

HR 10GigE

hr455CXGE



General

Model:	hr455CXGE
Product code:	F004099
Product series:	HR 10GigE
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Color
Spectrum:	Visible
Spectral range:	400 nm to 1000 nm
Resolution:	9,568 × 6,380 (61.00 MP)
Sensor model:	Sony IMX455AQK
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
RGB pixel formats:	bayer8, bayer12, bayer16

Imaging performance

Dynamic range: 81.4 dB

SNR: 47 dB

Timing and gain

Max. frame rate: 18 fps

Exposure time: 34 μ 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

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

Interfaces

Digital interface: 10gige

Interface connector: (RJ-45)

FW features - image control

Exposure modes: Manual, Auto, External

Gain modes: Auto, Manual

White balance modes: auto, manual

FW features - image control

Image control features:

FW Features - Image Control

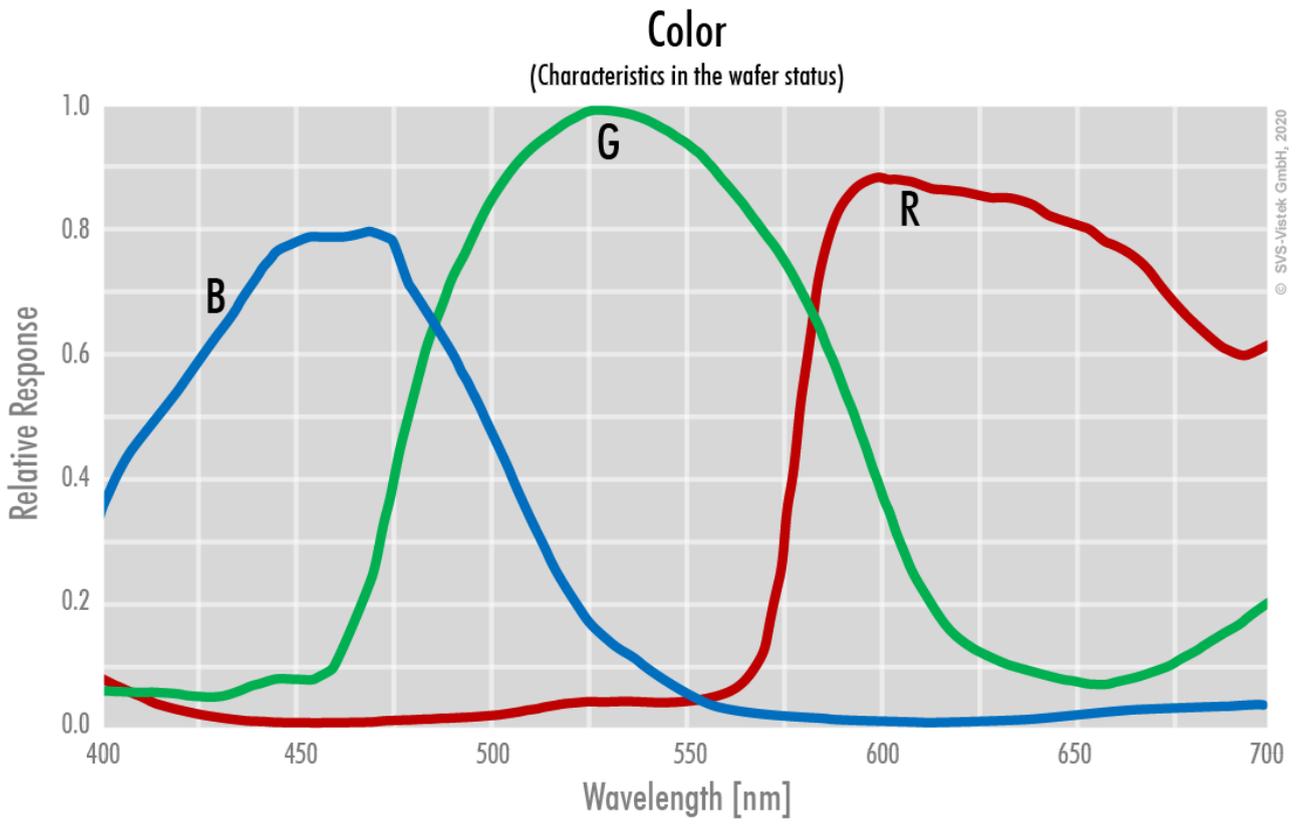
FW features - camera control

Trigger modes/sync:

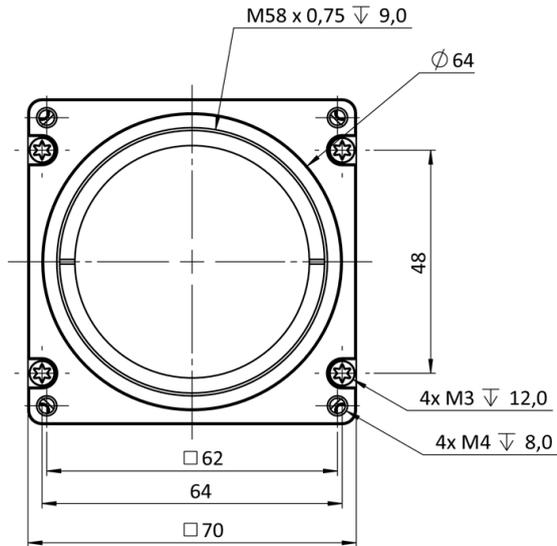
INTERNAL,SOFTWARE,EXTERNAL

Camera control features:

