exo991MGE *(preliminary)*

EXO GigE SWIR

preliminary

The solid, CNC-milled unibody housing offers excellent temperature management for passively cooled SWIR sensors. The robust GigE interface can handle high network loads. In burst mode, the generous image memory supports rapid triggering of image sequences at speeds well above the GigE bandwidth.

Technical Highlights

- Thermally optimized aluminum unibody housing
- Integrated 4-channel LED strobe controller
- Burst mode, ROI, binning, lookup tables
- GigE Vision, GenICam 3.0, GenTL
- Vcc 12-24V, signal voltages TTL-24V
- IO interface with 2xIN, 4xOUT, Opto and RS232 with programmable timers, logic functions and sequencer

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Information accurate as to: 14.04.2021, errors and omissions excepted.
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SWIR Series exo991MGE *(preliminary)*

Please note: *This product is preliminary.*

Technical specifications might change.

Resolution	640 x 512 px
Frame rate (max.)	259 fps
Chroma	SWIR
Interface	GigE Vision

Sensor

Sensor	IMX991AABJ
Manufacturer	Sony
Sensor type	Area SWIR CMOS
Shutter type	global shutter
Sensor size (h x v)	3.2 x 2.56 mm
Optical diagonal	4.1 mm
Sensor format	4.1mm (Typ 1/4)
Pixel size (h x v)	5 x 5 µm

Camera

Exposure modes	MANUAL;AUTO
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	28 µs
Exposure time (max)	0.5 sec
Pixel format / max	8 bit,12bit / 12 bit
Gain modes	manual, auto
Dynamic range (max)	57 dB (dep. on environment)
Internal memory	256 MB SDRAM, 32 MB Flash

Feature Set

Manual white balance	yes
Automatic white balance	yes
AOI	yes
LUT	yes
Offset	yes
Readout control	yes
Binning	yes
Image flip	yes
Shading correction	yes
Defect pixel correction	yes
Sequencer	yes
Dynamic HotPixel Correction	yes

Housing

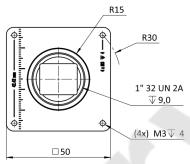
Lens mount	C-Mount
Dimensions (w x h x d)	50 x 50 x 42.7 mm
Weight	138 g
Operating temperature (housing)	-10 to 60 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP40

I/O-Interfaces

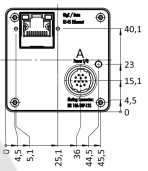
Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	4.5 W (dep. on operating mode)

Dimensions [mm]

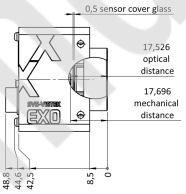
front



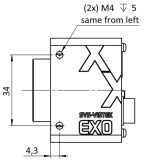
back



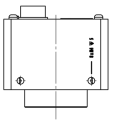
cross section



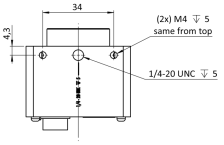
right side



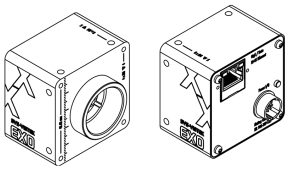
top



bottom

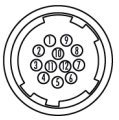


3D



Pinout Mating Connector

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)

preliminary