

常规

| | |
|-------|-----------|
| 型号: | exo990MU3 |
| 产品代码: | F002237 |
| 产品系列: | EXO SWIR |
| 状态: | Available |

传感器

| | |
|-------------|--|
| 传感器类型: | Area scan |
| 色度: | Mono |
| 光谱: | eXtended SWIR |
| 光谱范围: | 400 nm to 1700 nm |
| 分辨率: | 1,280 × 1,024 (1.30 MP) |
| 传感器型号: | Sony IMX990AABJ |
| 传感器架构 (材料): | cmos |
| 快门类型: | global-shutter |
| 传感器尺寸: | 6.40 × 5.12 mm (8.20 mm, 8.2mm (Type 1/2)) |
| 像素尺寸: | 5.00 μm × 5.00 μm |

像素格式

| | |
|---------|-----------------------|
| 传感器位深度: | 8-Bit, 12-Bit, 12-Bit |
| 单色像素格式: | mono8, mono12packed |

成像性能

| | |
|-------|-------|
| 动态范围: | 57 dB |
|-------|-------|

时序与增益

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|-------|-----------------------|
| 最大帧率: | 125.4 fps |
| 曝光时间: | 1 μs (max) |
| 增益: | 0.0 dB to 42.0 dB |

I/O与电源

| | |
|------------|---|
| 非电气隔离IO: | 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, |
| 特定非电气隔离IO: | 1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output, |
| 光电隔离线路: | 1 x Optical isolated input, 0 x Optical isolated input, |
| 电源供应: | 10 to 25VDC |
| 功耗: | External: 4 W (typical) |

工作条件

| | |
|------------|-----------------|
| 工作温度 (外壳): | -10 °C to 60 °C |
|------------|-----------------|

机械特性

| | |
|-----------------------|--------------|
| 机身尺寸 (L x W x H mm) : | 43 x 50 x 50 |
| IP防护等级: | IP40 |
| 镜头接口: | C-Mount |
| 重量: | 138 g |

板载内存与FPGA

| | |
|----------------|-----------|
| 图像缓存 (RAM) : | 192 MByte |
| 非易失性存储器 (闪存) : | 32 MByte |

接口

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|--------|-----------|
| 数字接口: | usb3.0 |
| 接口连接器: | (Micro-B) |

固件功能 - 图像控制

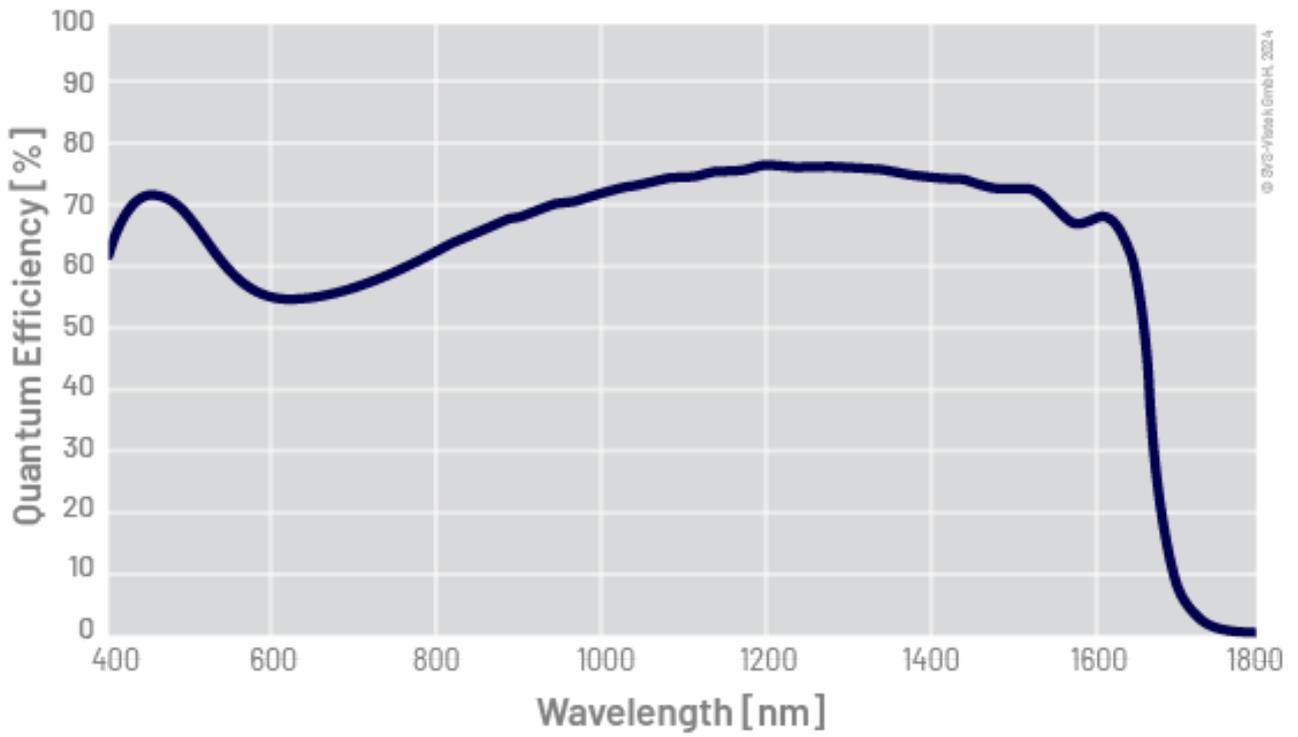
| | |
|---------|-----------------------------|
| 曝光模式: | Manual, Auto |
| 增益模式: | Auto, Manual |
| 图像控制功能: | FW Features - Image Control |

