



# HR 10GigE

## hr342CXGE

### General

|                |           |
|----------------|-----------|
| Model          | hr342CXGE |
| Product code   | F004071   |
| Product series | HR 10GigE |
| Status         | Available |

### Sensor

|                                |                                            |
|--------------------------------|--------------------------------------------|
| Sensor type                    | Area scan                                  |
| Chroma                         | Color                                      |
| Spectrum                       | Visible                                    |
| Spectral range                 | 400 nm to 1000 nm                          |
| Resolution                     | 6,464 × 4,852 (31.40 MP)                   |
| Sensor model                   | Sony IMX342                                |
| Sensor architecture (material) | cmos                                       |
| Shutter type(s)                | global-shutter                             |
| Sensor size                    | 22.3 × 16.74 mm (27.88 mm, 27.9mm (APS-C)) |
| Pixel size                     | 3.45 µm × 3.45 µm                          |

### Pixel formats

|                   |                 |
|-------------------|-----------------|
| Sensor bit depth  | 8-Bit,12-Bit    |
| RGB pixel formats | bayer8, bayer12 |

### Imaging performance

|               |         |
|---------------|---------|
| Dynamic range | 70.5 dB |
| SNR           | 39.9 dB |

## Timing and gain

|                 |                    |
|-----------------|--------------------|
| Max. frame rate | 35.4 fps           |
| Exposure time   | 19 $\mu$ s to 60 s |
| Gain            | 0.0 dB to 48.0 dB  |

## I/Os and power

|                             |                                                                                                       |
|-----------------------------|-------------------------------------------------------------------------------------------------------|
| Non-isolated lines          | 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, |
| Specific non-isolated lines | 1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,                                 |
| Opto-isolated lines         | 1 x Optical isolated input, 0 x Optical isolated input,                                               |
| Power supply                | 10 to 25VDC, Power over Ethernet (POE+, in option -P)                                                 |
| Power consumption           | External: 16 W (typical)                                                                              |

## Mechanical properties

|                                   |                    |
|-----------------------------------|--------------------|
| Body dimensions (L x W x H in mm) | 80 x 70 x 70       |
| Filter/protection glass           | N-BK7 - AR coating |
| IP class                          | IP30               |
| Lens mount(s)                     | M58x0.75           |
| Weight                            | 400 g              |

## On-board memory and FPGA

|                             |           |
|-----------------------------|-----------|
| Image buffer (RAM)          | 448 MByte |
| Non-volatile memory (Flash) | 32 MByte  |

## Interfaces

|                     |         |
|---------------------|---------|
| Digital interface   | 10gige  |
| Interface connector | (RJ-45) |

