Allied Vision

EXO SWIR

exo991MGE

General

Model:	exo991MGE
Product code:	F002204
Product series:	EXO SWIR
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono
Spectrum:	eXtended SWIR
Spectral range:	400 nm to 1700 nm
Resolution:	640 × 512 (0.30 MP)
Sensor model:	Sony IMX991 | InGaAs
Sensor architecture (material):	cmos
Shutter type(s):	global-shutter
Sensor size:	3.2 × 2.56 mm (4.1 mm, 4.1mm (Type 1/4))
Pixel size:	5.00 µm × 5.00 µm

Pixel formats

Sensor bit depth:	8-Bit,12-Bit
Monochrome pixel formats:	mono8, mono12

Imaging performance

Dynamic range:	57 dB

Timing and gain

Max. frame rate:	260 fps
Exposure time:	21 µs to 500.00 ms
Gain:	0.0 dB to 42.0 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
Power consumption:	External: 3.5 W (typical)

Operating conditions

Operating temperature (housing):	-10 °C to 60 °C

Mechanical properties

Body dimensions (L x W x H in mm):	43 × 50 × 50
IP class:	IP40
Lens mount(s):	C-Mount
Weight:	138 g

On-board memory and FPGA

Image buffer (RAM):	192 MByte
Non-volatile memory (Flash):	32 MByte

Interfaces

Digital interface:	gige
Interface connector:	(RJ-45)

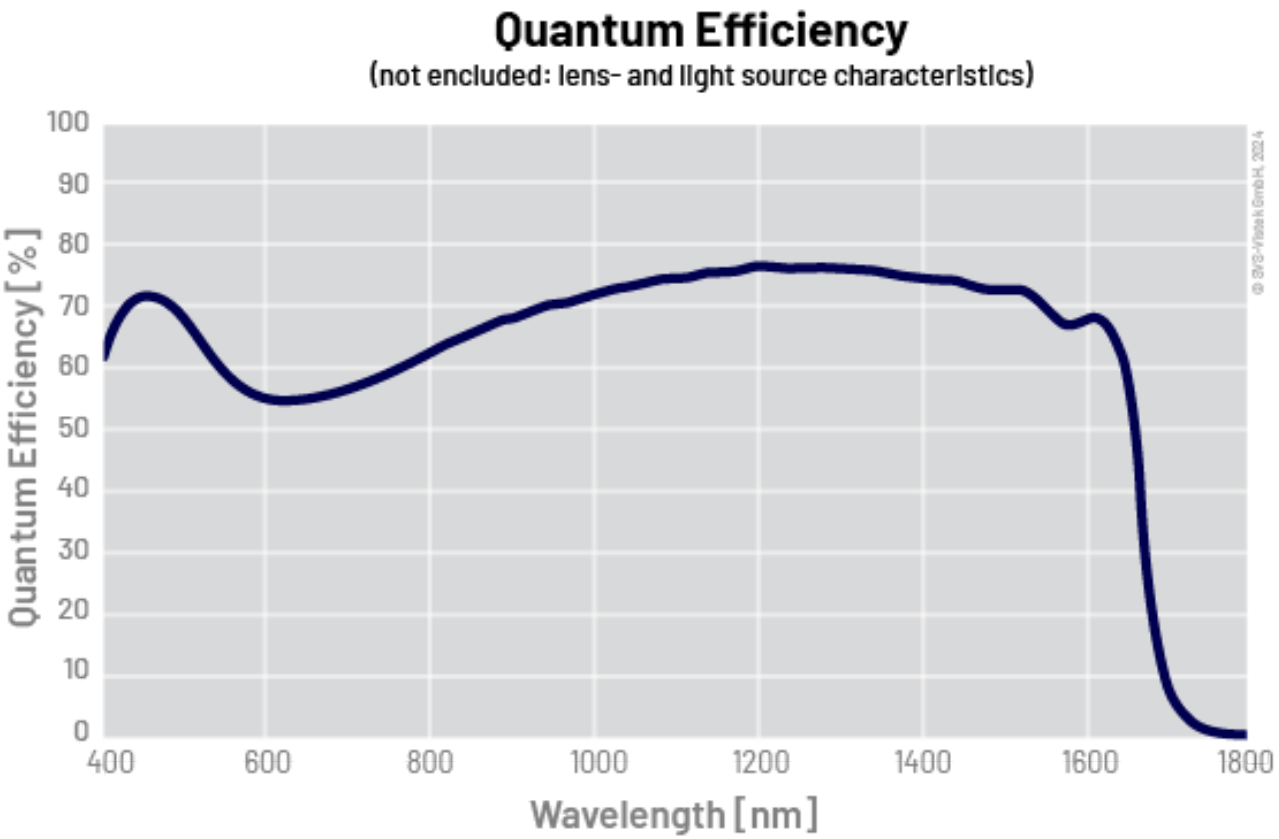
FW features - image control

Exposure modes:	Manual, Auto
Gain modes:	Auto, Manual
Image control features:	FW Features - Image Control

