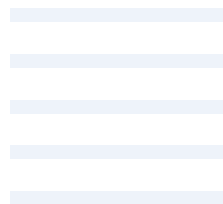
|                            |                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response inconsistency (%) | <3                                                                                                                                                                                                                                                                                                                |
| Video output format        | Mono 8bit                                                                                                                                                                                                                                                                                                         |
| Visual standards protocol  | GigE Vision, GenICam                                                                                                                                                                                                                                                                                              |
| Data interface             | Gigabit Ethernet port                                                                                                                                                                                                                                                                                             |
| Power supply               | 12~24V                                                                                                                                                                                                                                                                                                            |
| Power                      | <6W                                                                                                                                                                                                                                                                                                               |
| Lens interface             | C-Mount                                                                                                                                                                                                                                                                                                           |
| Dimension                  | 59.5 x 59.5 x 43.3mm (without lens mount and rear shell interface)                                                                                                                                                                                                                                                |
| Weight                     | <500g                                                                                                                                                                                                                                                                                                             |
| Working temperature        | 0~50°C                                                                                                                                                                                                                                                                                                            |
| Working humidity           | 20~80% (no condensation)                                                                                                                                                                                                                                                                                          |
| Storage temperature        | 30~60°C                                                                                                                                                                                                                                                                                                           |
| Storage humidity           | 20~95% (no condensation)                                                                                                                                                                                                                                                                                          |
| Operating system           | WINXP, WIN7/8/10 32&64 bit systems, Linux and ARM Linux drivers, Android platform drivers, MAC OS systems                                                                                                                                                                                                         |
| Driver                     | Directshow component, Halcon dedicated component, Labview dedicated driver, OCX component, TWAIN component                                                                                                                                                                                                        |
| Programming language pack  | C/C++/C#/VB6/VB.NET/Delphi/BCB/Python/Java                                                                                                                                                                                                                                                                        |
| Other functions            | Support any size ROI custom resolution, contrast and gamma adjustment, saturation adjustment, white balance correction, black level correction, custom dead point coordinate correction, ISP image processing acceleration, 3D noise reduction, custom LUT table, frame rate adjustment, custom camera name, etc. |

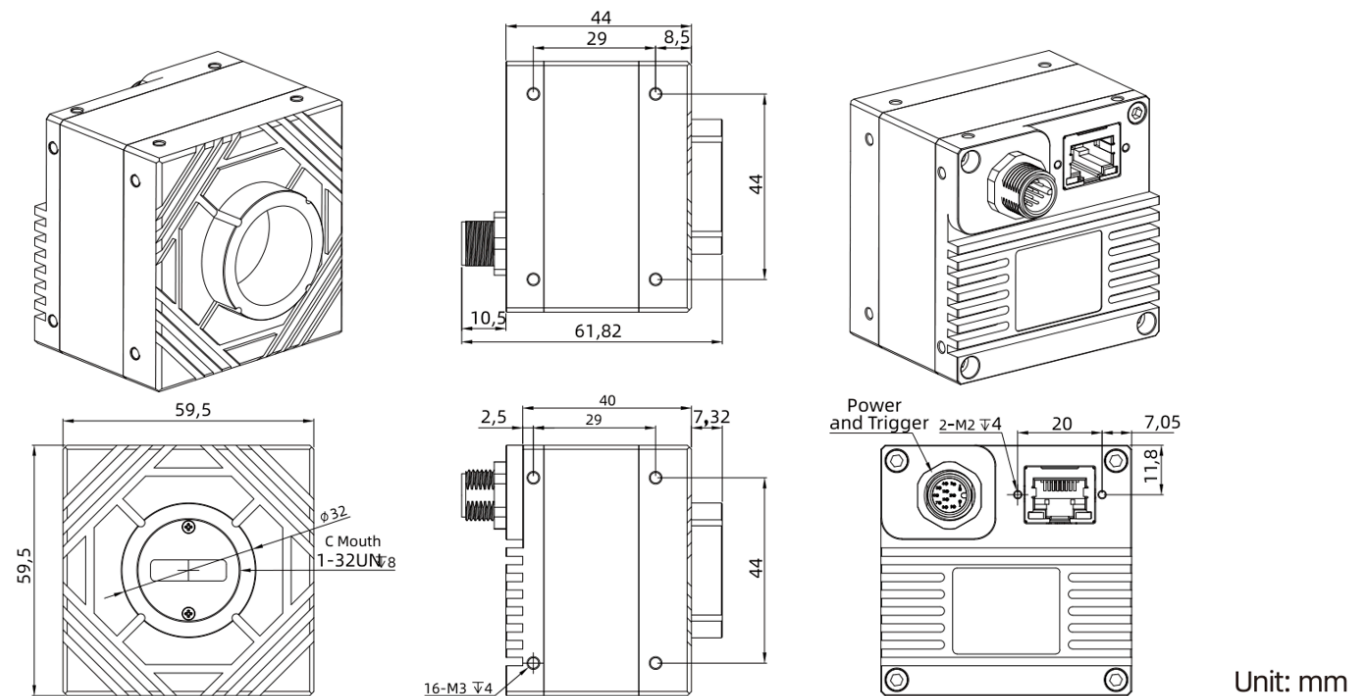
## Models

| Model        | Response spectral range (um)*1 | Effective pixel | Line frequency | Peak quantum efficiency (%) | Effective pixel rate (%) | Readout mode       | Resolution |
|--------------|--------------------------------|-----------------|----------------|-----------------------------|--------------------------|--------------------|------------|
| LS-MV-IL10GE | 0.95±0.05~1.7±0.0              | 1024x1          | 20K            | ≥70@1.55um                  | >99                      | IWR, ITR, optional | 1024 x 1   |
| LS-MV-IL20GE | 0.95±0.05~1.7±0.5              | 2048x1          | 40K            | ≥65                         | ≥99                      | IWR, ITR           | 2048 x 1   |

More values per model (Mono / colour, Voltage) are on each product page.

## Dimensions





Performance

