

# exo990MGE

**SWIR** 



The SWIR cameras based on the EXO and FXO series offer an extremely wide usable spectral range of 400-1700nm with the Sony SenSWIR sensor. Highly efficient thermal management of the housing is the basis of the outstanding dynamic range and homogeneity of the image. The integrated 4-channel strobe controller supports complex illumination and analysis scenarios.

## Technical Highlights

- > Switchable active cooling (FXO only)
- > GenlCam 3.0, GenTL
- > Integrated 4-channel LED strobe controller
- > I/O interface with 2xIN, 4xOUT, Opto and RS232
- > programmable timer, logic functions and sequencer
- > Two-Point NUC (Non Uniformity Correction)

ATTENTION: This product is subject to export control and requires written information on intended use and final destination!

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# SWIR / UV / Polarized Series exo990MGE

Resolution [MP]	1.3 MP	
Resolution (h x v)	1280 x 1024 px	
Frame rate (max.)	94.4 fps	
Chroma	SWIR	
Interface	GigE Vision	

Sensor	IMX990AABJ	
Manufacturer	Sony	
Sensor type	Area SWIR CMOS	
Shutter type	global shutter	
Sensor size (h x v)	6.4 x 5.12 mm	
Optical diagonal	8.2 mm	
Sensor format	8.2mm (Typ 1/2)	
Pixel size (h x v)	5 x 5 µm	

#### Camera

Exposure modes	MANUAL;AUTO
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	21 µs
Exposure time (max)	0.5 sec
Pixel format / max	mono8, mono12 / 12 bit
Gain modes	manual, auto
Dynamic range (max)	57 dB (dep. on environment)
Internal memory	256 MB SDRAM, 32 MB Flash

### Feature Set

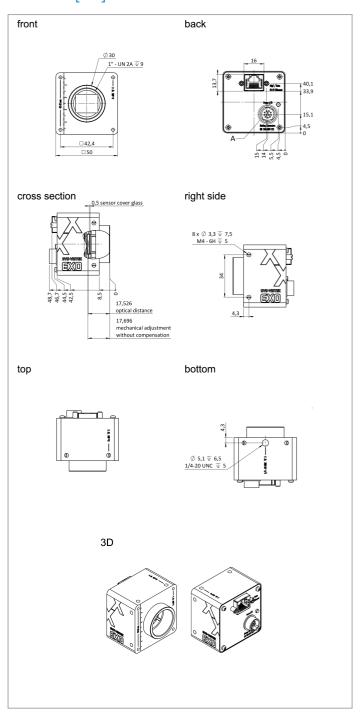
AOI	yes	
LUT	yes	
Offset	yes	
Readout control	yes	
Binning	yes	
Image flip	yes	
Two-Point NUC	yes	
Defect pixel correction	yes	
Sequencer	yes	
POE	yes	
Dynamic HotPixel Correction	yes	

#### Housing

Lens mount	C-Mount	
Dimensions (w x h x d)	50 x 50 x 42.5 mm	
Weight	138 g	
Operating temperature (housing)	-10 to 60 °C	
Ambient humidity	10 to 90 % (non-condensing)	
Protection class	IP40	

I/ U-Interraces			
	Input up to 24V	2 x	
	Input OPTO	1 x	

## Dimensions [mm]

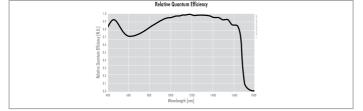


# Pinout Mating Connector

Hirose 1	2 Pin	1	VIN-	(GND)	7	OUT 1	(open drain)
		2	VIN+	(10 V to 25 V DC)	8	OUT 2	(open drain)
/// no		3	IN 4	(RXD RS232)	9	IN3+	(opto In+)
	뭐 )))	4	0UT 4	(TXD RS232)	10	IN3-	(opto In —)
(// 🐠	5.3//	5	IN 1	(0 - 24V)	11	OUT 3	(open drain)
	<i>)</i>	6	IN 2	(0-24V)	12	0 T U O	(open drain)

Spectral Response \*

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



 $^\star$  Sensor data - excludes camera cover- or IR-cut filter characteristics