

HR 10 GigE

# hr342CXGE

The HR 10GigE series with its high-end high-resolution CMOS sensors permits making full use of the sensor bandwidth. 10GigE delivers up to 1.1 GB/s of image data with distances up to 100 m.

The clean design according to well established standards like GigE Vision, 10GigE Vision and GenICam ensure rapid integration into the final application. The camera features a rich choice of industrial hardware and software features. Burst mode enables even higher trigger frequencies.

Best suited for applications such as optical metrology, surface control, quality control or monitoring of large areas.



## Technical Highlights

- Defect pixel correction, lens shading correction
- ROI, LUT, binning, offset, gamma, auto exposure
- GenICam interface with GenTL driver
- Integrated 4-channel power LED strobe controller
- POE (Power Over Ethernet)
- M58 lens thread (F-mount optional)
- Industrial TTL-24V I/O interface with SafeTrigger, programmable logic functions, sequencers and timers, RS232



## Specifications

Resolution [MP]	31.4 MP
Resolution (h x v)	6464 x 4852 px
Frame rate (max.)	35.4 fps
Chroma	color
Interface	10GigE Vision (RJ-45)

## Sensor

Sensor	IMX342LQA
Manufacturer	Sony
Sensor type	Area CMOS
Shutter type	global shutter
Sensor size (h x v)	22.3 x 16.74 mm
Optical diagonal	27.88 mm
Sensor format	27.9mm (APS-C)
Pixel size (h x v)	3.45 x 3.45 $\mu\text{m}$

## Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	19 $\mu\text{s}$
Exposure time (max)	10 sec (external $\infty$ )
Pixel format / max	bayer8, bayer12 / 12 bit
Gain modes / max	manual, auto / 48 dB
S/N ratio (max)	39.9 dB (dep. on environment)
Dynamic range (max)	70.5 dB (dep. on environment)
Internal memory	512 MB SDRAM, 32 MB Flash

## Feature Set

Manual white balance	yes
Automatic white balance	yes
LUT	yes
Offset	yes
Binning	yes
Image flip	yes
Shading correction	yes (external)
Defect pixel correction	yes
Sequencer	yes
POE	yes (POE+) optional

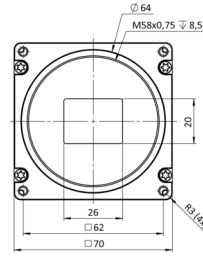
## Housing

Lens mount	M58x0.75
Dimensions (w x h x d)	70 x 70 x 79.8 mm
Weight	400 g
Ambient temperature	-10 to 45 °C
Protection class	IP30
Filter-/Coverglass	N-BK7 - AR coating

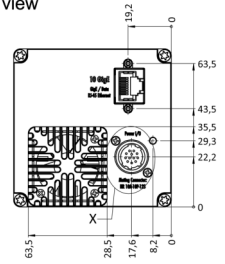
## I/O-Interfaces

Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	16 W (dep. on operating mode)

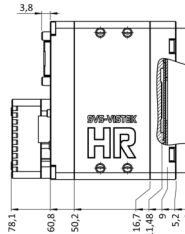
front view



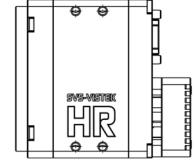
back view



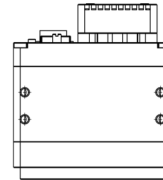
cross section



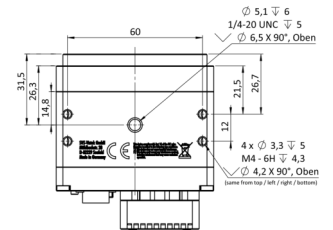
right view



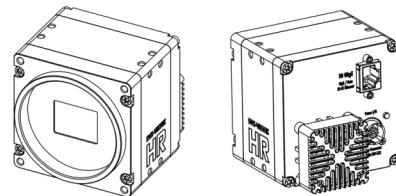
top view



bottom view

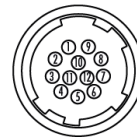


3D view



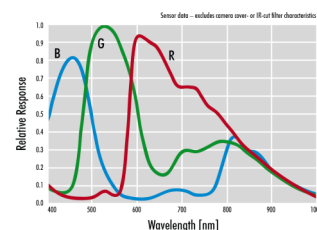
## Pinout Mating Connector

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)

## Spectral Response \*



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

**SVS-VISTEK GMBH**

© 2024 SVS-Vistek GmbH

Ferdinand-Porsche-Str. 3 82205 Gilching Germany phone +49 8105 3987-60 info@svs-vistek.com