Allied Vision

# EXO SWIR

## exo991MGE

## Generale

| | |
|---|---|
| Modello | exo991MGE |
| Codice prodotto | F002204 |
| Serie di prodotti | EXO SWIR |
| Stato | Available |

## Sensore

| | |
|---|---|
| Tipo di sensore | Area scan |
| Croma | Mono |
| Spettro | SWIR, Visible SWIR |
| Gamma spettrale | 400 nm to 1700 nm |
| Risoluzione | 640 × 512 (0.30 MP) |
| Modello sensore | Sony IMX991 \| InGaAs |
| Architettura sensore (Materiale) | cmos |
| Tipi di otturatore | Global shutter (GS) |
| Dimensione sensore | 3.2 × 2.56 mm (4.1 mm, Type 1/4) |
| Dimensione pixel | 5.00 µm × 5.00 µm |

## Formati pixel

| | |
|---|---|
| Profondità bit sensore | 8-bit, 12-bit |
| Formati pixel monocromatici | mono8, mono12 |

## Prestazioni di imaging

| | |
|---|---|
| Gamma dinamica | 57 dB |

## Tempi e guadagno

| | |
|---|---|
| Frequenza fotogrammi max. | 260 fps |
| Tempo di esposizione | 21 µs to 500.00 ms |
| Guadagno | 0.0 dB to 42.0 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 |
| Consumo energetico | External: 3.5 W (typical) |

## Condizioni operative

| | |
|---|---|
| Temperatura operativa (Custodia) | -10 °C to 60 °C |

## Proprietà meccaniche

| | |
|---|---|
| Dimensioni custodia (L x P x A in mm) | 43 × 50 × 50 |
| Classe IP | IP40 |
| Attacco/i obiettivo | C-Mount |
| Peso | 138 g |

## Memoria onboard e FPGA

| | |
|---|---|
| Buffer immagine (RAM) | 192 MByte |
| Memoria non volatile (Flash) | 32 MByte |

