

EXO USB3

exo250MU3



General

Model:	exo250MU3
Product code:	F001685
Product series:	EXO USB3
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	2,448 × 2,048 (5.00 MP)
Sensor model:	Sony IMX250LLR
Sensor architecture (material):	cmos
Shutter type(s):	global-shutter
Sensor size:	8.45 × 7.07 mm (11.01 mm, 11.1mm (Type 2/3))
Pixel size:	3.45 μm × 3.45 μm

Pixel formats

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

Imaging performance

Dynamic range: 72 dB

SNR: 40 dB

Timing and gain

Max. frame rate: 75

Exposure time: 21 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: 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: K9 - AR coating - 400-850nm

IP class: IP40

Lens mount(s): C-Mount

Weight: 138 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

Image control features:

FW Features - Image Control

FW features - camera control

Trigger modes/sync:

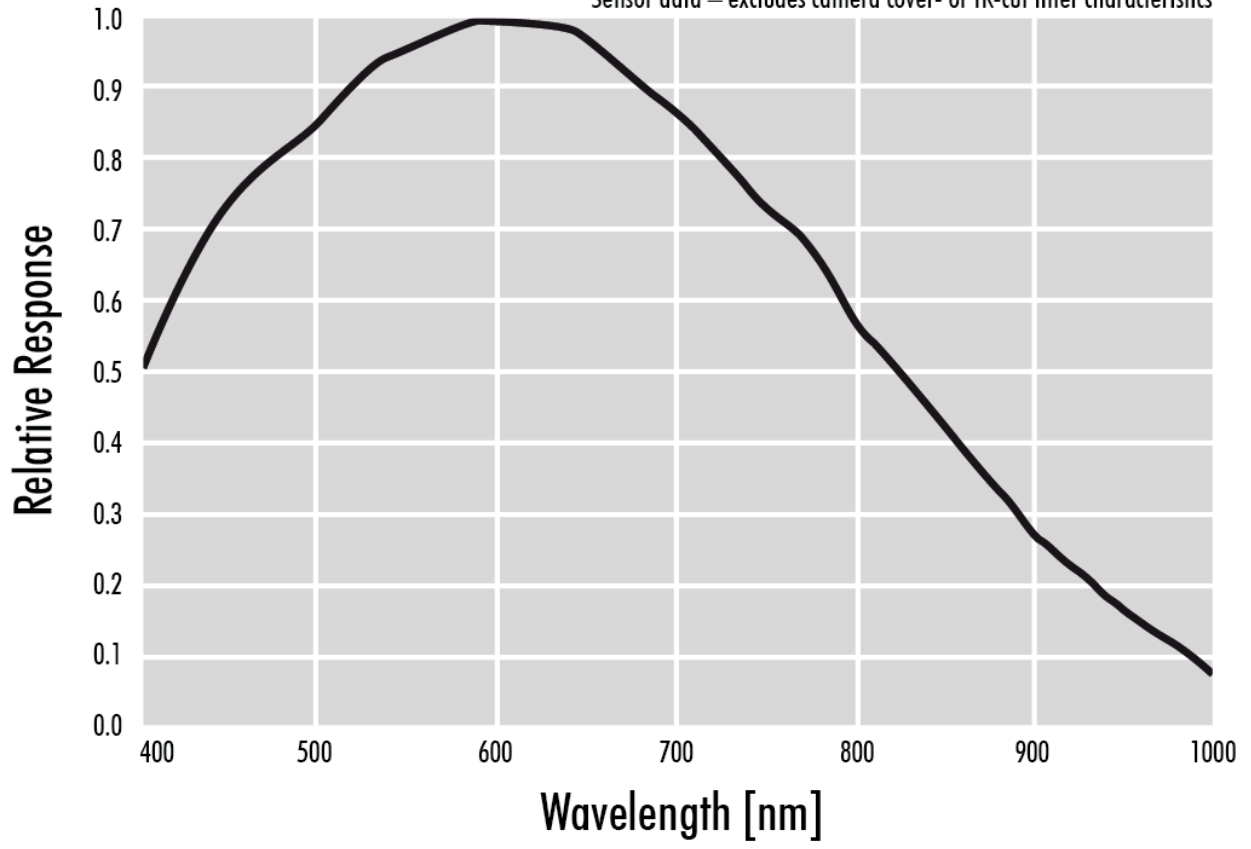
INTERNAL, SOFTWARE, EXTERNAL

Camera control features:

