



# HR 10GigE

## hr65CXGE

### Generale

|                   |           |
|-------------------|-----------|
| Modello           | hr65CXGE  |
| Codice prodotto   | F004122   |
| Serie di prodotti | HR 10GigE |
| Stato             | Available |

### Sensore

|                                  |                                     |
|----------------------------------|-------------------------------------|
| Tipo di sensore                  | Area scan                           |
| Croma                            | Color                               |
| Spettro                          | Visible                             |
| Gamma spettrale                  | 400 nm to 1000 nm                   |
| Risoluzione                      | 9,344 × 7,000 (65.00 MP)            |
| Modello sensore                  | Gpixel GMAX3265                     |
| Architettura sensore (Materiale) | cmos                                |
| Tipi di otturatore               | Global shutter (GS)                 |
| Dimensione sensore               | 29.9 × 22.4 mm (37.36 mm, Type 2.3) |
| Dimensione pixel                 | 3.20 µm × 3.20 µm                   |

### Formati pixel

|                        |                 |
|------------------------|-----------------|
| Profondità bit sensore | 8-bit, 12-bit   |
| Formati pixel RGB      | bayer8, bayer12 |

### Prestazioni di imaging

|                |         |
|----------------|---------|
| Gamma dinamica | 65.6 dB |
| SNR            | 40 dB   |

## Tempi e guadagno

|                           |                    |
|---------------------------|--------------------|
| Frequenza fotogrammi max. | 17.4 fps           |
| Tempo di esposizione      | 22 $\mu$ s to 60 s |
| Guadagno                  | 0.0 dB to 18.0 dB  |

## I/O e alimentazione

|                              |                                                                                                       |
|------------------------------|-------------------------------------------------------------------------------------------------------|
| Linee non isolate            | 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, |
| Linee non isolate specifiche | 1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,                                 |
| Linee otticamente isolate    | 1 x Optical isolated input, 0 x Optical isolated input,                                               |
| Connettore I/O               | 12-pin Hirose HR10A-10P-12S                                                                           |
| Alimentazione                | 10 to 25VDC, Power over Ethernet (POE+, in option -P)                                                 |
| Consumo energetico           | External: 14 W (typical)                                                                              |

## Condizioni operative

|                                  |                 |
|----------------------------------|-----------------|
| Temperatura operativa (Custodia) | -10 °C to 65 °C |
|----------------------------------|-----------------|

## Proprietà meccaniche

|                                       |              |
|---------------------------------------|--------------|
| Dimensioni custodia (L x P x A in mm) | 76 × 70 × 70 |
| Vetro filtro/protezione               | IR-Cut 680   |
| Classe IP                             | IP30         |
| Attacco/i obiettivo                   | M58x0.75     |
| Peso                                  | 420 g        |

## Memoria onboard e FPGA

|                              |           |
|------------------------------|-----------|
| Buffer immagine (RAM)        | 448 MByte |
| Memoria non volatile (Flash) | 32 MByte  |

## Interfacce

|                        |                 |
|------------------------|-----------------|
| Interfaccia digitale   | 10gige          |
| Connettore interfaccia | (RJ-45)         |
| Standard Vision        | GigE Vision 2.0 |

## Funzioni FW – Controllo immagine

|                         |                        |
|-------------------------|------------------------|
| Modalità di esposizione | manual, auto, external |
|-------------------------|------------------------|

