

## FEATURES

- 100 meters long distance stable transmission, optional POE power supply;
- Compatible with VISION standard, drive-free drive directly support Halcon, VisionPro and other software;
- Support external trigger and flash synchronization, up to 7 GPIO, all photoelectric isolation;
- Support for 16bit grayscale and 48bit color lossless format output ;
- Support multiple cameras work at the same time, the number is not limited, can be any networking ;
- Unique packet retransmission technology to ensure reliable data transmission;
- Excellent SDK design, as simple as using a USB camera, plug and play;
- The SDK supports Windows, Linux, and Mac OS systems.



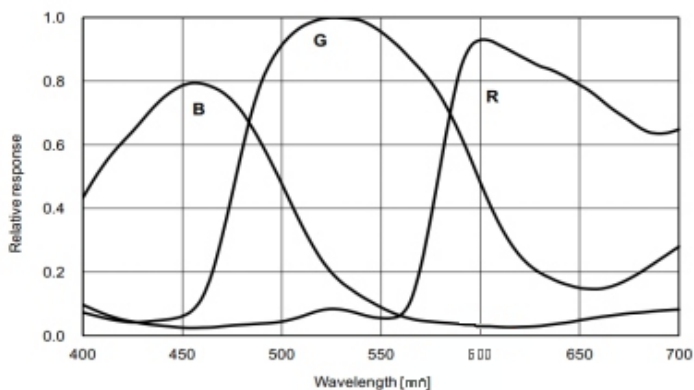
## SPECIFICATIONS

| Model parameter           | MV-2100RC-GE  | MV-2100RM-GE                              |
|---------------------------|---|---|
| Sensor                    | 1" CMOS, IMX183   |   |
| Shutter                   | Rolling , GRR support   |   |
| Mono/Color                | Color   | Mono                                      |
| Pixel siz                 | 2.4X2.4 μm  |   |
| Effective Pixels          | 20MP  |   |
| Frame rate(fps)           | 5488X3672@5.9FPS  |   |
| Bit depth                 | 12bit   |   |
| Sensitivity               | 462mV 1/30s   | 388mV 1/30s                               |
| GPIO                      | 1 optical input, 1 optical output; 3 input 4 output   |   |
| Capture Mode              | Continuous / software trigger / hardware trigger  |   |
| Gain                      | 22  |   |
| Exposure time range (ms)  | 0.016~4194.3  |   |
| Filter                    | Standard with a 650nm infrared cutoff filter  | Standard double-sided AR penetration lens |
| Image Buffer              | 128M Bytes  |   |
| User-defined data area    | 2K Bytes  |   |
| Video output format       | Bayer8  | Mono8                                     |
| Visual Standards Protocol | GigE Vision V1.2、GenICam  |   |
| Lens Mount                | C-mount is default, optional C or CS mount, M12 lens adapter accessories available  |   |
| Data interface            | RJ 45 Gigabit Ethernet interface, downward compatible with 100M network system  |   |
| Power Supply              | 9~24V(POE is optional)  |   |
| Power Consumption         | <2.66W  |   |
| Dimensions                | 29(mm)X29(mm)X40(mm) (excluding lens base and rear housing ports)   |   |
| Weight                    | <60g  |   |
| Temperature               | Storage temperature:-30° C~ +60° C; Operation temperature:0° C~+50° C   |   |
| Other functions           | Support arbitrary 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. |   |

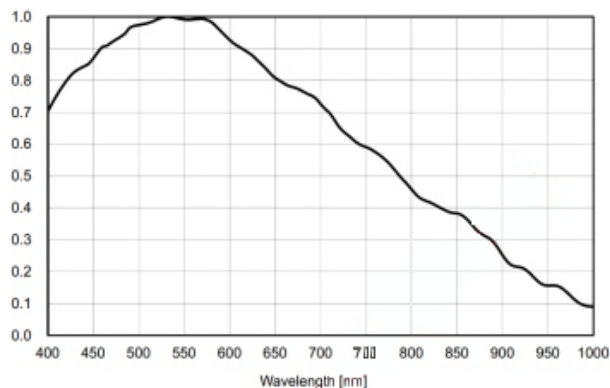
# Spectrogram

MV-2100RC-GE

(excludes lens characteristics and light source characteristics)

