

# 5000 series

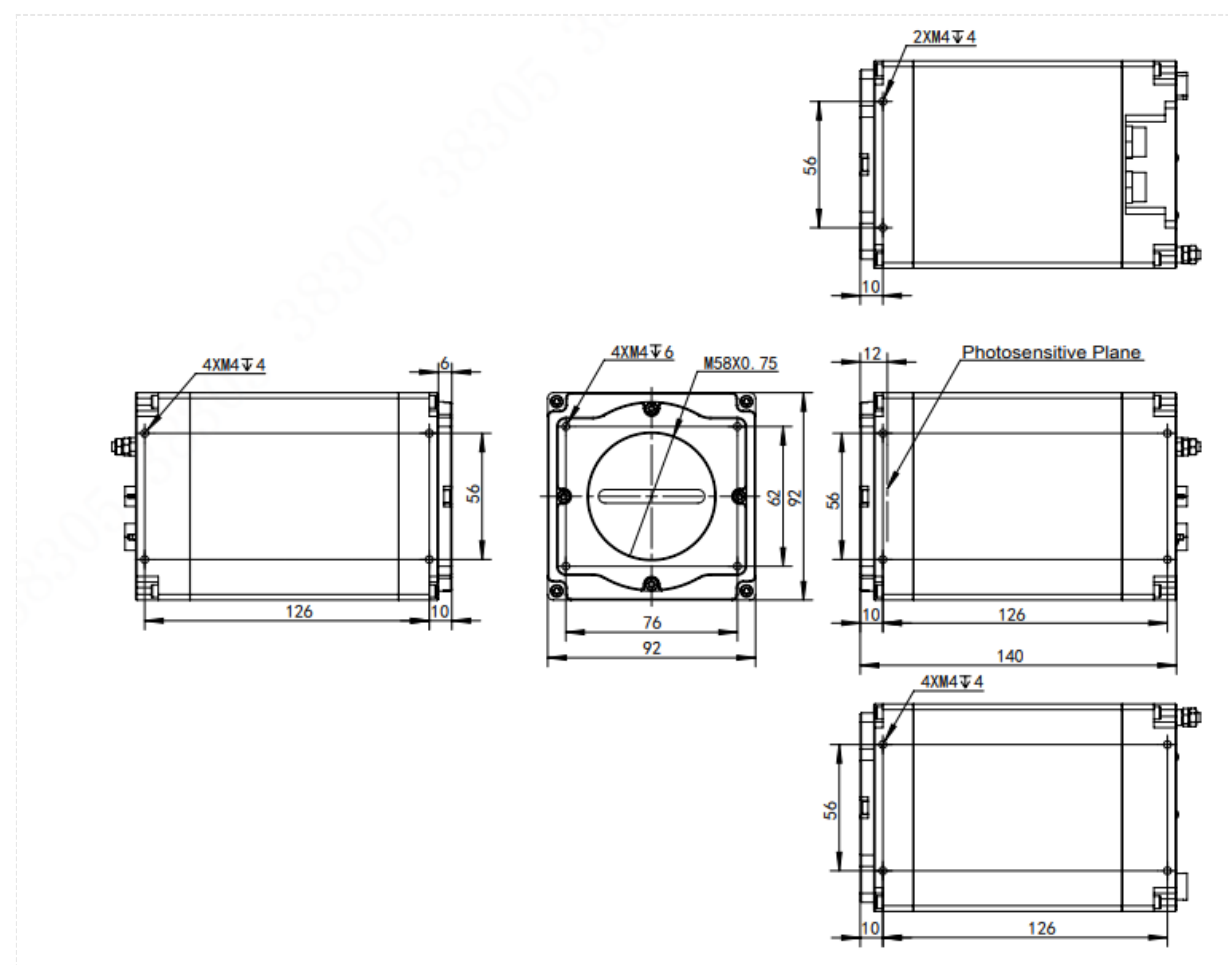
## MV-L087MQ-T



### Features

- BSI TDI CMOS Sensor
- Pixel size  $5\mu\text{m} \times 5\mu\text{m}$
- Support 256-TDI mode
- Maximum line rate of 1MHz
- Suitable for semiconductor, scientific experiments and other fields

### Dimensions (mm)



## Specification

|             |                       |                                                                                                                                |
|-------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Model       |                       | MV-L087MQ-T                                                                                                                    |
| Basic       | Image Sensor          | TDI CMOS Sensor                                                                                                                |
|             | Shutter               | Global                                                                                                                         |
|             | Resolution            | 8192 × 256                                                                                                                     |
|             | Line Rate             | 50kHz~1MHz                                                                                                                     |
|             | Bit Depth             | 12bit                                                                                                                          |
|             | Mono/Color            | Mono                                                                                                                           |
|             | Pixel Size            | 5 μm × 5 μm                                                                                                                    |
| Image       | S/N Ratio             | 40dB                                                                                                                           |
|             | Dynamic Range         | 60.5dB                                                                                                                         |
|             | Image Format          | Mono8/Mono10/Mono12                                                                                                            |
|             | ROI                   | One ROI in the horizontal direction, with a minimum ROI width of 128 pixels, and a single CXPoF setting step size of 64 pixels |
|             | Gain                  | ×1~×16                                                                                                                         |
|             | Trigger Mode          | Free run, software, and external trigger                                                                                       |
|             | TDI Stages            | 256、252、224、192、128、64、32                                                                                                      |
| Port        | Port                  | QSFP28                                                                                                                         |
|             | Lens Mount            | M58 x 0.75                                                                                                                     |
| Power       | Power Supply          | 24V DC±2V power supply via 6-pin Hirose interface                                                                              |
|             | Power Consumption     | <60W                                                                                                                           |
| Structure   | Product Dimensions    | 92mm×92mm×140mm                                                                                                                |
|             | Net Weight            | ≤2kg                                                                                                                           |
| Environment | Operating Temperature | 0°C~+50°C                                                                                                                      |

Connector Pin-out

| Pin number | Signals       | IO  | Description                                                                                                         |
|------------|---------------|-----|---------------------------------------------------------------------------------------------------------------------|
| 1          | Line0 RS422_n | In  | RS-422 input.                                                                                                       |
| 2          | Line0 RS422_p | In  | Line0, As a trigger signal for line-rate control.                                                                   |
| 3          | Line1 RS422_n | In  | RS-422 input.                                                                                                       |
| 4          | Line1 RS422_p | In  | Line1, As a control signal for TDI scanning direction.                                                              |
| 8          | Line2 RS422_n | Out | RS-422 output.                                                                                                      |
| 9          | Line2 RS422_p | Out | Line2, The output signal can be selected by software.                                                               |
| 10         | Line3 RS422_n | Out | RS-422 output.                                                                                                      |
| 11         | Line3 RS422_p | Out | Line3, Outputs RS-422 signal indicating sensor power-off status.                                                    |
| 12         | GND           |     | GND                                                                                                                 |
| 5          | GPIO Line4    | In  | GPIO, Support 3.3V TTL, 5V TTL, Configurable via GenICam XML file.<br>Line4, As a control signal for acquisition.   |
| 6          | GPIO Line5    | In  | GPIO, Support 3.3V TTL, 5V TTL, can be configured through XML.<br>Line5, As the input signal for sensor power-down. |
| 7          | GND           |     | GND                                                                                                                 |

Spectrogram