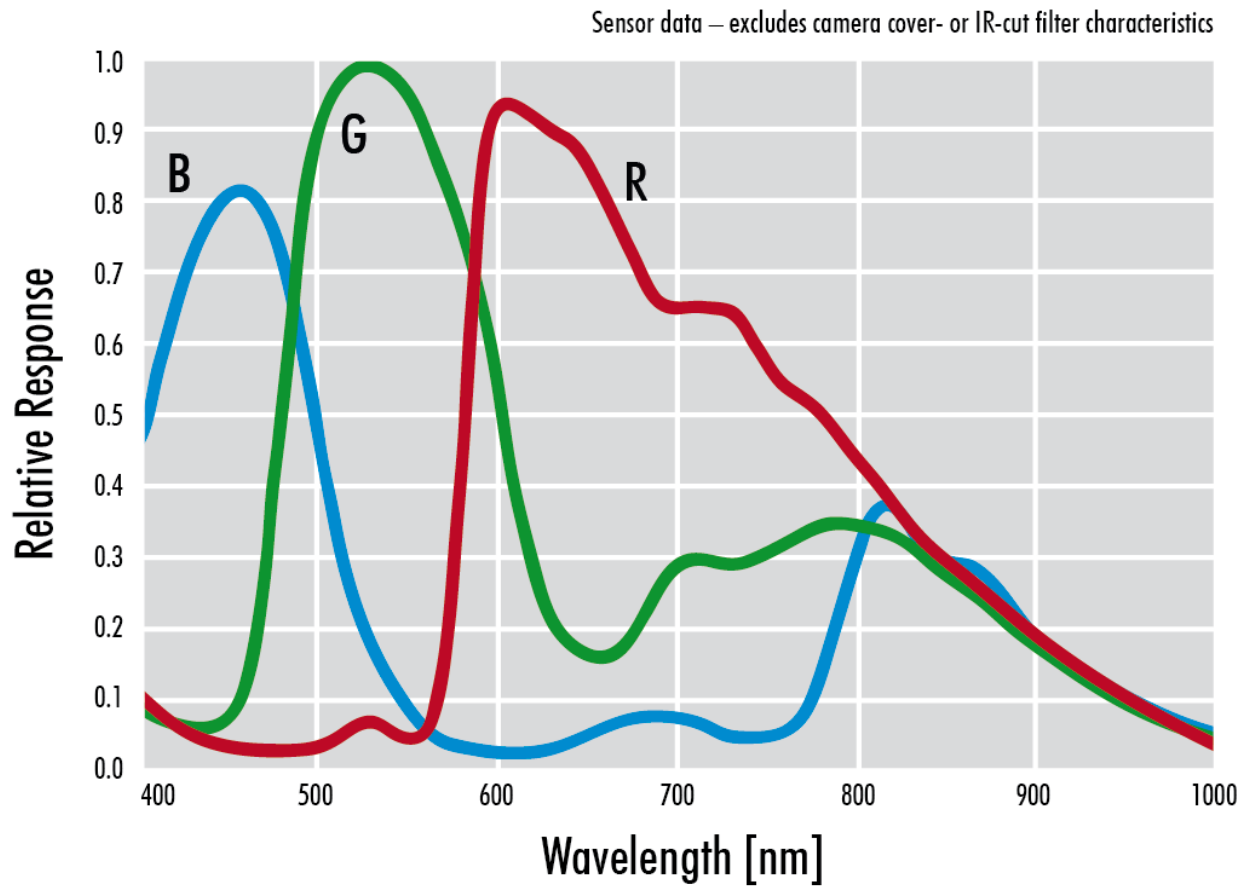
## FW features - image control

|                        |                             |
|------------------------|-----------------------------|
| Exposure modes         | Manual, Auto, External      |
| Gain modes             | Auto, Manual                |
| White balance modes    | auto, manual                |
| Image control features | FW Features - Image Control |

## FW features - camera control

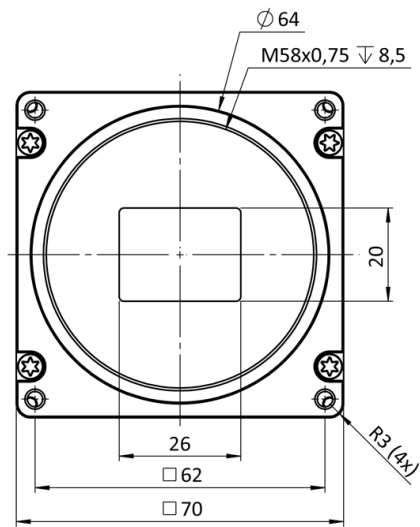
|                         |                                    |
|-------------------------|------------------------------------|
| Trigger modes/sync      | INTERNAL,SOFTWARE,EXTERNAL         |
| Camera control features | User Sets, POE, PWM(4), Sequencer, |