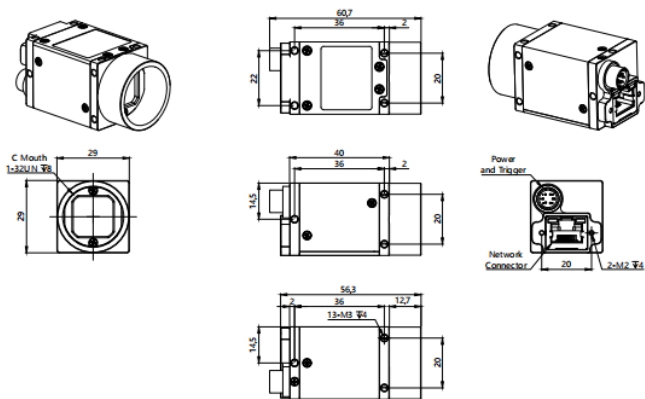


MV-2100RM-GE

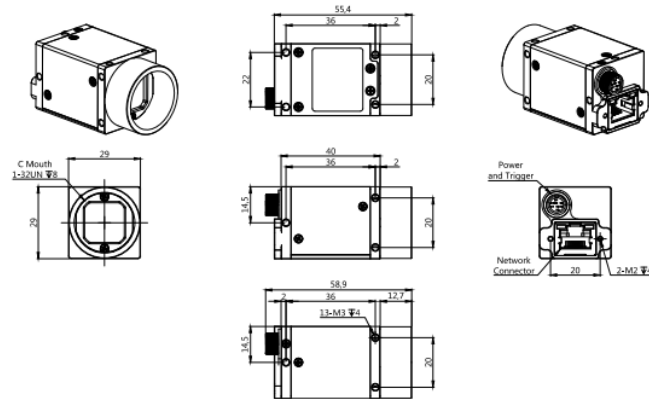


# Dimensions

Unit: mm



GE-T1-C

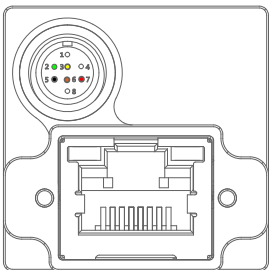


GE-T-CL

## GE/GEF/GED/GEC Camera tail selection table

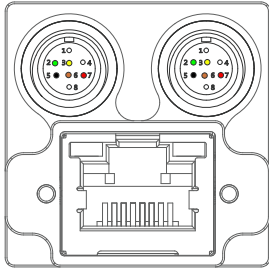
| function<br>postfix | Defindigram<br>of aviation<br>head line<br>sequence | POE<br>power supply | Dual head<br>extended IO | Shrapnel type<br>Air head<br>interface | Threaded type<br>Air head<br>interface | Lens<br>interface<br>C-mount | Lens<br>interface<br>CS-mount | Status                     |
|---------------------|---|---------------------|--------------------------|--|--|------------------------------|-------------------------------|----------------------------|
| -T-CL               | 1   |                     |                          |  | ●                                      | ●                            |                               | recommend                  |
| -T-L                | 1   |                     |                          |  | ●                                      |                              | ●                             | subscribe                  |
| -TPO-CL             | 2   | ●                   | ●                        |  | ●                                      | ●                            |                               | subscribe                  |
| -T1-C               | 3   |                     |                          | ●                                      |  | ●                            |                               | recommend                  |
| -TIP-C              | 3   | ●                   |                          | ●                                      |  | ●                            |                               | subscribe                  |
| -T                  | 4   |                     |                          | ●                                      |  |                              | ●                             | Plan to stop<br>production |
| -TPO                | 5   | ●                   | ●                        | ●                                      |  |                              | ●                             | Plan to stop<br>production |
| -TPO-C              | 5   | ●                   | ●                        | ●                                      |  | ●                            |                               | Plan to stop<br>production |

