



General

Model:	exo174CGE
Product code:	F001558
Product series:	EXO GigE
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Color
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	1,920 × 1,200 (2.30 MP)
Sensor model:	Sony IMX174LQJ
Sensor architecture (material):	cmos
Shutter type(s):	global-shutter
Sensor size:	11.25 × 7.03 mm (13.27 mm, 13.4mm (Type 1/1.2))
Pixel size:	5.86 μm × 5.86 μm

Pixel formats

Sensor bit depth:	8-Bit,12-Bit,12-Bit
RGB pixel formats:	bayer8, bayer12packed

Imaging performance

Dynamic range: 72 dB

SNR: 44 dB

Timing and gain

Max. frame rate: 53.6

Max. frame rate burst: 71.9 fps

Exposure time: 25 μ s to 60 s

Gain: 0.0 dB to 18.0 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: 4.5 W (typical)

Operating conditions

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

Mechanical properties

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

Filter/protection glass: IR-Cut - 680nm

IP class: IP40

Lens mount(s): C-Mount

Weight: 140 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

FW features - image control

Gain modes: Auto, Manual

White balance modes: auto, manual

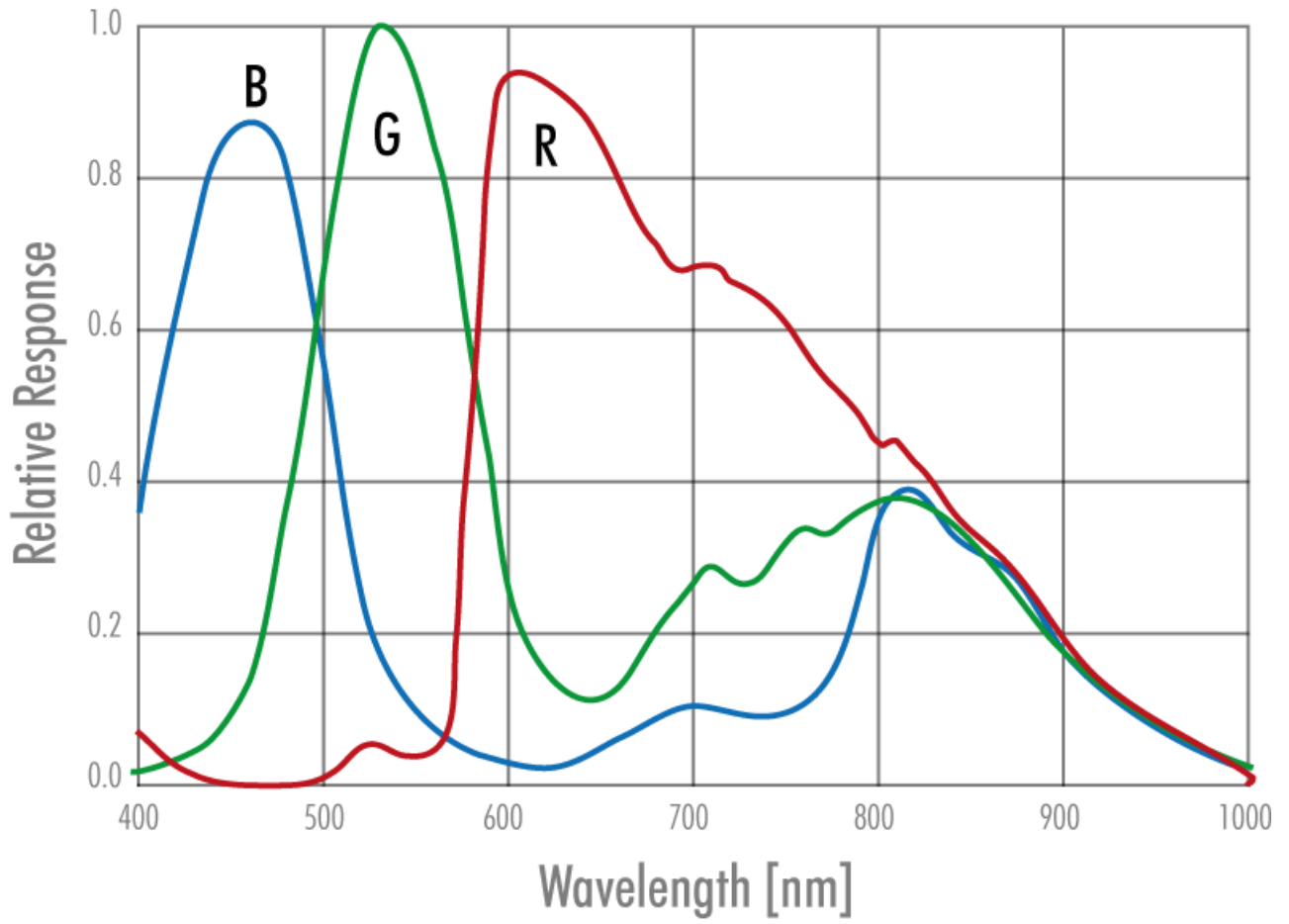
Image control features: FW Features - Image Control

