Allied Vision



HR 10GigE

hr51MXGE-G2

General

Model	hr51MXGE-G2
Product code	F004153
Product series	HR 10GigE
Status	Deleted

Sensor

Sensor type	Area scan
Chroma	Mono
Spectrum	Visible
Spectral range	400 nm to 1000 nm
Resolution	8,424 × 6,032 (51.00 MP)
Sensor model	Gpixel GMAX4651-BVM-BU2
Sensor architecture (material)	cmos
Shutter type(s)	Global shutter (GS)
Sensor size	38.75 × 27.75 mm (47.66 mm, 35mm Full Frame)
Pixel size	4.60 µm × 4.60 µm

Pixel formats

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

Imaging performance

Dynamic range	65 dB
SNR	42.6 dB

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Timing and gain

Max. frame rate	23.7 fps
Exposure time	60 µs (max)
Gain	0.0 dB to 40.0 dB

I/Os and power

Non-isolated lines	0 x LVDS input, 0 x LVDS output0 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 consumption	External: 17 W (typical at 12 VDC)

Mechanical properties

Body dimensions (L x W x H in mm)	77 × 70 × 70
Filter/protection glass	N-BK7 - AR coating 380-850nm
IP class	IP30
Lens mount(s)	M58x0.75
Weight	380 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
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,

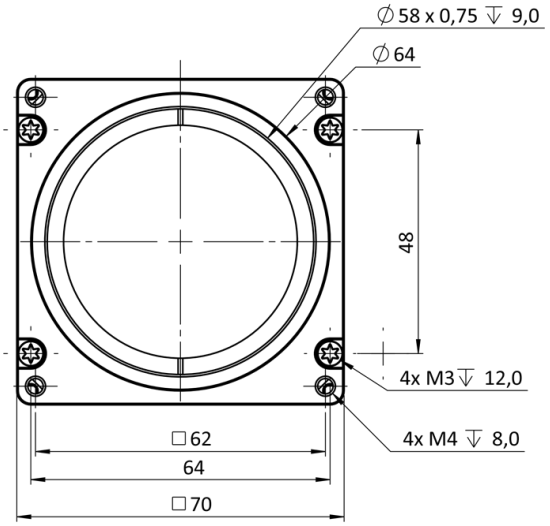
Quantum Efficiency



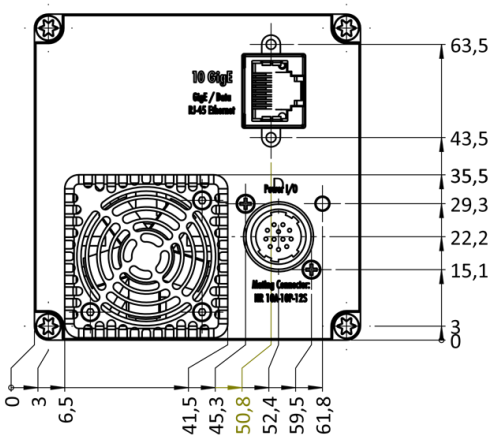
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Technical Drawing

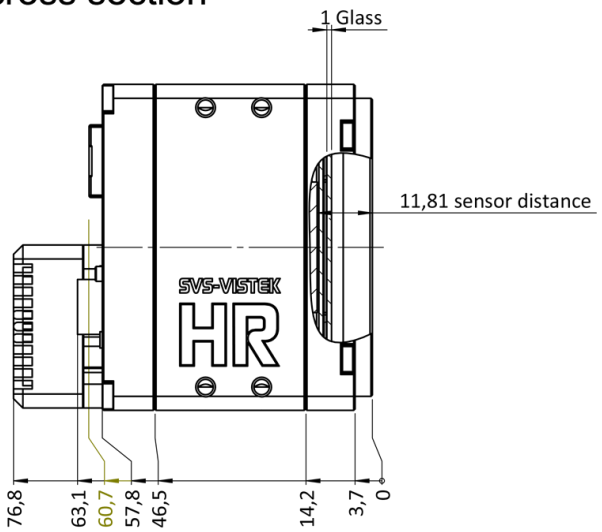
front



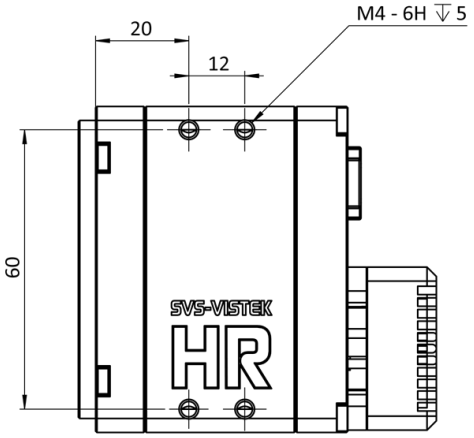
back



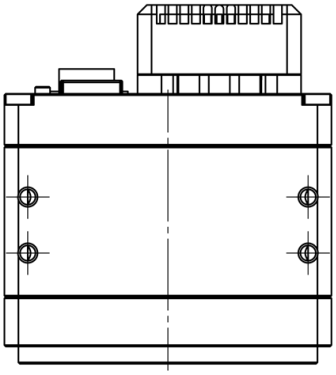
cross section



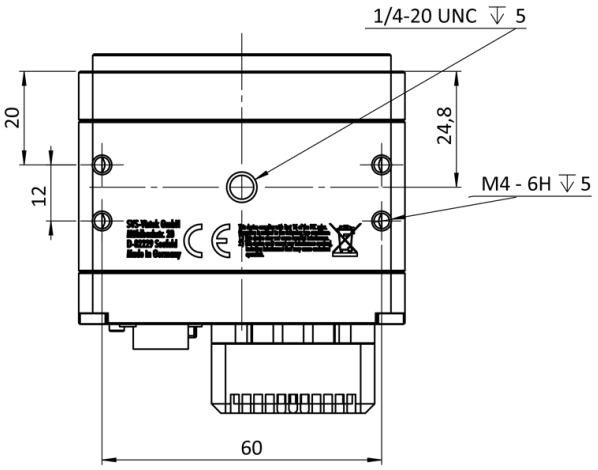
right side



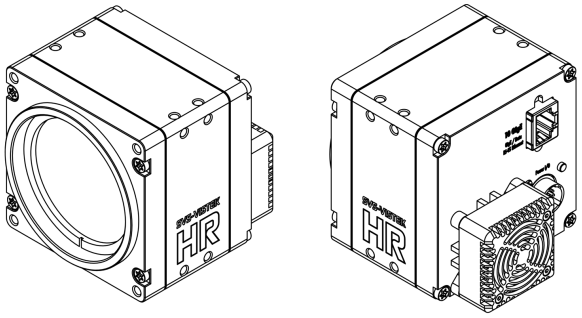
top



bottom

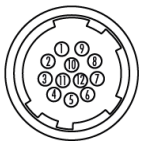


3D



I/O pin assignment

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)