exo174CGE

EXO GigE

Form follows requirements

With uniform size and standard interfaces comes simple interchangeability, allowing the system integrator to easily adapt a solution to varying conditions and requirements - with minimal design effort. SVS-Vistek meets precisely these needs. The EXO series is a perfect match with its uniform form factor and feature set, combined with industry standard interfaces. A solution for virtually every case, allowing smooth and effortless up- or downscaling. Once designed in, the implementations can be varied endlessly.

SVCam EXO series cameras with GigE Vision interface give your applications an extreme scalability. Quick and easy hardware interchangeability results in shorter design cycles and reduced development costs. Further value is added to your application by a virtually limitless feature set. As an example, the 4I/O LED driver with standardized software control.

Technical Highlights

- 2.3 to 20 Mega Pixel
- progressive scan / global shutter sensors
- logical trigger functions
- programmable sequencer for shutter and LED light
- SDK for Windows (32/64 Bit) und Linux available
- GenICam Standard compliant
- up to 120 MB/s data rate
- cable length up to 100 Meter
- broadcast-safe

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EXO Series exo174CGE

Resolution	1920 x 1200 px
Frame rate (max.)	52 fps
Frame rate burst mode (max.)	72 fps
Chroma	color
Interface	GigE Vision

Sensor

Sensor	IMX174LQJ
Manufacturer	Sony
Sensor type	Area CMOS
Shutter type	global shutter
Sensor size (h x v)	11.25 x 7.03 mm
Optical diagonal	13.27 mm
Sensor format	1/1.2 "
Pixel size (h x v)	5.86 x 5.86 µm

Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	20 µs
Exposure time (max)	1 sec (external ∞)
Pixel format / max	bayer8, bayer12packed / 12 bit
Gain modes / max	manual, auto / 18 dB
S/N ratio	44 dB (dep. on environment)
Dynamic range	72 dB (dep. on environment)
Internal memory	256 MB SDRAM, 32 MB Flash

Feature Set

Manual white balance	yes
Automatic white balance	yes
AOI	yes
LUT	yes
Offset	yes
Readout control	yes
Binning	yes
Image flip	yes
Sequencer	yes

Housing

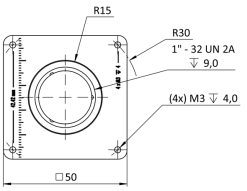
Lens mount	C-Mount
Dimensions (w x h x d)	50 x 50 x 33.9 mm
Weight	138 g
Operating temperature (housing)	-10 to 60 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP40

I/O-Interfaces

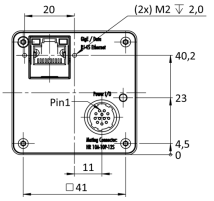
Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x

Dimensions [mm]

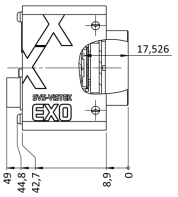
front



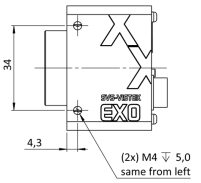
back



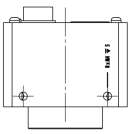
cross section



right side



top



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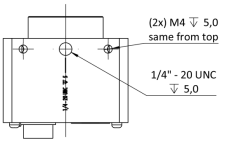
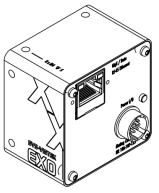
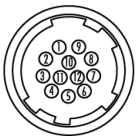




Pinout

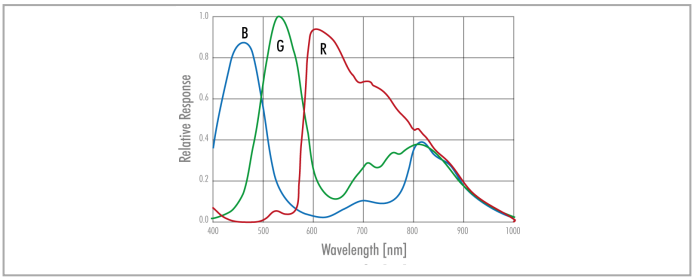
Hirose 12 Pin



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)

I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	4.5 W (dep. on operating mode)

Spectral Response *



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