

EXO GigE

exo541MGE



General

Model:	exo541MGE
Product code(s):	F002166
Product series:	EXO GigE
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	4,504 × 4,504 (20.30 MP)
Sensor model:	Sony IMX541LLA
Sensor architecture (material):	cmos
Shutter type(s):	global-shutter
Sensor size:	12.34 × 12.34 mm (17.45 mm, 17.5mm (Type 1.1))
Pixel size:	2.74 µm × 2.74 µm

Pixel formats

Sensor bit depth:	8-Bit, 12-Bit, 12-Bit
Monochrome pixel formats:	mono8, mono12packed

Imaging performance

Dynamic range: 72 dB

Timing and gain

Max. frame rate: 6 fps

Max. frame rate burst: 15 fps

Exposure time: 60 μ s (max)

Gain: 0.0 dB to 48.0 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 consumption: External: 4.5 W (typical)

Operating conditions

Operating temperature (housing): -10 °C to 65 °C

Mechanical properties

Body dimensions (L x W x H in mm): 43 × 50 × 50

Filter/protection glass: K9 - AR coating - 400-850nm

IP class: IP40

Lens mount(s): C-Mount

Weight: 143 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, External

Gain modes: Auto, Manual

FW features - image control

Image control features:

FW Features - Image Control

FW features - camera control

Trigger modes/sync:

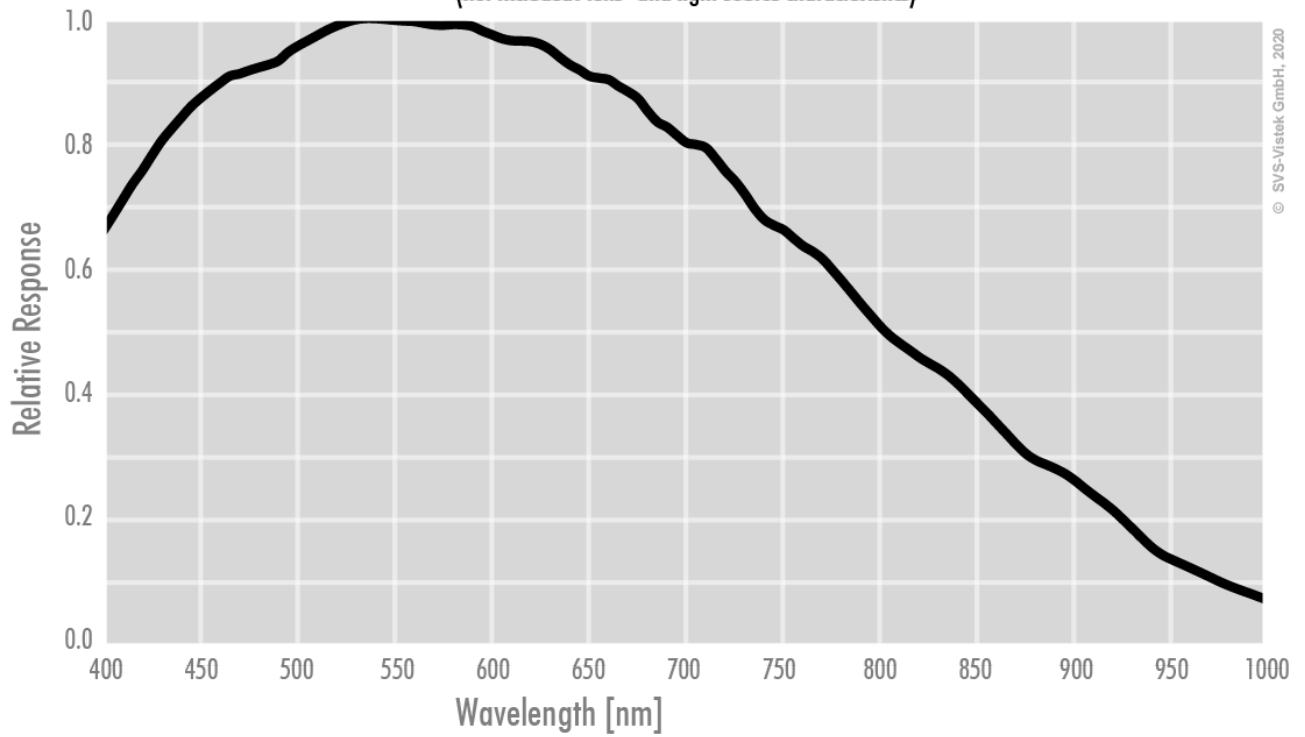
INTERNAL, SOFTWARE, EXTERNAL

Camera control features:

