

# eco414CVGE67

ECO IP67 »BlackLine«



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#### Dust tight and protected against water in harmful quantity

Factory automation is dependent on reliable and efficient solutions. For this to happen, the components for machinery, controls and industrial image processing need to work in total harmony. SVS-VISTEK's "BlackLine"-standard makes it easier and more cost efficient to integrate the delicate image processing parts even in harsh environments.

The SVCam-ECO »BlackLine« is equipped with a waterproof housing and a M12 connector concept for industrial field wiring.

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

### **Technical Highlights**

- > IP67 protection class (including lens tube)
- > 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

## eco414CVGE67

Resolution	656 x 492 px		
Frame rate (max.)	125 fps		
Chroma	color		
Interface	GigE Vision		
Sensor			
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 µm		

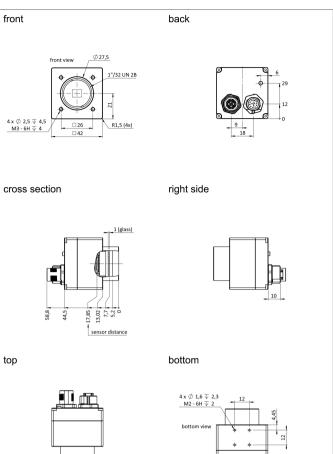
#### Camera

Exposure modes	MANUAL;AUTO;EXTERNAL			
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL			
Exposure time (min)	21 µs			
Exposure time (max)	60 sec (external ∞)			
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	C-Mount
Dimensions (w x h x d)	42 x 42 x 31.5 mm
Weight	120 g
Ambient temperature	-10 to 45 $^{\circ}\text{C}$
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP67
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

top

	2 - I/O nnector		RJ45 to Connecto		•
Pin	Color Code	Signal	Color Code	Pin RJ45	Pin M12
1	brown	V IN+ (10-25V)	white / orange	1	1
2	blue 🔲	V IN- (GND)	orange	2	2
3	white 🗆	RxD (RS232) not available for PoE versions	white / green	3	3
4	green 🔲	TxD (RS232) not available for PaE versions	blue	4	8
5	pink 🔲	IN 1 (0-24 V)	white / blue	5	7
6	yellow 📃	IN 2 (0-24 V)	green	6	4
7	black 🔳	OUT 1 (open Drain max. 24 V, 0.3 A)	white / brown	7	5
8	grey 🔲	OUT 2 (open Drain max. 24 V, 0.3 A)	brown	8	6
9	red 📕	IN 3 + (RS422)	· · · · · · · · · · · · · · · · · · ·		
10	violet 🔲	IN 3 - (RS422)			
11	grey/pink 🔲	0UT 3+(RS422)			
12	red / blue 🛛 🗖	0UT 3 - (RS422)			
	yellow/green 🗖	Shielding			

# Spectral Response \*



 $^{\star}$  Sensor data — excludes camera cover- or IR-cut filter characteristics