FW features - camera control

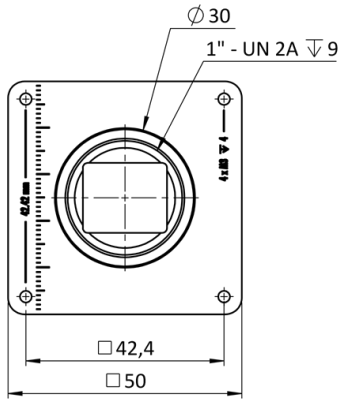
Trigger modes/sync:	INTERNAL,SOFTWARE,EXTERNAL
Camera control features:	User Sets, POE, PWM(4), Sequencer,

Quantum Efficiency

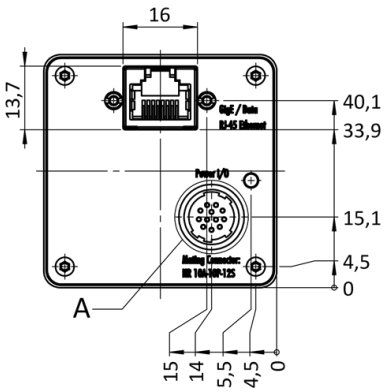


Technical Drawing

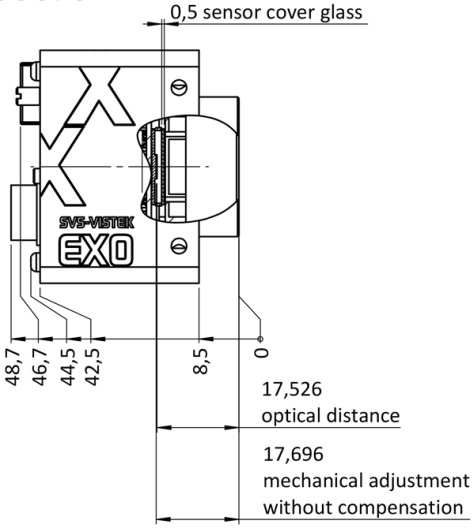
front



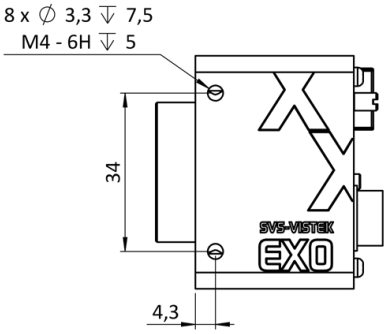
back



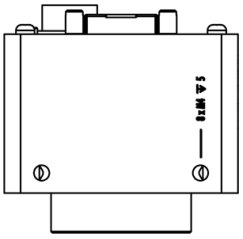
cross section



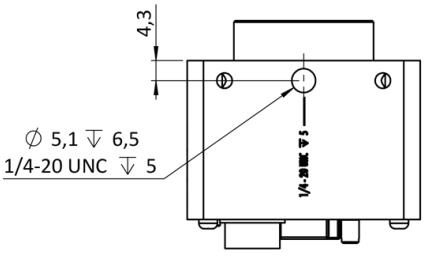
right side



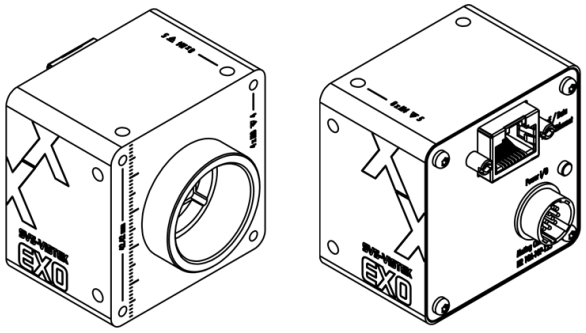
top



bottom

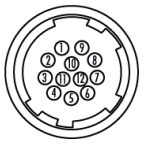


3D



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)