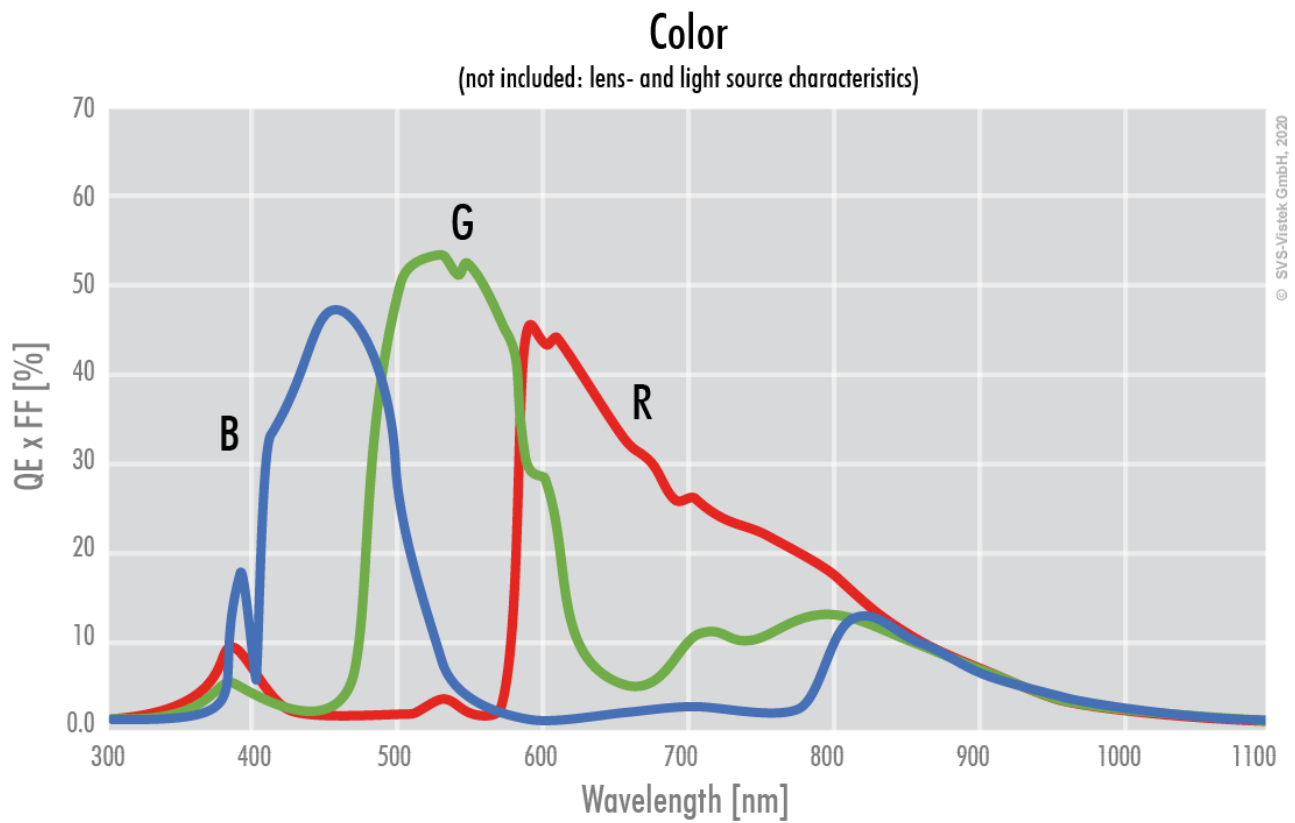
## Funzioni FW – Controllo immagine

|                                      |                        |
|--------------------------------------|------------------------|
| Modalità di guadagno                 | auto, manual           |
| Modalità di bilanciamento del bianco | auto, manual           |
| Funzioni di controllo immagine       | roi, lut, mirror-image |

## Funzioni FW – Controllo fotocamera

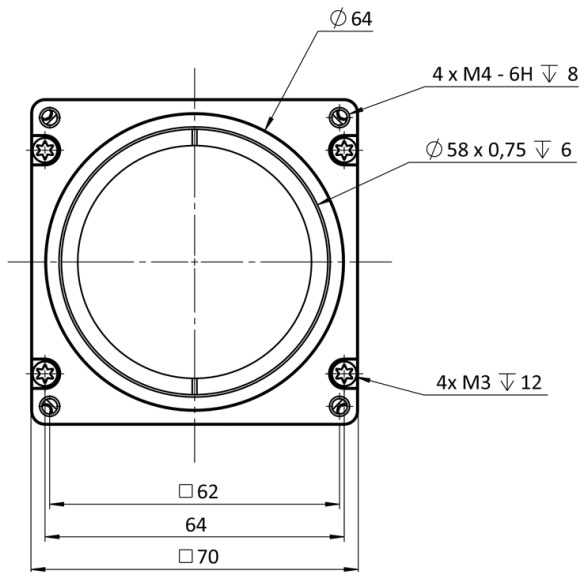
|                                        |                                    |
|----------------------------------------|------------------------------------|
| Modalità di trigger/sincronizzazione   | internal, software, external       |
| Funzioni di controllo della fotocamera | User Sets, POE, PWM(4), Sequencer, |

