



# FXO CoaXPress

## fxo542MCX

### 一般

|      |               |
|------|---------------|
| 型號   | fxo542MCX     |
| 產品編號 | F002088       |
| 產品系列 | FXO CoaXPress |
| 狀態   | Available     |

### 感測器

|            |                                      |
|------------|--------------------------------------|
| 感測器類型      | Area scan                            |
| 色度         | Mono                                 |
| 光譜         | Visible                              |
| 光譜範圍       | 400 nm to 1000 nm                    |
| 解析度        | 5,312 × 3,032 (16.10 MP)             |
| 感測器型號      | Sony IMX542                          |
| 感測器架構 (材料) | cmos                                 |
| 快門類型       | Global shutter (GS)                  |
| 感測器尺寸      | 14.55 × 8.31 mm (16.76 mm, Type 1.1) |
| 像素大小       | 2.74 μm × 2.74 μm                    |

### 像素格式

|        |               |
|--------|---------------|
| 感測器位深  | 8-bit, 12-bit |
| 單色像素格式 | mono8, mono12 |

### 影像性能

|      |         |
|------|---------|
| 動態範圍 | 72 dB   |
| 訊噪比  | 39.9 dB |

## 時序與增益

|       |                    |
|-------|--------------------|
| 最大影格率 | 45.6 fps           |
| 曝光時間  | 10 $\mu$ s to 60 s |
| 增益    | 0.0 dB to 48.0 dB  |

## I/O 與電源

|         |                                                                                                       |
|---------|-------------------------------------------------------------------------------------------------------|
| 非隔離線    | 0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 4 x Open drain output, |
| 特定非隔離線  | 1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,                                 |
| 光隔離線    | 1 x Optical isolated input, 0 x Optical isolated input,                                               |
| I/O 連接器 | 12-pin Hirose HR10A-10P-12S                                                                           |
| 電源供應    | 10 to 25VDC, Power over CoaXPress                                                                     |
| 功耗      | External: 9 W (typical)                                                                               |

## 操作條件

|           |                 |
|-----------|-----------------|
| 操作溫度 (機殼) | -10 °C to 65 °C |
|-----------|-----------------|

## 機械特性

|                     |                             |
|---------------------|-----------------------------|
| 機殼尺寸 (長 x 寬 x 高 mm) | 70 x 50 x 50                |
| 濾光片/保護玻璃            | K9 - AR coating - 400-850nm |
| 防護等級                | IP30                        |
| 鏡頭接口                | C-Mount                     |
| 重量                  | 240 g                       |

## 板載記憶體與 FPGA

|                 |          |
|-----------------|----------|
| 非揮發性記憶體 (Flash) | 32 MByte |
|-----------------|----------|

## 介面

|       |                          |
|-------|--------------------------|
| 數位介面  | cxp-12 with 1 connection |
| 介面連接器 | (micro-BNC)              |
| 視覺標準  | CoaXPress 2.0            |

## FW 功能 – 影像控制

|      |                        |
|------|------------------------|
| 曝光模式 | manual, auto, external |
|------|------------------------|

