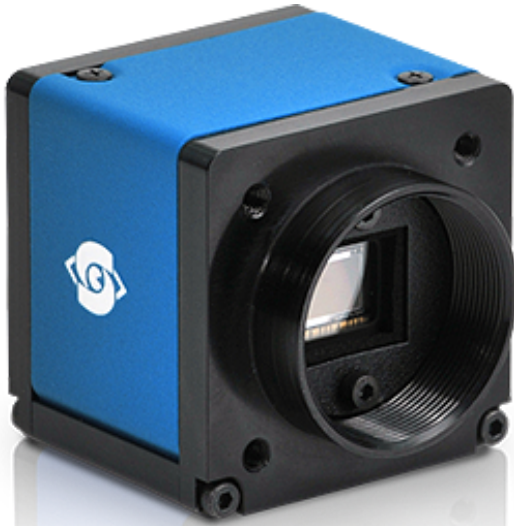


# eco414CVGE

ECO Standard



## One of the smallest GigE Vision Cameras in the world

The SVScam ECO-series is compelling by virtue of its extremely compact design (38 x 38 x 33 mm) and offers the best value for money. The SVScam-ECO is small, robust, fit for the factory floor, manufactured with precision, safe to connect, offers an LED controller and is PLC ready and reliable.

## Technical Highlights

- > progressive scan sensor
- > 2 x outputs for direct drive and control of LED lighting
- > up to 120 MB/s data rate
- > GigE Vision and GenICam-Standards compliant
- > Industrial I/O interface for easy Integration
- > large range of Software and Algorithms
- > broadcast-safe

## ECO Series

## eco414CVGE

Resolution	656 x 492 px
Frame rate (max.)	125 fps
Chroma	color
Interface	GigE Vision
<b>Sensor</b>	
Sensor	ICX414AQ
Manufacturer	Sony
Sensor type	Area CCD
Shutter type	global shutter
Sensor architecture	interline transfer
Readout type	progressive scan
Sensor size (h x v)	6.49 x 4.87 mm
Optical diagonal	8.12 mm
Sensor format	1/2 "
Pixel size (h x v)	9.9 x 9.9 $\mu\text{m}$

### Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	21 $\mu\text{s}$
Exposure time (max)	60 sec (external $\infty$ )
Pixel format / max	bayer8, bayer12 / 12 bit
Gain modes / max	manual, auto / 30 dB
Dynamic range (max)	58 dB (dep. on environment)
Internal memory	64 MB SDRAM, 8 MB Flash

### Feature Set

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

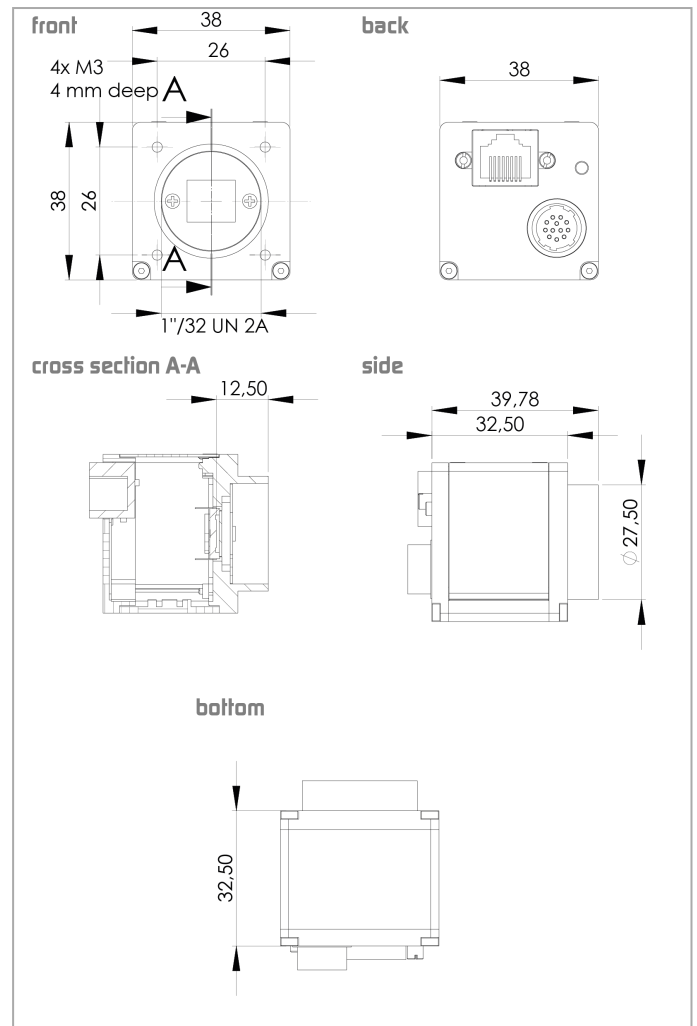
### Housing

Lens mount	CS-Mount
Dimensions (w x h x d)	38 x 38 x 33 mm
Weight	85 g
Ambient temperature	-10 to 45 $^{\circ}\text{C}$
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP40


### I/O-Interfaces

Input up to 24V	2 x
Output open drain	2 x
I/O RS-232	1 x
I/O RS-422	1 x
Power supply	10 to 25 V (DC)
Power consumption	4.5 W (dep. on operating mode)

## Dimensions [mm]



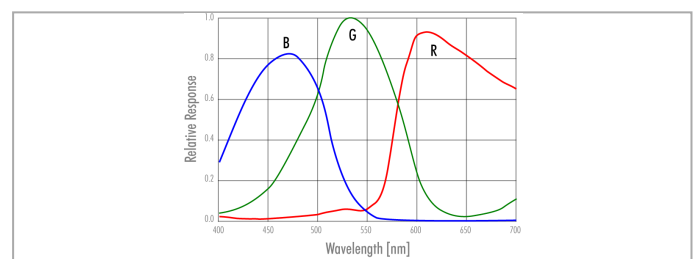
## Pinout Mating Connector



**Hirose Pinout**

Pin	Signal ECO, ECO2, EVO, HR (CL medium, GigE only)	Signal EXO, HR (CL Deca, CXP), SHR	Signal 4 I/O for option ECO
1	V IN- (GND)	V IN- (GND)	V IN- (GND)
2	V IN+ (10 – 25V)	V IN+ (10 – 25V)	V IN+ (10 – 25V)
3	RxD (RS232) not available for PoE versions	IN 4 RxD (RS232)	not connected
4	TxD (RS232) not available for PoE versions	OUT 4 TxD (RS232)	not connected
5	IN 1 (0 – 24 V)	IN 1 (0 – 24 V)	IN 1 (0 – 24 V)
6	IN 2 (0 – 24 V)	IN 2 (0 – 24 V)	IN 2 (0 – 24 V)
7	OUT 1 (open drain)	OUT 1 (open drain)	OUT 1 (open drain)
8	OUT 2 (open drain)	OUT 2 (open drain)	OUT 2 (open drain)
9	IN 3+ (RS422)	IN 3+ (opto IN +)	IN 3 (0 – 24 V)
10	IN 3- (RS422)	IN 3- (opto IN -)	IN 4 (0 – 24 V)
11	OUT 3+ (RS422)	OUT 3 (open drain)	OUT 3 (open drain)
12	OUT 3- (RS422)	OUT 0 (open drain)	OUT 4 (open drain)
	Shielding	Shielding	Shielding

## Spectral Response \*



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