固件功能 - 相机控制

| | |
|----------|-------------------------------|
| 触发模式/同步: | INTERNAL,SOFTWARE,EXTERNAL |
| 相机控制功能: | User Sets, PWM(4), Sequencer, |

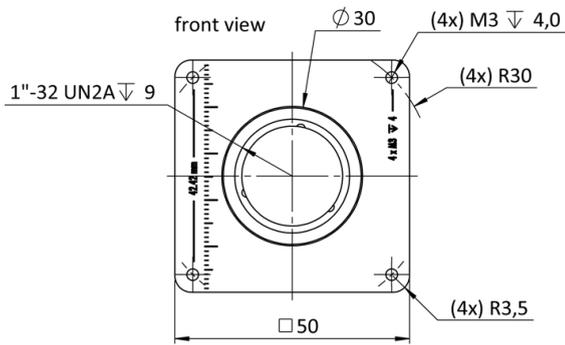
Quantum Efficiency

(not included: lens- and light source characteristics)

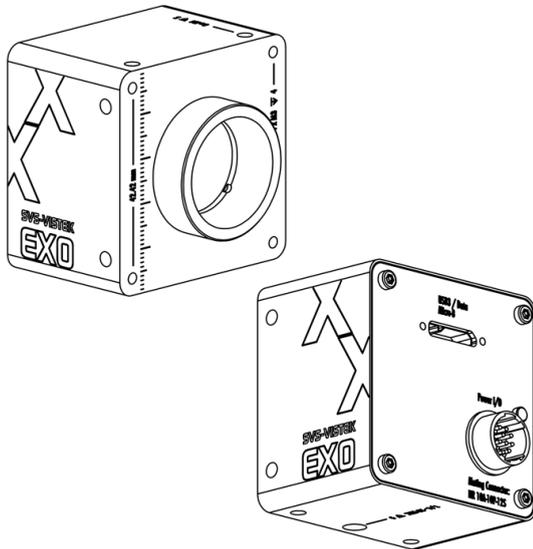
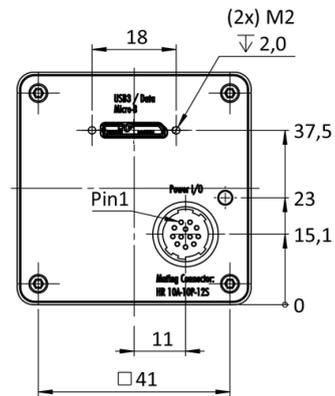


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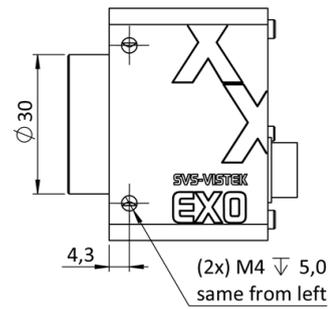
front



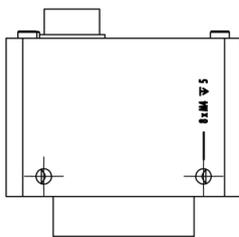
back



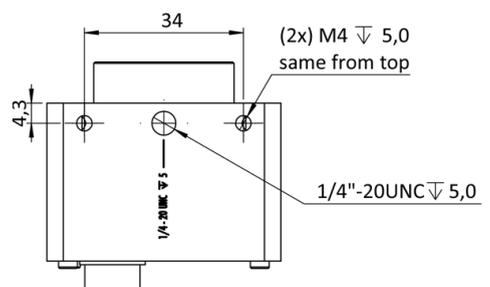
right side



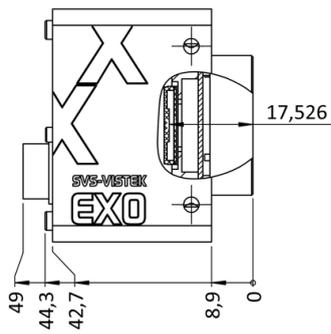
top



bottom



cross section



I/O pin assignment



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