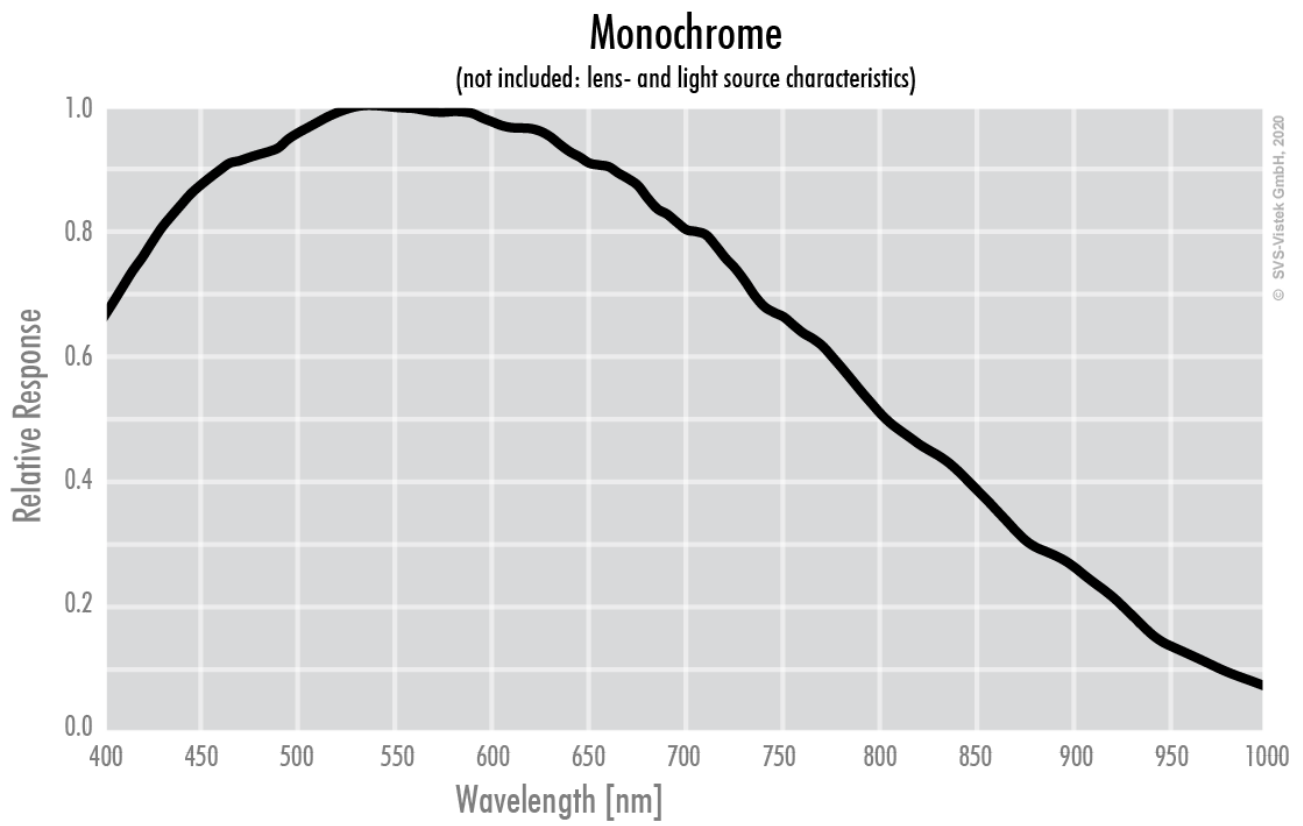
## FW 功能 – 影像控制

|        |                                                      |
|--------|------------------------------------------------------|
| 增益模式   | auto, manual                                         |
| 影像控制功能 | roi, lut, mirror-image, dpc, shading-correction, ffc |