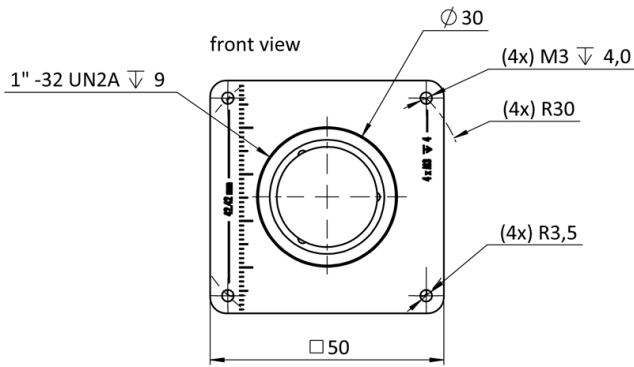
User Sets, PWM(4), Sequencer,

Monochrome

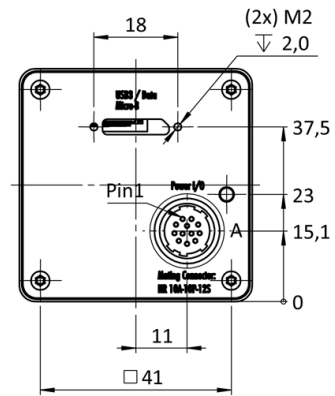
Sensor data – excludes camera cover- or IR-cut filter characteristics



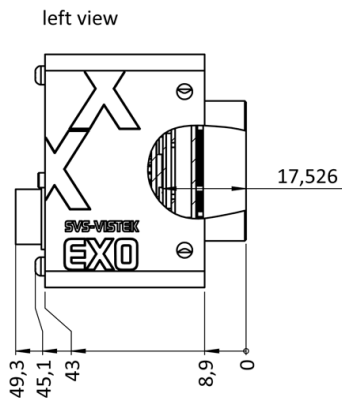
front



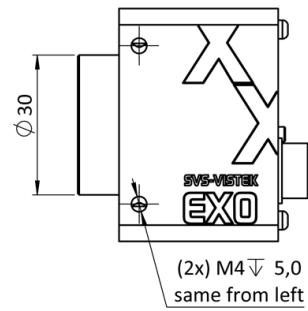
back



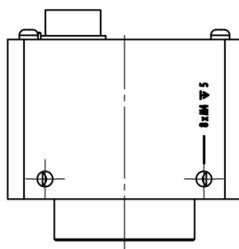
cross section



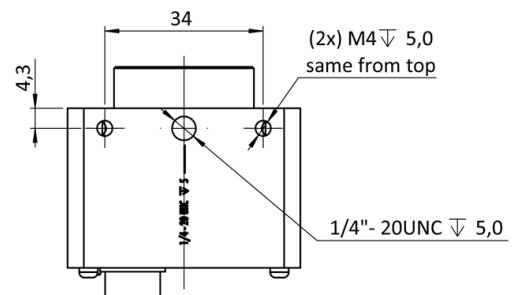
right side

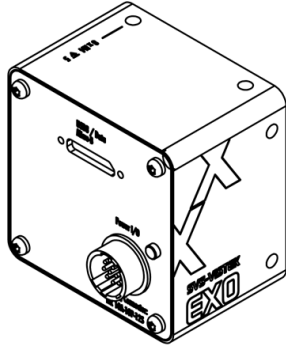


top



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)