

# HR 10GigE

hr455MXGE



## General

Model:	hr455MXGE
Product code:	F004098
Product series:	HR 10GigE
Status:	Available

## Sensor

Sensor type:	Area scan
Chroma:	Mono
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	9,568 × 6,380 (61.00 MP)
Sensor model:	Sony IMX455ALK
Sensor architecture (material):	cmos
Shutter type(s):	rolling-shutter
Sensor size:	35.98 × 23.99 mm (43.24 mm, 43.3mm (Type 2.7))
Pixel size:	3.76 μm × 3.76 μm

## Pixel formats

Sensor bit depth:	8-Bit, 12-Bit, 16-Bit
Monochrome pixel formats:	mono8, mono12, mono16

## Imaging performance

Dynamic range:	81.4 dB
SNR:	47 dB

## Timing and gain

Max. frame rate:	18
Exposure time:	34 $\mu$ s to 60 s
Gain:	0.0 dB to 36.0 dB

## I/Os and power

Non-isolated lines:	0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 4 x Open drain output,
Specific non-isolated lines:	1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,
Opto-isolated lines:	1 x Optical isolated input, 0 x Optical isolated input,
Power supply:	10 to 25VDC, Power over Ethernet (POE+, in option -P)
Power consumption:	External: 18 W (typical)

## Operating conditions

Operating temperature (housing):	-10 °C to 60 °C
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## Mechanical properties

Body dimensions (L x W x H in mm):	78 x 70 x 70
Filter/protection glass:	N-BK7 - AR coating
IP class:	IP30
Lens mount(s):	M58x0.75
Weight:	420 g

## On-board memory and FPGA

Image buffer (RAM):	448 MByte
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## Interfaces

Digital interface:	10gige
Interface connector:	(RJ-45)

## FW features - image control

Exposure modes:	Manual, Auto, External
Gain modes:	Auto, Manual
Image control features:	FW Features - Image Control

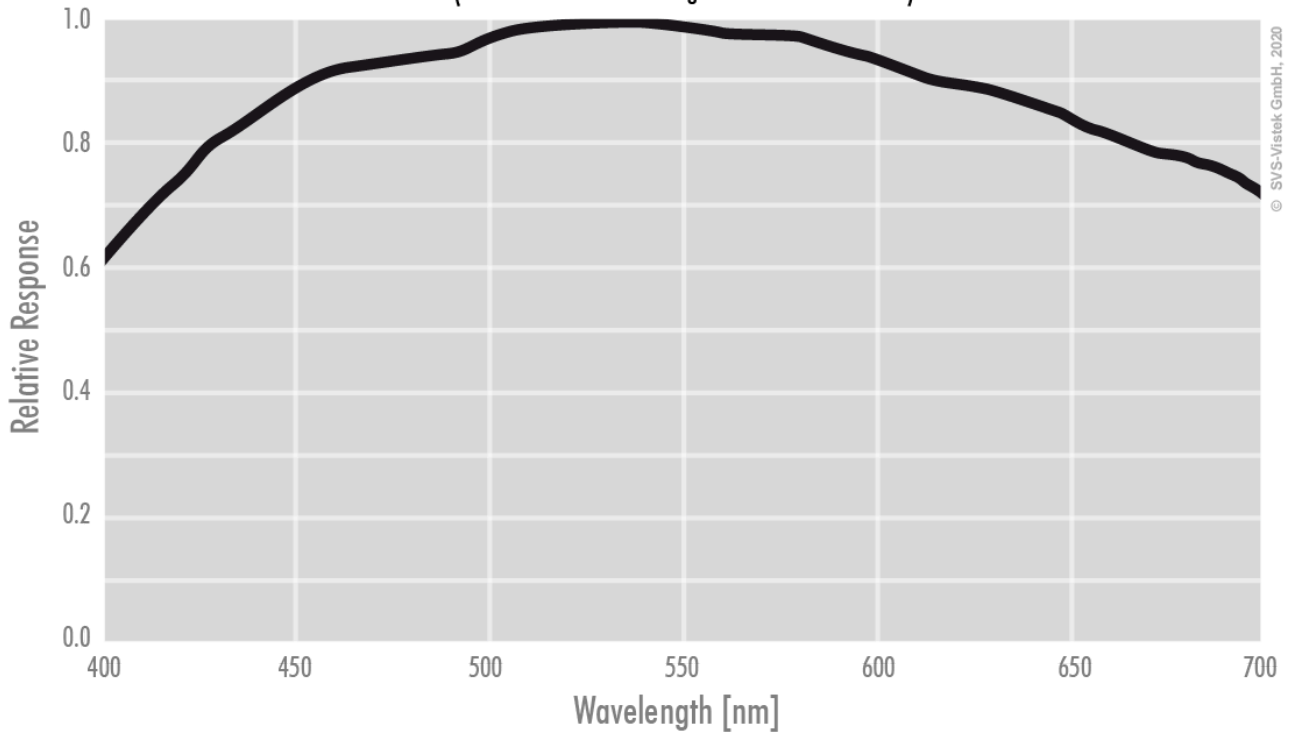
## FW features - camera control

Trigger modes/sync: INTERNAL,SOFTWARE,EXTERNAL

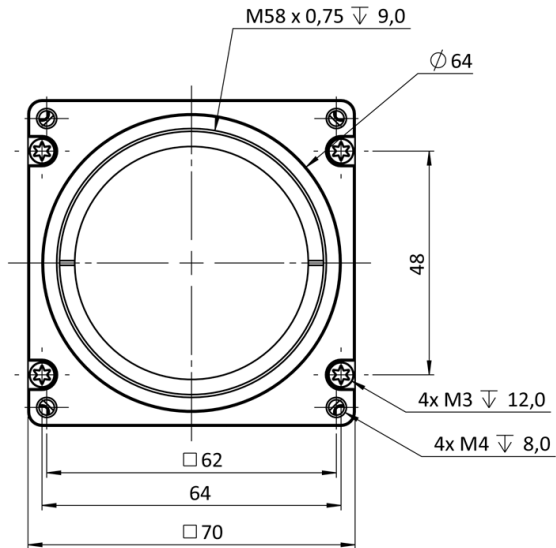
Camera control features: User Sets, POE, PWM(4), Sequencer,

