

exo253MU3

EXO USB3 Vision



The SVCam EXO is one of the most flexible and scalable cameras for the industrial market segment. The USB3 Vision interface is easy to integrate in your system, with a data rate up to effective 360 MB/sec. The time to market for applications is shortened, saving cost even further. Power the camera via the interface and reduce cable complexity.

Technical Highlights

- > Up to 360 MB/s effective transfer rate
- > Leverages existing infrastructure for cables and connectors
- > Powers camera with up to 4.5 W
- > GenICam compliant
- > Cost effective / Easy implementation and interfacing

EXO Series

exo253MU3

Resolution [MP]	12.3 MP
Resolution (h x v)	4096 x 3000 px
Frame rate (max.)	30 fps
Chroma	mono
Interface	USB3 Vision

Sensor

Sensor	IMX253LLR
Manufacturer	Sony
Sensor type	Area CMOS
Shutter type	global shutter
Sensor size (h x v)	14.13 x 10.35 mm
Optical diagonal	17.52 mm
Sensor format	1.1 "
Pixel size (h x v)	3.45 x 3.45 μm

Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	28 μs
Exposure time (max)	1 sec (external ∞)
Pixel format / max	mono8, mono12packed / 12 bit
Gain modes / max	manual, auto / 48 dB
S/N ratio (max)	39.6 dB (dep. on environment)
Dynamic range (max)	72 dB (dep. on environment)
Internal memory	256 MB SDRAM, 32 MB Flash

Feature Set

AOI	yes
LUT	yes
Offset	yes
Binning	yes
Image flip	yes
Shading correction	yes
Defect pixel correction	yes
Sequencer	yes

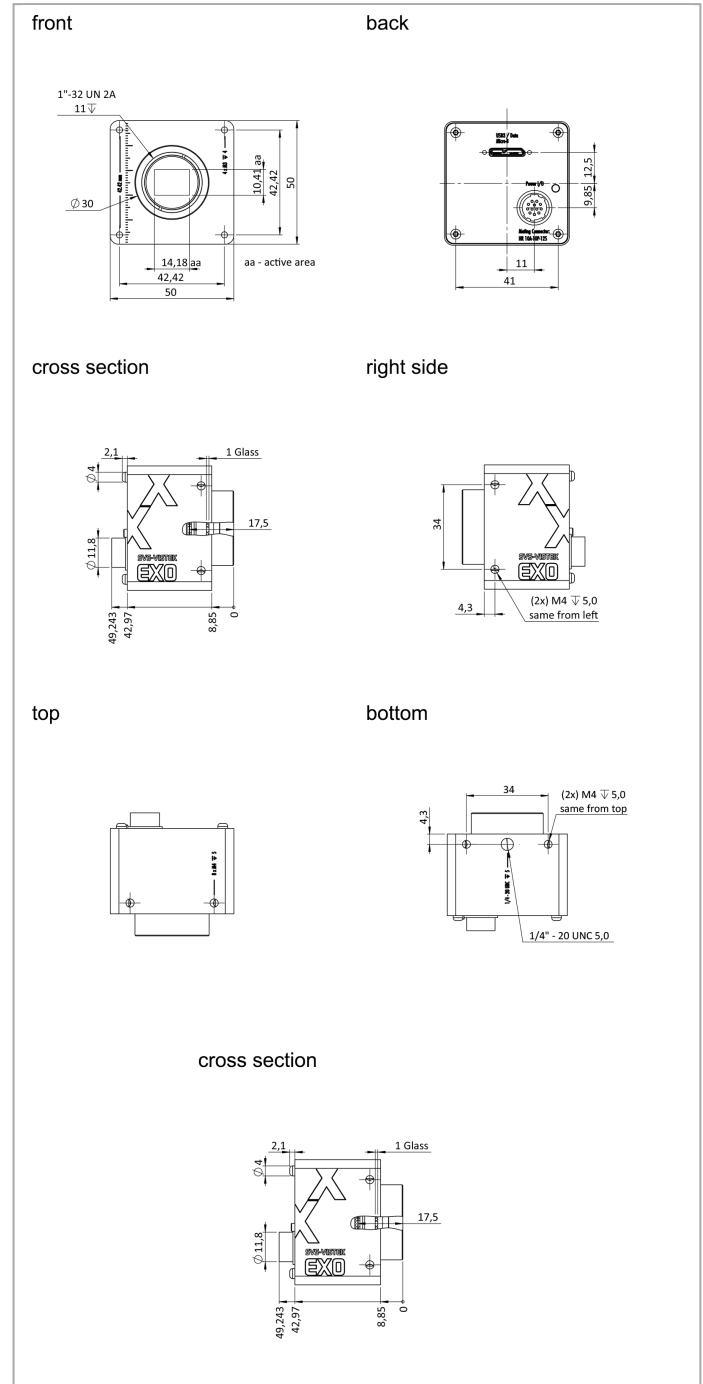
Housing

Lens mount	C-Mount
Dimensions (w x h x d)	50 x 50 x 43 mm
Weight	138 g
Operating temperature (housing)	-10 to 60 $^{\circ}\text{C}$
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP40

I/O-Interfaces

Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x

Dimensions [mm]

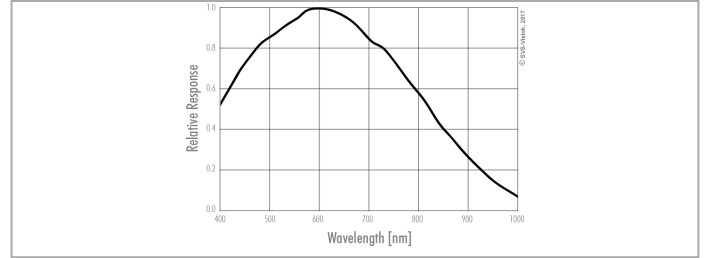


Pinout Mating Connector

Hirose 12 Pin	1	2	3	4	5	6	7	8	9	10	11	12
	VIN -	VIN +	IN 4	OUT 4	IN 1	IN 2	(GND)	OUT 1	OUT 2	IN 3 +	OUT 3	OUT 0
		(10 V to 25 V DC)	(RXD RS232)	(TXD RS232)	(0-24V)	(0-24V)		(open drain)	(open drain)	(opto In +)	(open drain)	(open drain)

Spectral Response *

Power supply	10 to 25 V (DC)
Power consumption	4.5 W (dep. on operating mode)



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