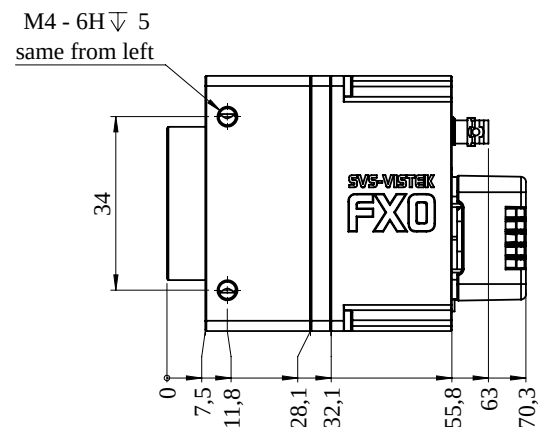
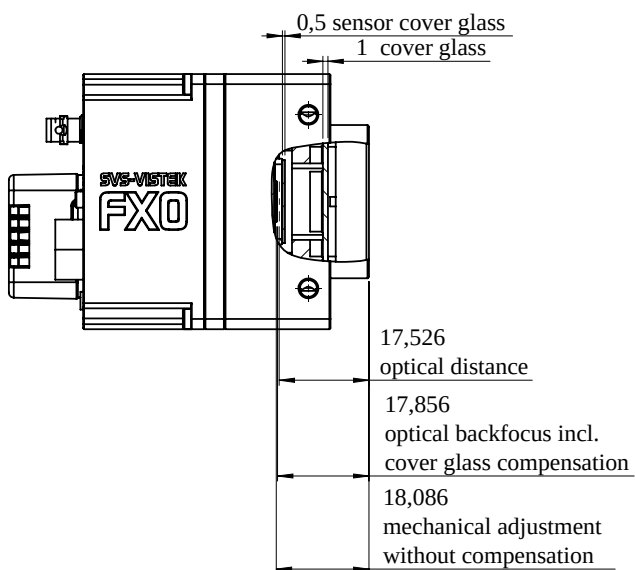
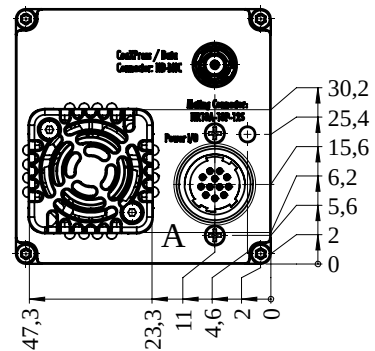
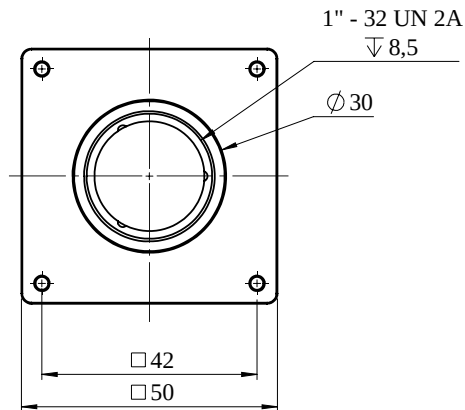
## FW 功能 – 相機控制

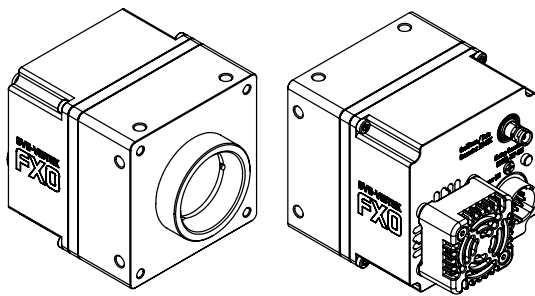
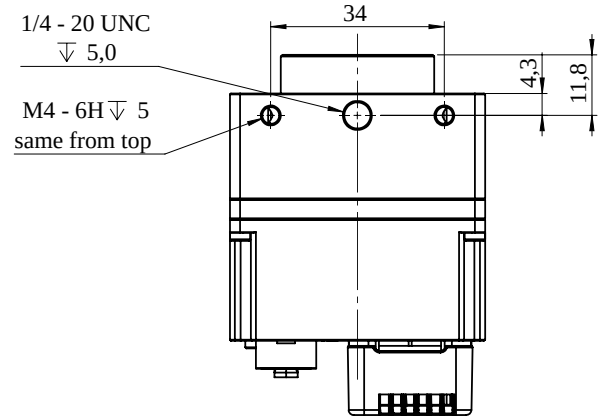
|         |                                      |
|---------|--------------------------------------|
| 觸發模式/同步 | internal, software, external         |
| 相機控制功能  | PoCxP, User Sets, PWM(4), Sequencer, |

量子效率



技術圖紙





## I/O 引腳分配



|   |       |                   |    |        |              |
|---|-------|-------------------|----|--------|--------------|
| 1 | VIN - | (GND)             | 7  | OUT 1  | (open drain) |
| 2 | VIN + | (10 V to 25 V DC) | 8  | OUT 2  | (open drain) |
| 3 | IN 4  | (RXD RS232)       | 9  | IN 3 + | (opto In +)  |
| 4 | OUT 4 | (TXD RS232)       | 10 | IN 3 - | (opto In -)  |
| 5 | IN 1  | (0-24V)           | 11 | OUT 3  | (open drain) |
| 6 | IN 2  | (0-24V)           | 12 | OUT 0  | (open drain) |