### Monochrome

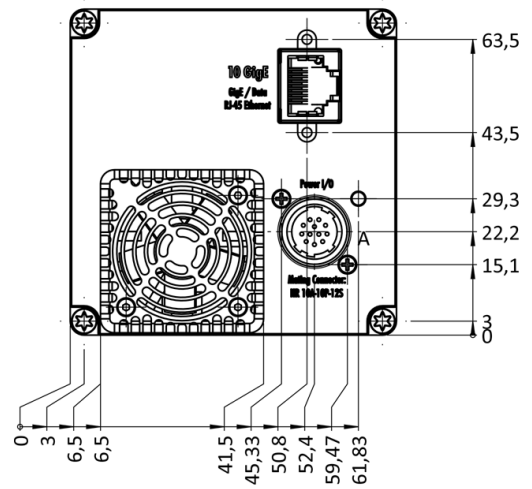
(not included: lens- and light source characteristics)



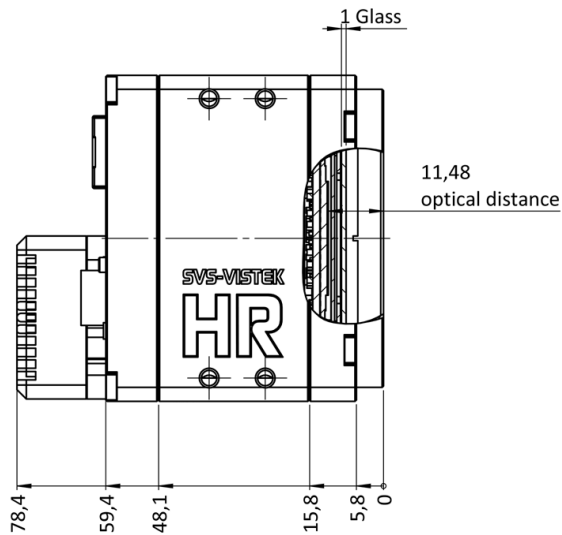
front



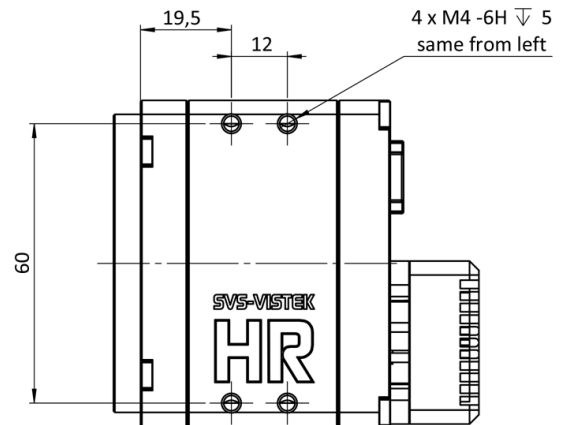
back



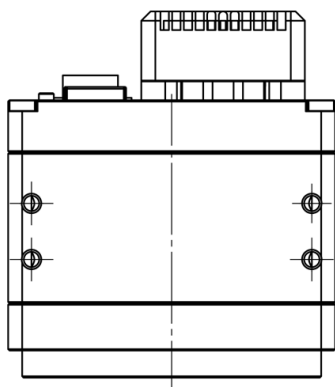
cross section



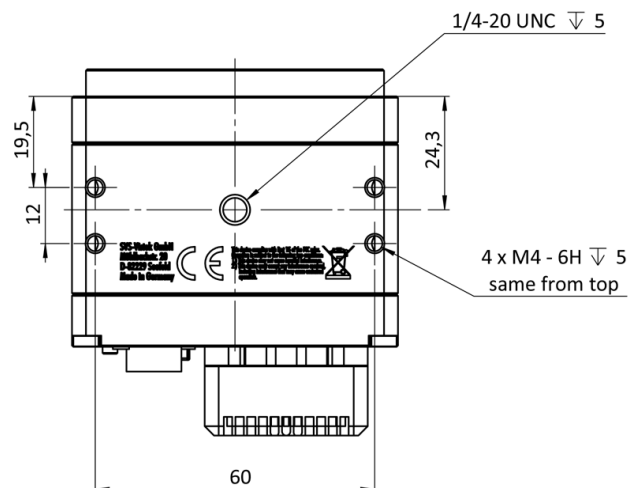
right side

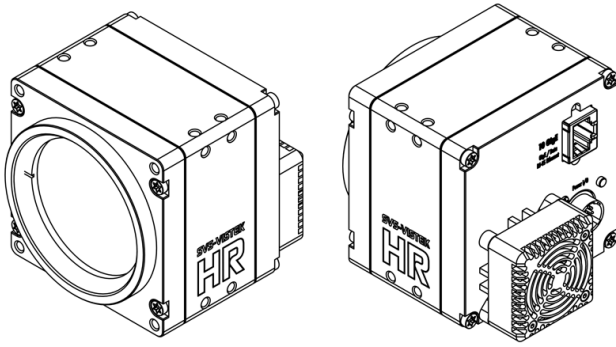


top



bottom





## I/O pin assignment



1	VIN - (GND)	7	OUT 1 (open drain)
2	VIN + (10V to 25V 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)