## Quantum Efficiency

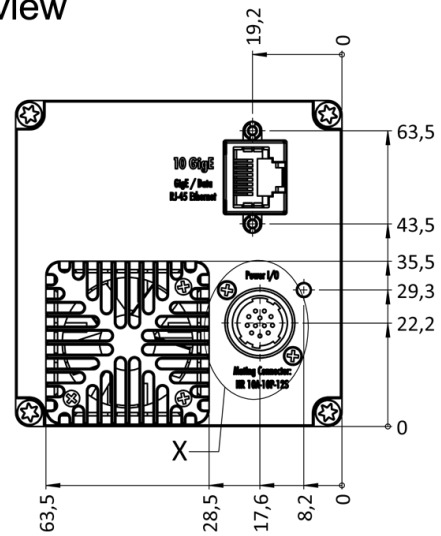


## Technical Drawing

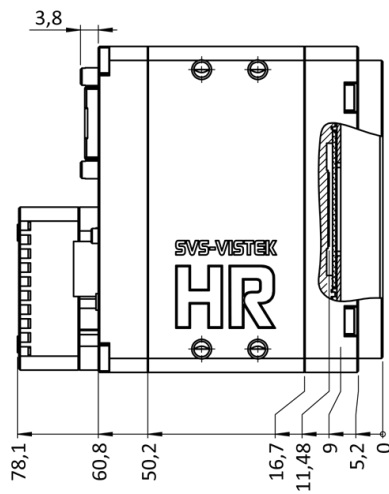
front view



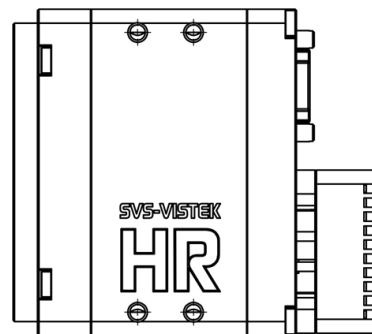
back view



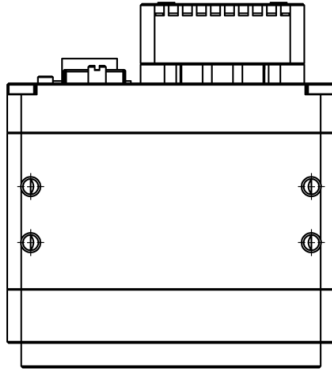
cross section



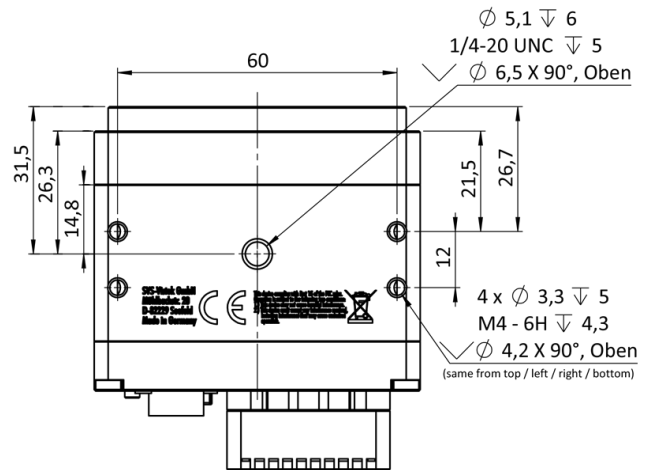
right view



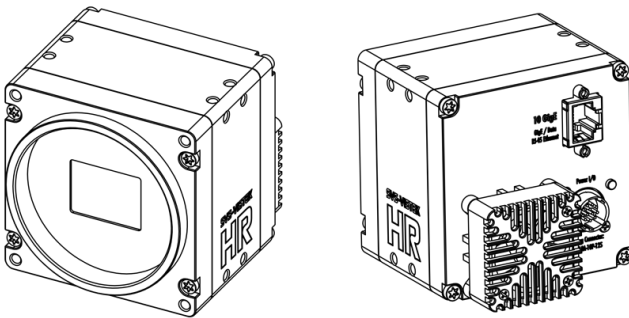
top view



bottom view



3D view



## I/O pin assignment



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) |