FW features - camera control

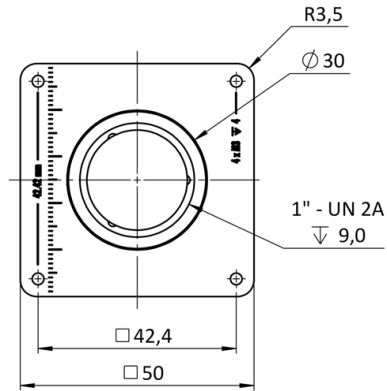
Trigger modes/sync: INTERNAL,SOFTWARE,EXTERNAL

Camera control features: PTP, BurstMode, User Sets, POE, PWM(4), Sequencer,

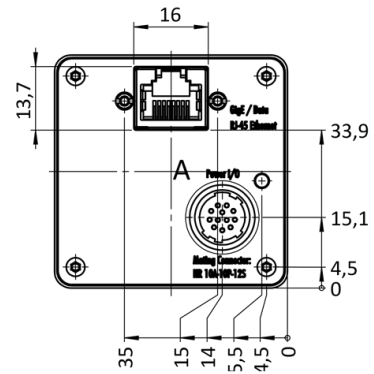
Quantum Efficiency



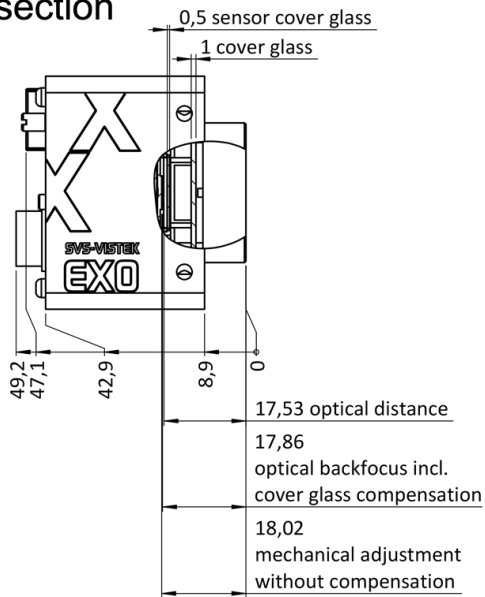
front



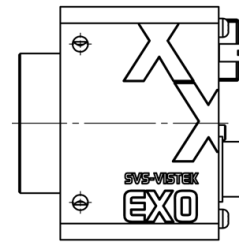
back



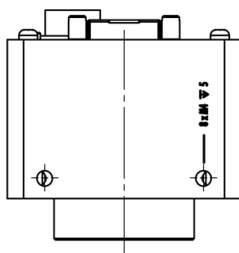
cross section



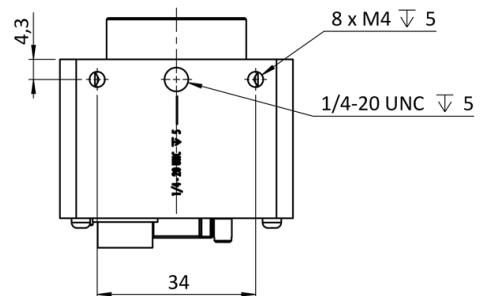
right side

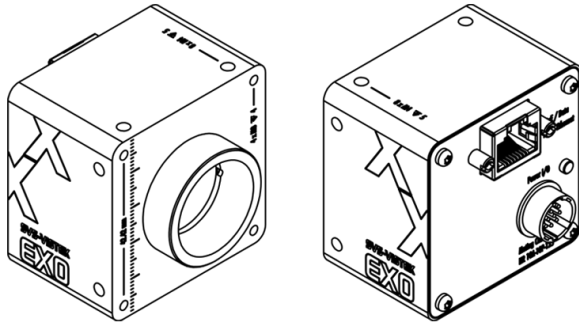


top



bottom





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)