



# HR CoaXPress

hr51MCX

## 一般

|      |              |
|------|--------------|
| 型號   | hr51MCX      |
| 產品編號 | F004102      |
| 產品系列 | HR 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        | 8,416 × 6,032 (51.00 MP)                     |
| 感測器型號      | Gpixel GMAX4651                              |
| 感測器架構 (材料) | cmos                                         |
| 快門類型       | Global shutter (GS)                          |
| 感測器尺寸      | 38.71 × 27.75 mm (47.63 mm, 35mm Full Frame) |
| 像素大小       | 4.60 $\mu\text{m}$ × 4.60 $\mu\text{m}$      |

## 像素格式

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

## 影像性能

|      |         |
|------|---------|
| 動態範圍 | 65 dB   |
| 訊噪比  | 42.6 dB |

## 時序與增益

|       |                    |
|-------|--------------------|
| 最大影格率 | 30 fps             |
| 曝光時間  | 16 $\mu$ s to 60 s |
| 增益    | 0.0 dB to 40.0 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,                                               |
| 電源供應   | 10 to 25VDC, Power over CoaXPress                                                                     |
| 功耗     | External: 13 W (typical)                                                                              |

## 機械特性

|                     |                              |
|---------------------|------------------------------|
| 機殼尺寸 (長 x 寬 x 高 mm) | 76 x 70 x 70                 |
| 濾光片/保護玻璃            | N-BK7 - AR coating 380-850nm |
| 防護等級                | IP30                         |
| 鏡頭接口                | M58x0.75                     |
| 重量                  | 380 g                        |

## 板載記憶體與 FPGA

|                 |           |
|-----------------|-----------|
| 非揮發性記憶體 (Flash) | 160 MByte |
|-----------------|-----------|

## 介面

|       |                          |
|-------|--------------------------|
| 數位介面  | cxp-6 with 4 connections |
| 介面連接器 | (Din1.0/2.3)             |

## FW 功能 – 影像控制

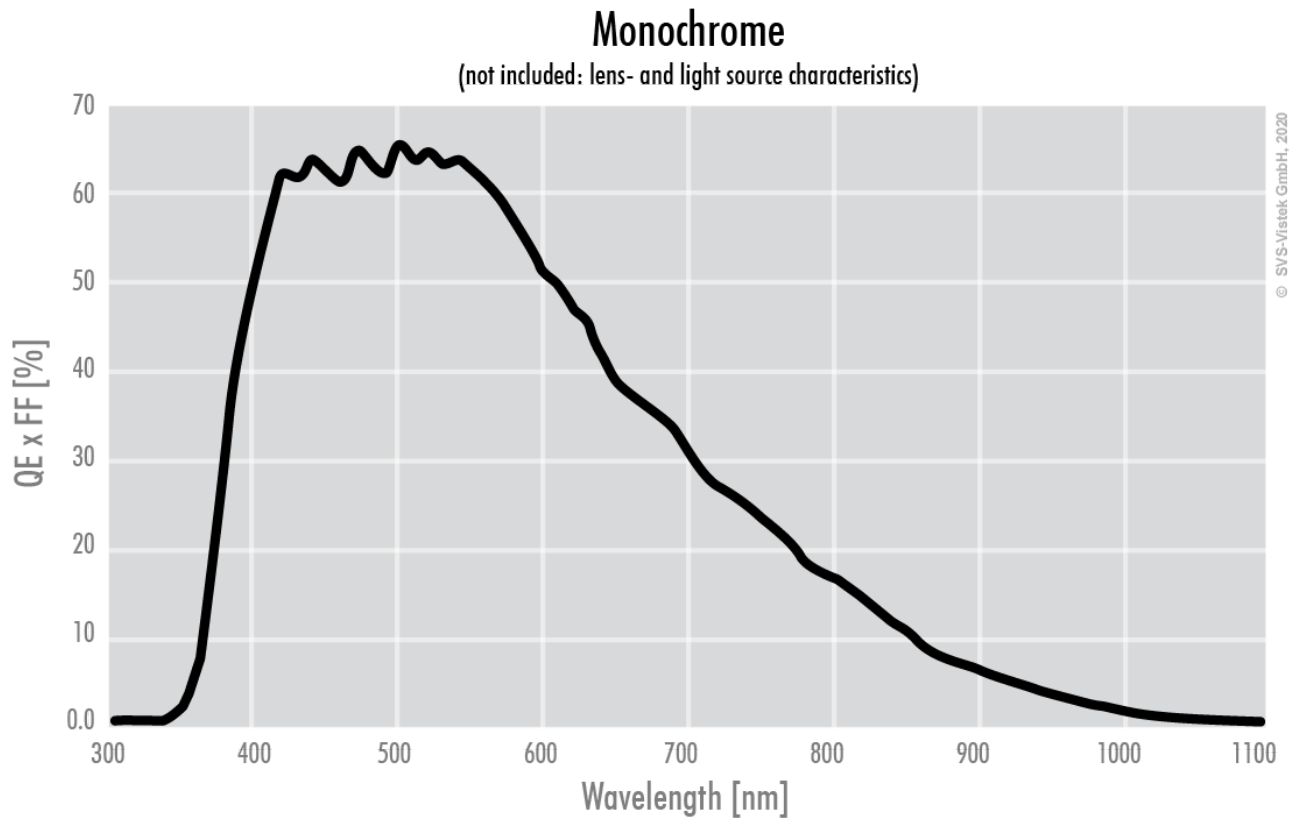
|        |                                                      |
|--------|------------------------------------------------------|
| 曝光模式   | auto, manual                                         |
| 增益模式   | auto, manual                                         |
| 影像控制功能 | dpc, ffc, lut, mirror-image,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