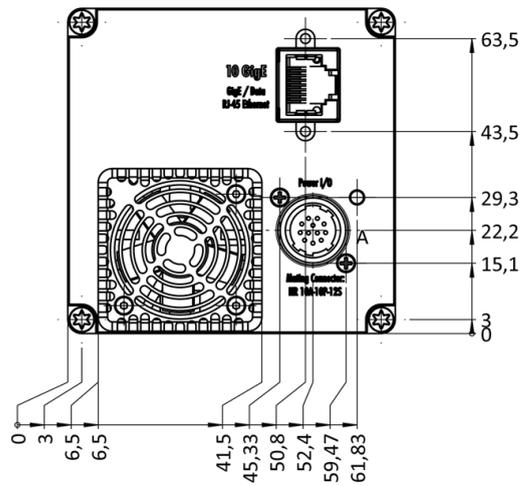
User Sets, POE, PWM(4), Sequencer,



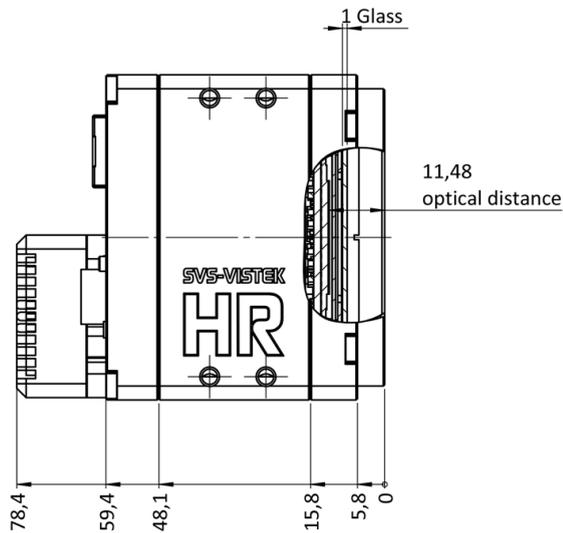
front



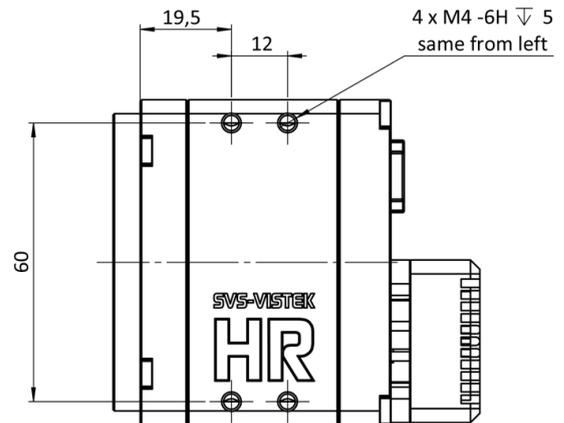
back



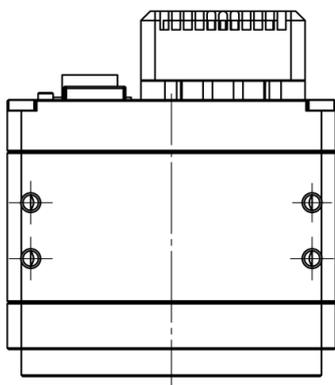
cross section



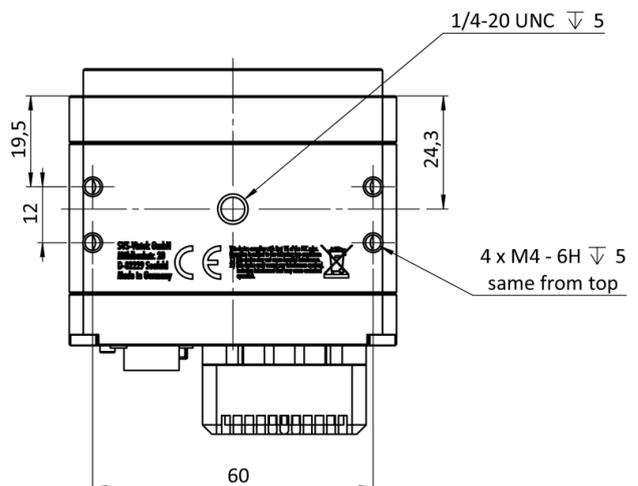
right side

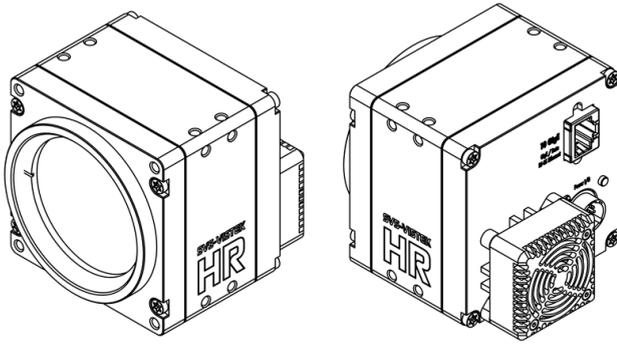


top



bottom





I/O pin assignment



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)