## Line order definition 1



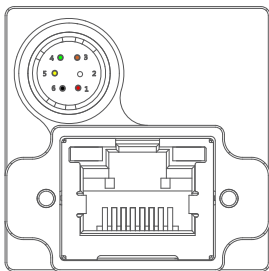
| Port   | Pin | Line color                   | Signal name      | Signal instructions                               | Remark                                 |
|--------|-----|------------------------------|------------------|---|--|
| Port A | 1   | white                        | GPI1+/TRIG_IN+   | GPI1 Positive end /<br>trigger input positive end | The default is<br>the trigger<br>input |
|        | 2   | green                        | GP01+/STRB_OUT + | GP01 Positive end /<br>Flash output positive end  | The default is<br>the flash output     |
|        | 3   | yellow                       | GP01-/STRB_OUT-  | GP01 Negative end /<br>flash output negative end  | The default is<br>the flash output     |
|        | 4   | empty feet                   |                  |   |  |
|        | 5   | black                        | PWRGND           | Camera power supply input<br>minus terminal       |  |
|        | 6   | brown<br>(High soft<br>blue) | GPI1-/TRIG_IN-   | GPI1 Negative end /<br>trigger input negative end | The default is<br>the trigger<br>input |
|        | 7   | red                          | PWR12V           | Camera power supply input<br>positive end         |  |
|        | 8   | empty feet                   |                  |   |  |

Line order definition 2



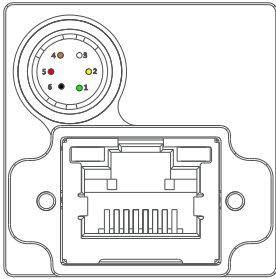
| Port   | Pin | Line color             | Signal name      | Signal instructions                            | Remark                           |
|--------|-----|------------------------|------------------|--|----------------------------------|
| Port A | 1   | white                  | GPI1+/TRIG_IN+   | GPI1 Positive end / trigger input positive end | The default is the trigger input |
|        | 2   | green                  | GP01+/STRB_OUT + | GP01 Positive end / Flash output positive end  | The default is the trigger input |
|        | 3   | yellow                 | GP01-/STRB_OUT-  | GP01 Negative end / flash output negative end  | The default is the trigger input |
|        | 4   | empty feet             |                  |  |                                  |
|        | 5   | black                  | PWRGND           | Camera power supply input minus terminal       |                                  |
|        | 6   | brown (High soft blue) | GPI1-/TRIG_IN-   | GPI1 Negative end / trigger input negative end | The default is the trigger input |
|        | 7   | red                    | PWR12V           | Camera power supply input positive end         |                                  |
|        | 8   | empty feet             |                  |  |                                  |
| Port B | 1   | white                  | GP04+            | GP04Positive end output                        |                                  |
|        | 2   | green                  | GP02+            | GP02Positive end output                        |                                  |
|        | 3   | yellow                 | GP03+            | GP03Positive end output                        |                                  |
|        | 4   | empty feet             |                  |  |                                  |
|        | 5   | black                  | GPIO_COM         | GPIOPublic minus end                           |                                  |
|        | 6   | brown                  | GPI2+            | GPI2Positive end input                         |                                  |
|        | 7   | red                    | GPI3+            | GPI3Positive end input                         |                                  |
|        | 8   | empty feet             |                  |  |                                  |

Line order definition 3



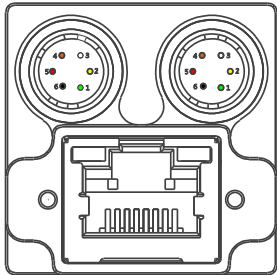
| Port   | Pin | Line color | Signal name               | Signal instructions                                  | Remark                           |
|--------|-----|------------|---------------------------|--|----------------------------------|
| Port A | 1   | red        | PWR12V                    | Camera power supply input positive end               |                                  |
|        | 2   | white      | GPI1+/TRIG_IN+            | GPI1Positive end / trigger input positive end        | The default is the trigger input |
|        | 3   | brown      | GP02+                     | GP02output the positive end                          | empty feet                       |
|        | 4   | green      | GP01+/STRB_OUT+           | GP01Positive end / Flash output positive end         | The default is the flash output  |
|        | 5   | yellow     | GP01-/STRB_OUT- /TRIG_IN- | GP01minus / flash output minus / trigger input minus | GPIOPublic minus end             |
|        | 6   | black      | PWRGND                    | Camera power supply input minus terminal             |                                  |

