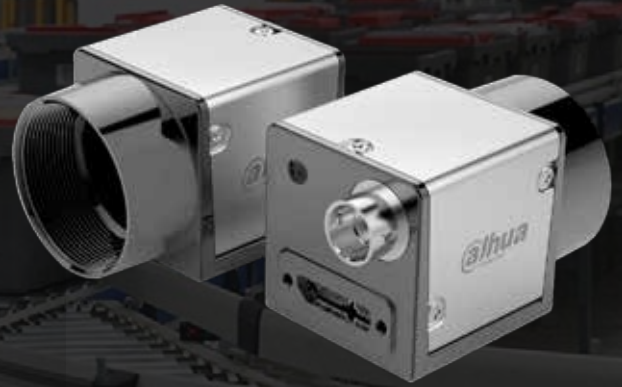


## ▲ A5402M/CU90E

- 5Gbps bandwidth USB3.0 interface
- 128MB on-board frame buffer
- Support multiple image data formats
- Conform to CE, FCC, RoHS certifications
- Software trigger/Hardware trigger/Free run mode
- Conforms to USB 3.0 vision protocol and GenICam standard



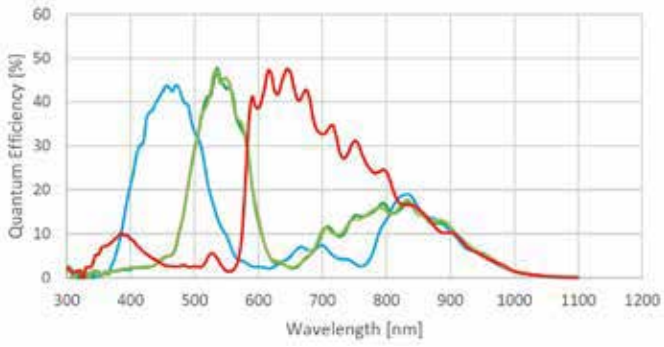
### Specification

| Model      | Sensor  | Sensor type | Shutter | Resolution  | Frame rate ( fps ) | Bit depth | Interface | Mono/Color | Pixel size ( μ m ) | Sensor size |
|------------|---------|-------------|---------|-------------|--------------------|-----------|-----------|------------|--------------------|-------------|
| A5402MU90E | CMV4000 | CMOS        | Global  | 2048 x 2048 | 90                 | 10        | USB3.0    | Mono       | 5.5 x 5.5          | 1"          |
| A5402CU90E | CMV4000 | CMOS        | Global  | 2048 x 2048 | 90                 | 10        | USB3.0    | Color      | 5.5 x 5.5          | 1"          |

| Model             | A5402MU90E   | A5402CU90E         |
|-------------------|--|--------------------|
| Effective Pixels  | 4.1MP  |                    |
| SNR               | >38dB  |                    |
| Dynamic Range     | 60dB   |                    |
| GPIO              | 6 pin Hirose:<br>1 Opto-isolated input, 1 Opto-isolated output, 1 configurable input/output without opto isolation |                    |
| Image Format      | Mono8  | BayerRG8, BayerGB8 |
| Binning           | Support  | --                 |
| Gain              | X1~X32   |                    |
| Gamma             | Range from 0 to 4, support LUT   |                    |
| Exposure Time     | 32μs~1S  |                    |
| Trigger Mode      | Software trigger/Hardware trigger/Free run mode  |                    |
| Image Buffer      | 64MB   |                    |
| User Setting      | Support two sets of user-defined configurations  |                    |
| Dimensions        | 29mmx29mmx29mm( not including lens mount and rear case connector)  |                    |
| Weight            | 60g  |                    |
| Power Supply      | Power supply via USB connector /DC power supply by Hirose connector, with voltage range from 6V to 26V             |                    |
| Power Consumption | ≈4.2W  |                    |
| Lens Mount        | C  |                    |
| Temperature       | Storage temperature:-30° C~ + 80° C; Operation temperature:-30° C~+50° C   |                    |

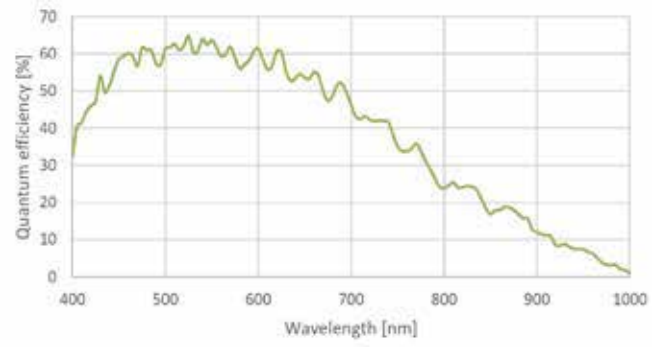
# Spectrogram

**A5402CU90E**



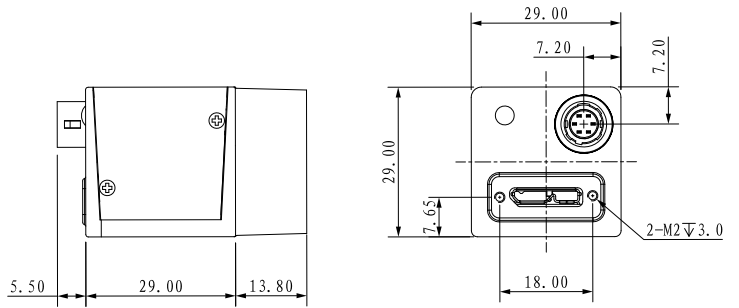
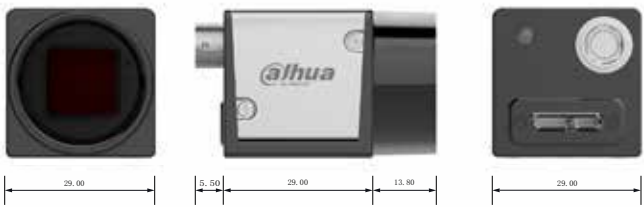
Quantum Efficiency Curve for Mono and Color Sensor

**A5402MU90E**

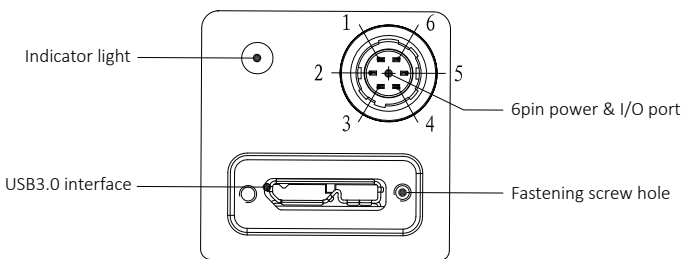


Quantum Efficiency Curve for Mono Sensor

# Dimensions



# IO Interface Instruction



| Pin | Signal | Description                  |
|-----|--------|------------------------------|
| 1   | Line3  | DC 6V-26V input              |
| 2   | Line1  | Opto-isolated input          |
| 3   | Line2  | Configurable IO input/output |
| 4   | Line0  | Opto-isolated output         |
| 5   | IO GND | Opto-isolated ground         |
| 6   | GND    | Ground                       |