## FW 功能 – 相機控制

|         |                              |
|---------|------------------------------|
| 觸發模式/同步 | external, internal, software |
|---------|------------------------------|



量子效率



ront

Technical drawing showing the front view of a square plate with a central circular hole. The plate has a square outer edge with a width of 70 mm. The central hole has an outer diameter of 64 mm and an inner diameter of 58 mm. The thickness of the plate is 4.3 mm. There are four M3 screws, each 12.0 mm long, mounted on the plate. The distance from the center of the hole to the center of each screw is 48 mm. The drawing includes dimension lines and labels for all these features.

Dimensions and features:

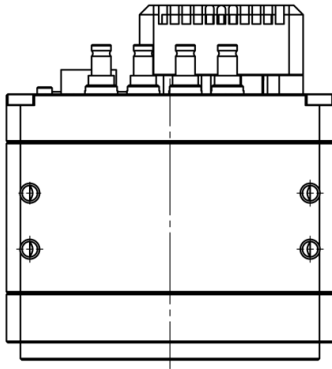
- Outer diameter of the central hole:  $\varnothing 58 \times 0,75 \nabla 9,0$
- Inner diameter of the central hole:  $\varnothing 64$
- Distance from center of hole to center of screws: 48
- Width of the plate: 70
- Thickness of the plate: 4,3
- Screw specification: 4x M3  $\nabla 12,0$
- Inner square dimension: 62

Technical drawing of the SVS-VISTEK HR sensor unit. The drawing shows the front view of the unit with the following dimensions and components:

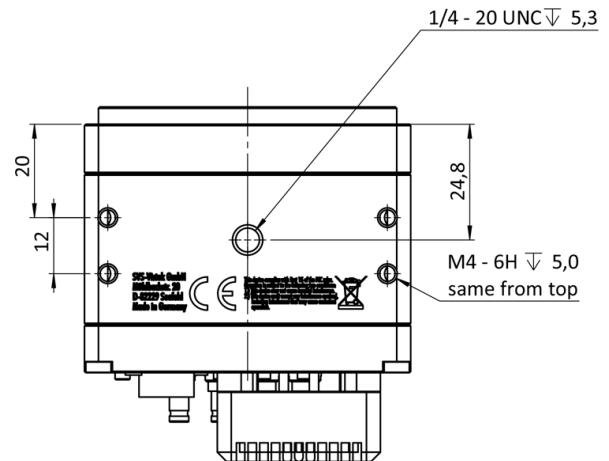
- Dimensions (mm):**
  - 75,9
  - 67,5
  - 62,1
  - 56,9
  - 46,5
  - 14,2
  - 3,7
  - 0
- Components:**
  - 1 Glass
  - 11,81 sensor distance
- Text on Unit:** SVS-VISTEK HR

Technical drawing of the SVS-VISTEK HR unit showing dimensions and mounting details. The unit is 60 units high. The top section has a width of 20 units, and the distance between the two top mounting holes is 12 units. The mounting holes are M4 - 6H with a depth of 5.0, and the distance from the left edge to the first hole is the same as from the left edge to the second hole. The unit features the SVS-VISTEK logo and the model number HR.

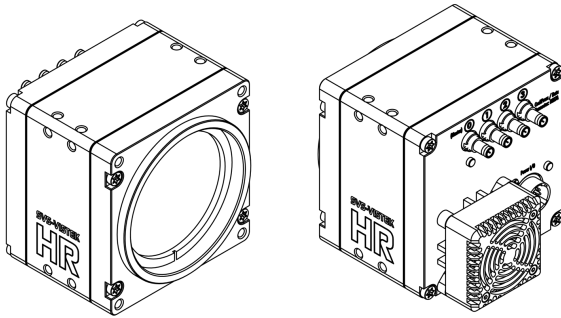
top



bottom

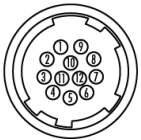


3D



## I/O 引脚分配

Hirose 12 Pin



|   |       |                   |    |        |              |
|---|-------|-------------------|----|--------|--------------|
| 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) |