

EXO USB3

exo342CU3



General

Model:	exo342CU3
Product code:	F001967
Product series:	EXO USB3
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Color
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	6,464 × 4,852 (31.40 MP)
Sensor model:	Sony IMX342
Sensor architecture (material):	cmos
Shutter type(s):	global-shutter
Sensor size:	22.3 × 16.74 mm (27.88 mm, 27.9mm (APS-C))
Pixel size:	3.45 μm × 3.45 μm

Pixel formats

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

Imaging performance

Dynamic range: 70.5 dB

SNR: 39.9 dB

Timing and gain

Max. frame rate: 12 fps

Exposure time: 47 μ s to 60 s

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: 6 W (typical)

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm): 46 × 58 × 58

Filter/protection glass: K9 - AR coating

IP class: IP40

Lens mount(s): M42

Weight: 320 g

On-board memory and FPGA

Image buffer (RAM): 192 MByte

Non-volatile memory (Flash): 32 MByte

Interfaces

Digital interface: usb3.0

Interface connector: (Micro-B)

FW features - image control

Exposure modes: Manual, Auto, External

Gain modes: Auto, Manual

FW features - image control

White balance modes: auto, manual

Image control features: FW Features - Image Control

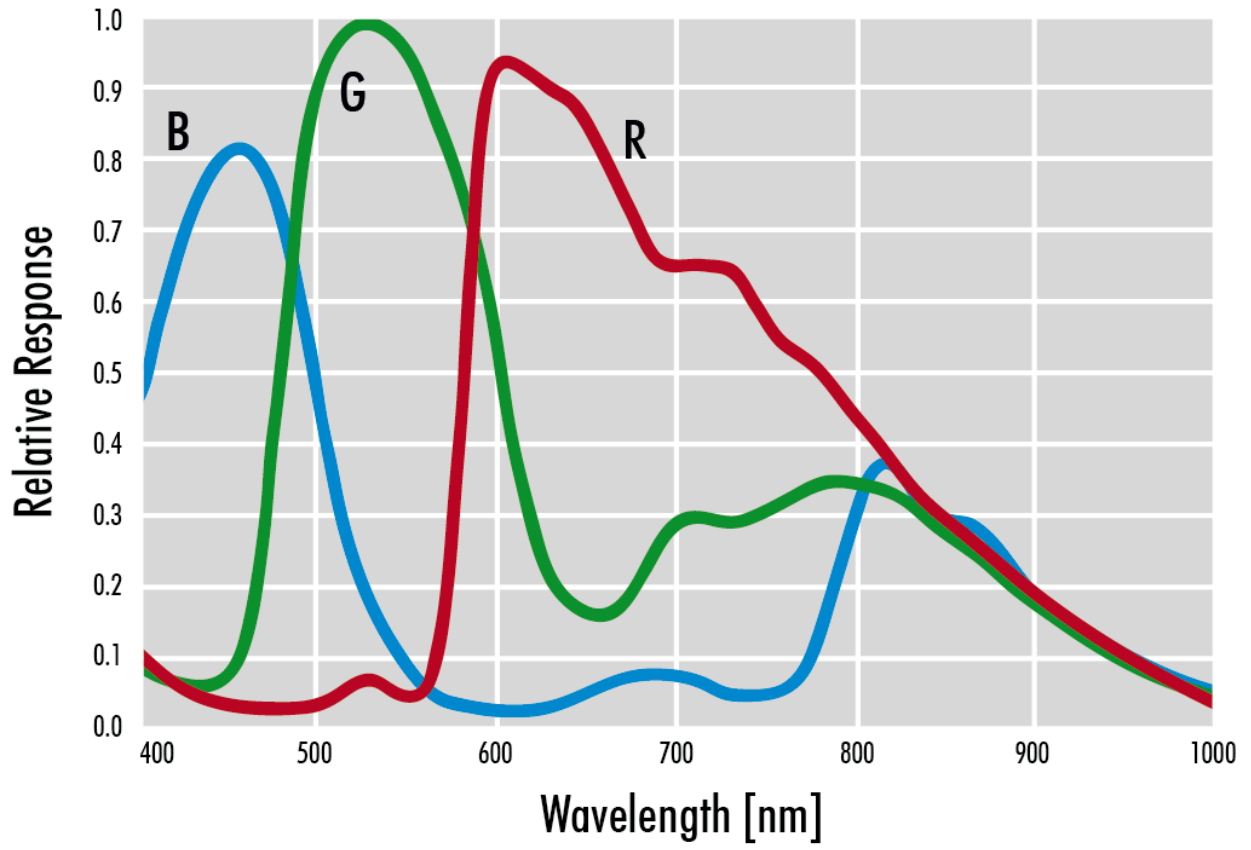
FW features - camera control

Trigger modes/sync: INTERNAL,SOFTWARE,EXTERNAL

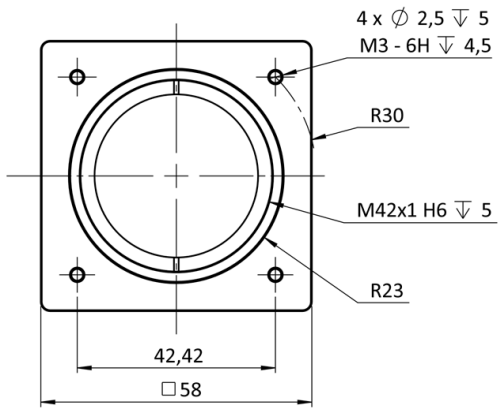
Camera control features: User Sets, PWM(4), Sequencer,

Quantum Efficiency

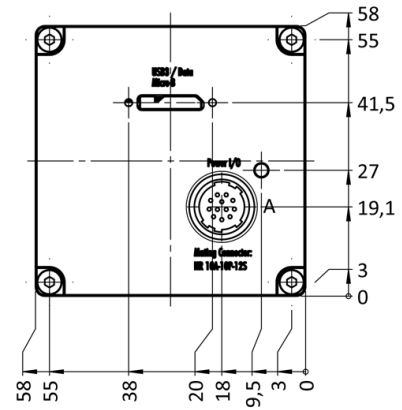
Sensor data – excludes camera cover- or IR-cut filter characteristics



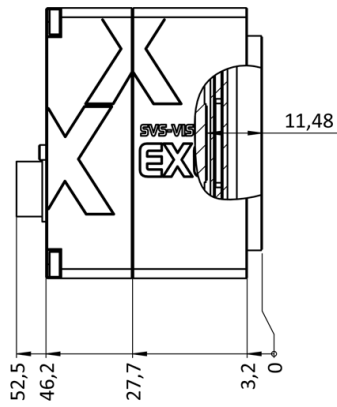
front



back



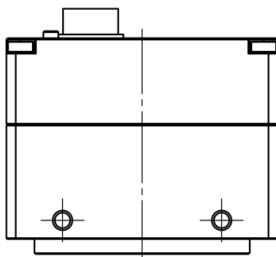
cross section



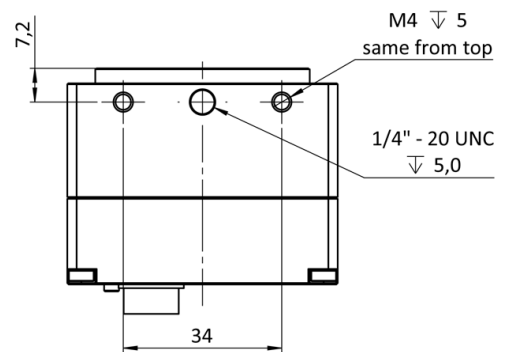
right side



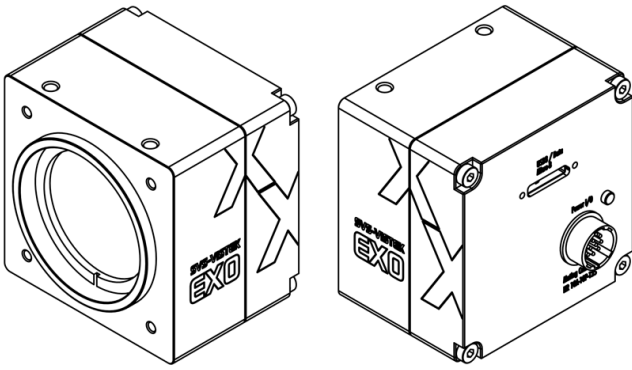
top



bottom



3D



I/O pin assignment



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)