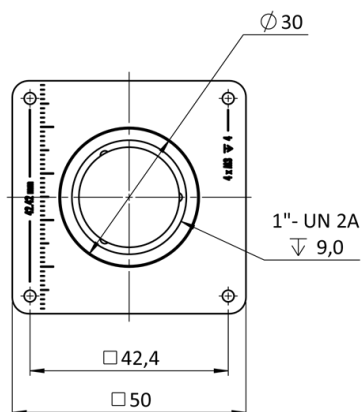
PTP, BurstMode, User Sets, POE, PWM(4), Sequencer,

Monochrome

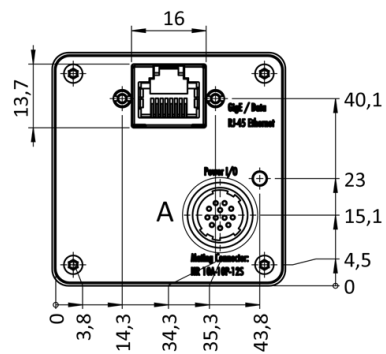
(not included: lens- and light source characteristics)



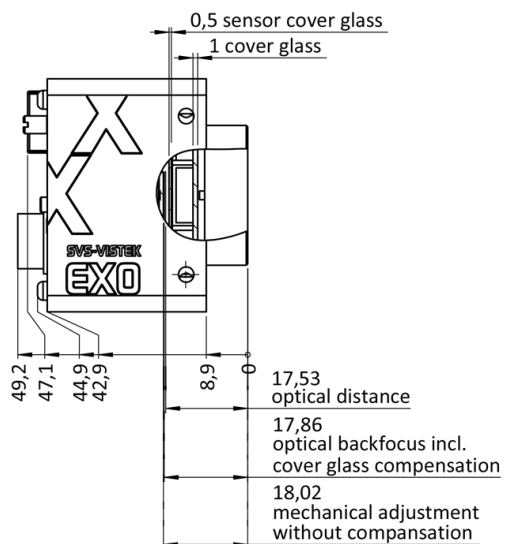
front



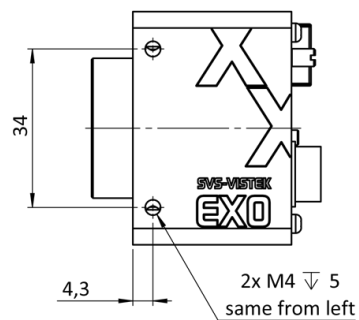
back



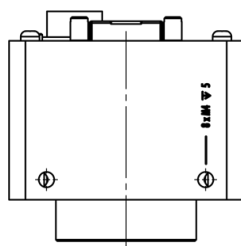
cross section



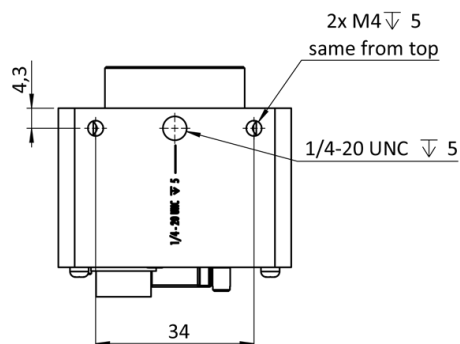
right side



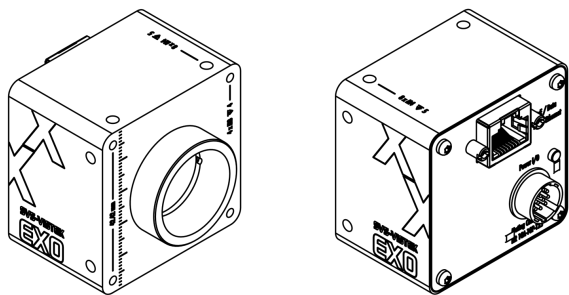
top



bottom

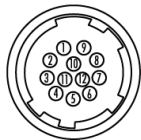


3D



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)