## Interfacce

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

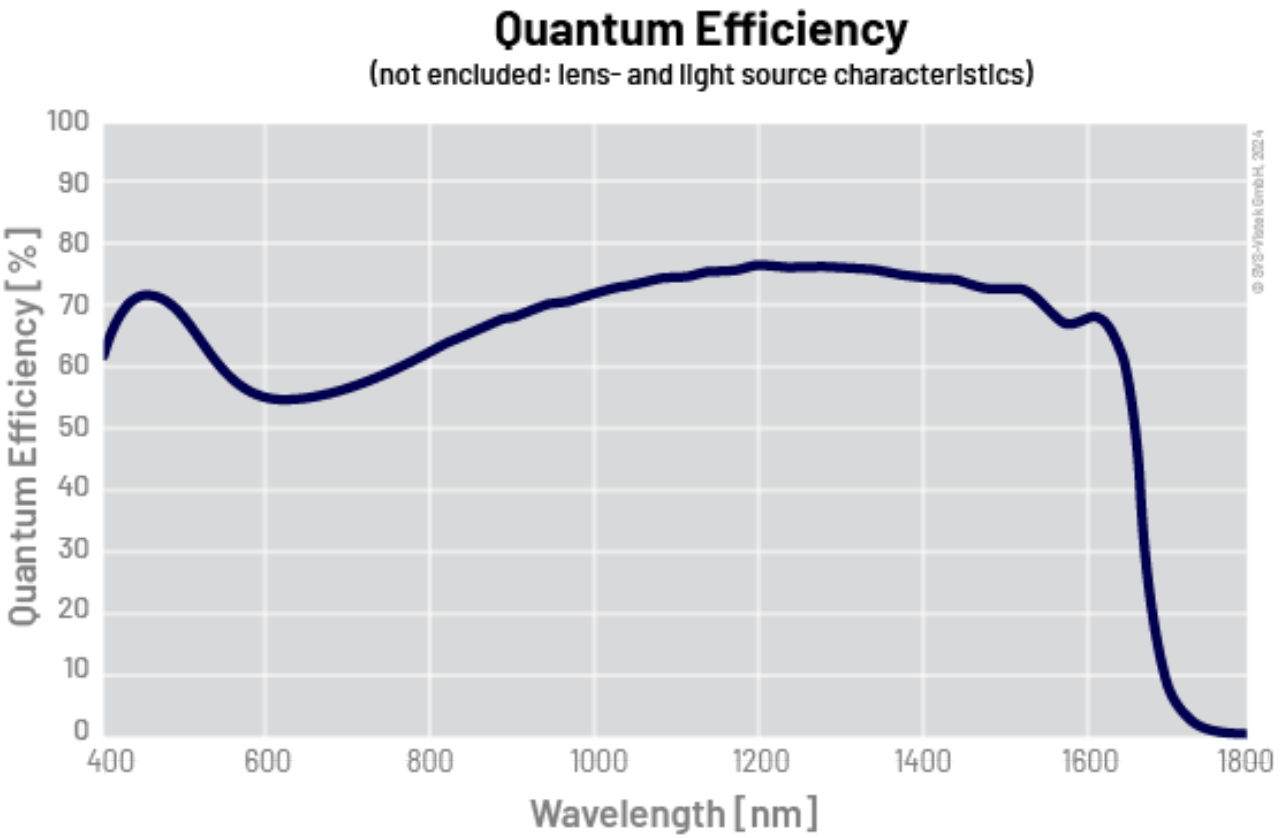
## Funzioni FW – Controllo immagine

| | |
|---|---|
| Modalità di esposizione | manual, auto |
| Modalità di guadagno | auto, manual |
| Funzioni di controllo immagine | roi, lut, mirror-image, dpc, nuc, ffc |

## Funzioni FW – Controllo fotocamera

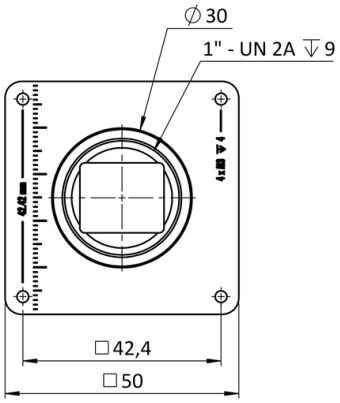
| | |
|---|---|
| Modalità di trigger/sincronizzazione | internal, software, external |
| Funzioni di controllo della fotocamera | User Sets, POE, PWM(4), Sequencer, |

## Efficienza quantica

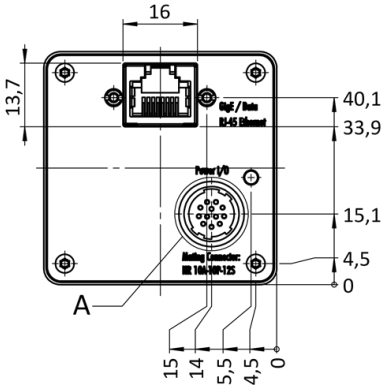


## Disegno tecnico

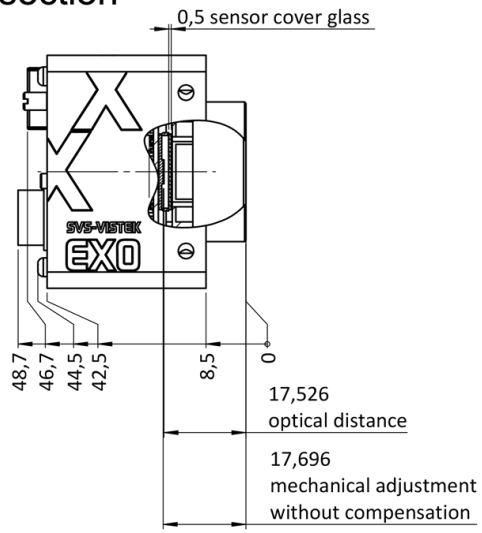
### front



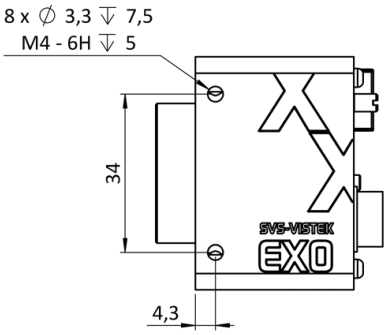

### back



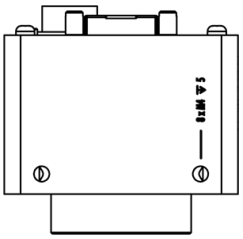

### cross section



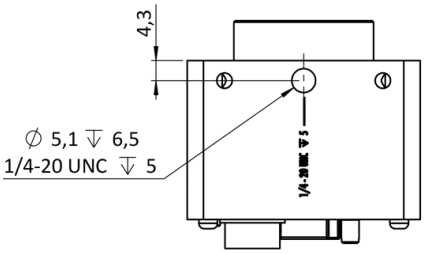

### right side



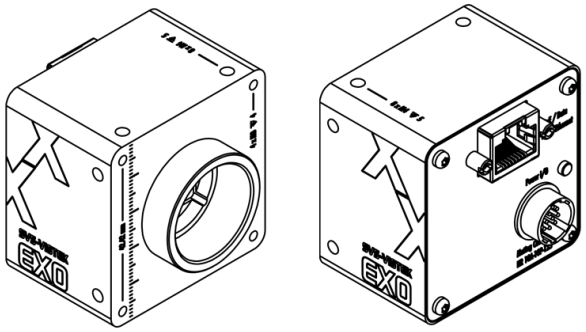
top



bottom

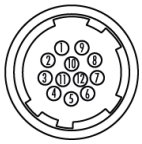



3D



## Assegnazione pin I/O

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) |