Line order definition 4



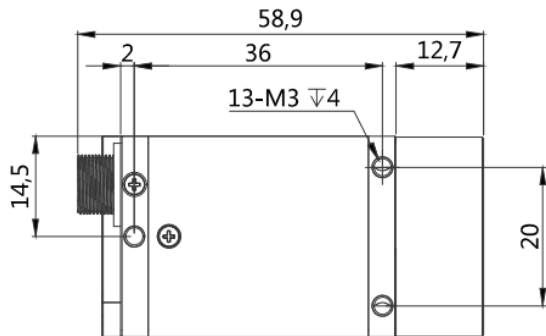
| Port   | Pin | Line color | Signal name     | Signal instructions                           | Remark                           |
|--------|-----|------------|-----------------|---|----------------------------------|
| Port A | 1   | green      | GP01+/STRB_OUT+ | GP01Positive end / Flash output positive end  | The default is the flash output  |
|        | 2   | yellow     | GP01-/STRB_OUT- | GP01Negative end / flash output negative end  | The default is the flash output  |
|        | 3   | white      | GPI1+/TRIG_IN+  | GPI1Positive end / trigger input positive end | The default is the trigger input |
|        | 4   | brown      | GPI1-/TRIG_IN-  | GPI1Negative end / trigger input negative end | The default is the trigger input |
|        | 5   | red        | PWR12V          | Camera power supply input positive end        |                                  |
|        | 6   | black      | PWRGND          | Camera power supply input minus terminal      |                                  |

Line order definition 5

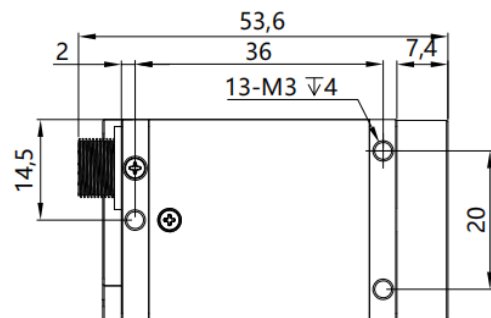


| Port   | Pin | Line color | Signal name     | Signal instructions                           | Remark                           |
|--------|-----|------------|-----------------|---|----------------------------------|
| Port A | 1   | green      | GP01+/STRB_OUT+ | GP01Positive end / Flash output positive end  | The default is the flash output  |
|        | 2   | yellow     | GP01-/STRB_OUT- | GP01Negative end / flash output negative end  | The default is the flash output  |
|        | 3   | white      | GPI1+/TRIG_IN+  | GPI1Positive end / trigger input positive end | The default is the trigger input |
|        | 4   | brown      | GPI1-/TRIG_IN-  | GPI1Negative end / trigger input negative end | The default is the trigger input |
|        | 5   | red        | PWR12V          | Camera power supply input positive end        |                                  |
|        | 6   | black      | PWRGND          | Camera power supply input minus terminal      |                                  |
| Port B | 1   | green      | GP02+           | GP02Positive end output                       |                                  |
|        | 2   | yellow     | GP03+           | GP03Positive end output                       |                                  |
|        | 3   | white      | GP04+           | GP04Positive end output                       |                                  |
|        | 4   | brown      | GPI2+           | GPI2Positive end input                        |                                  |
|        | 5   | red        | GPI3+           | GPI3Positive end input                        |                                  |
|        | 6   | black      | GPIO_COM        | GPIOPublic minus end                          |                                  |

C interface / CS interface camera diagram



C interface



CS interface

Unit: mm