Efficienza quantica

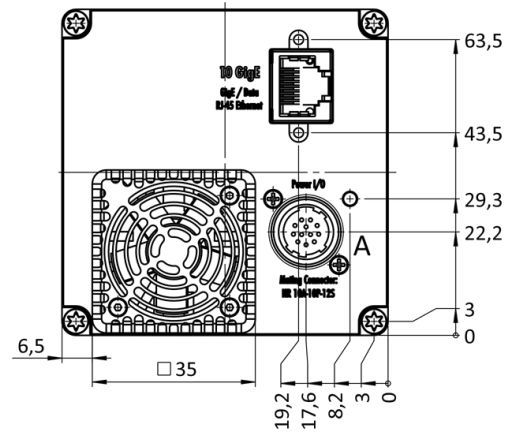


## Disegno tecnico

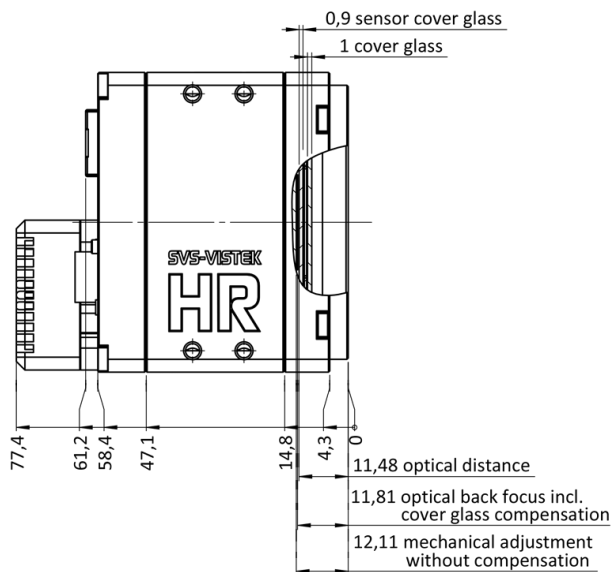
front



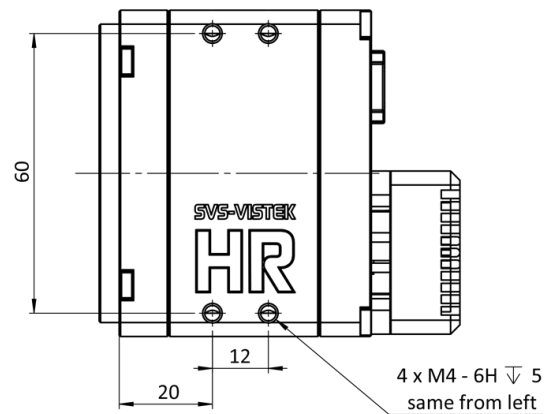
back



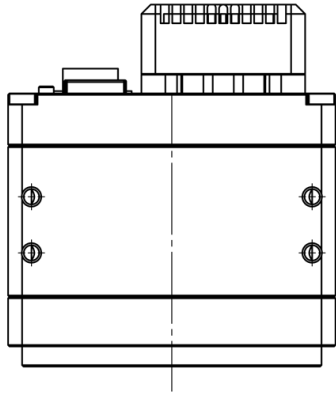
cross section



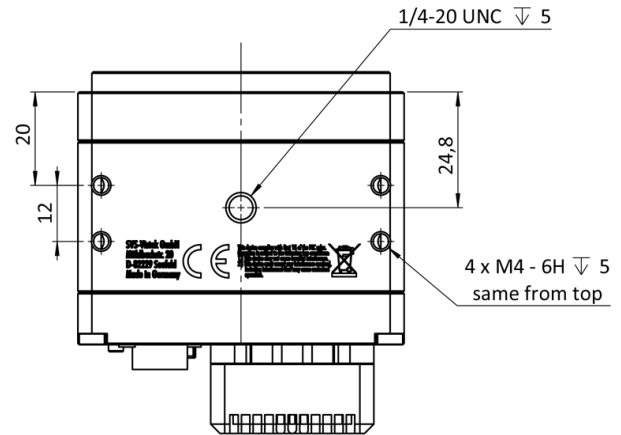
right side



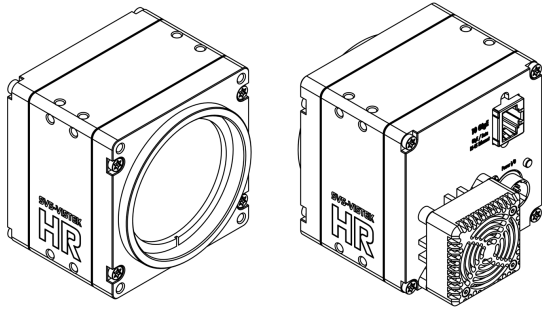
top



bottom



3D



## Assegnazione pin I/O



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