Allied Vision

HR 10GigE

hr51CXGE

Allgemein

Modell	hr51CXGE
Produktcode	F004101
Produktserie	HR 10GigE
Status	Available

Sensor

Sensortyp	Area scan
Chroma	Color
Spektrum	Visible
Spektralbereich	400 nm to 1000 nm
Auflösung	8,424 × 6,032 (51.00 MP)
Sensormodell	Gpixel GMAX4651
Sensorarchitektur (Material)	cmos
Verschlusstyp(en)	Global shutter (GS)
Sensorgröße	38.75 × 27.75 mm (47.66 mm, Type Full Frame)
Pixelgröße	4.60 µm × 4.60 µm

Pixelformate

Sensor-Bittiefe	8-bit, 12-bit
RGB-Pixelformate	bayer8, bayer12

Bildgebungsleistung

Dynamikbereich	65 dB
SNR	42.6 dB

Timing und Verstärkung

Max. Bildrate	23.7 fps
Belichtungszeit	17 µs to 60 s
Verstärkung	0.0 dB to 40.0 dB

I/Os und Stromversorgung

Nicht-isolierte Leitungen	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,
Spezifische nicht-isolierte Leitungen	1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,
Optisch isolierte Leitungen	1 x Optical isolated input, 0 x Optical isolated input,
I/O-Anschluss	12-pin Hirose HR10A-10P-12S
Stromversorgung	10 to 25VDC, Power over Ethernet (POE+, in option -P)
Stromverbrauch	External: 17 W (typical)

Mechanische Eigenschaften

Gehäuseabmessungen (L x B x H in mm)	77 × 70 × 70
Filter-/Schutzglas	IR-Cut 680
IP-Klasse	IP30
Objektivanschluss/-anschlüsse	M58x0.75
Gewicht	380 g

Onboard-Speicher und FPGA

Bildpuffer (RAM)	448 MByte

Schnittstellen

Digitale Schnittstelle	10gige
Schnittstellenanschluss	(RJ-45)
Vision-Standard	GigE Vision 2.0

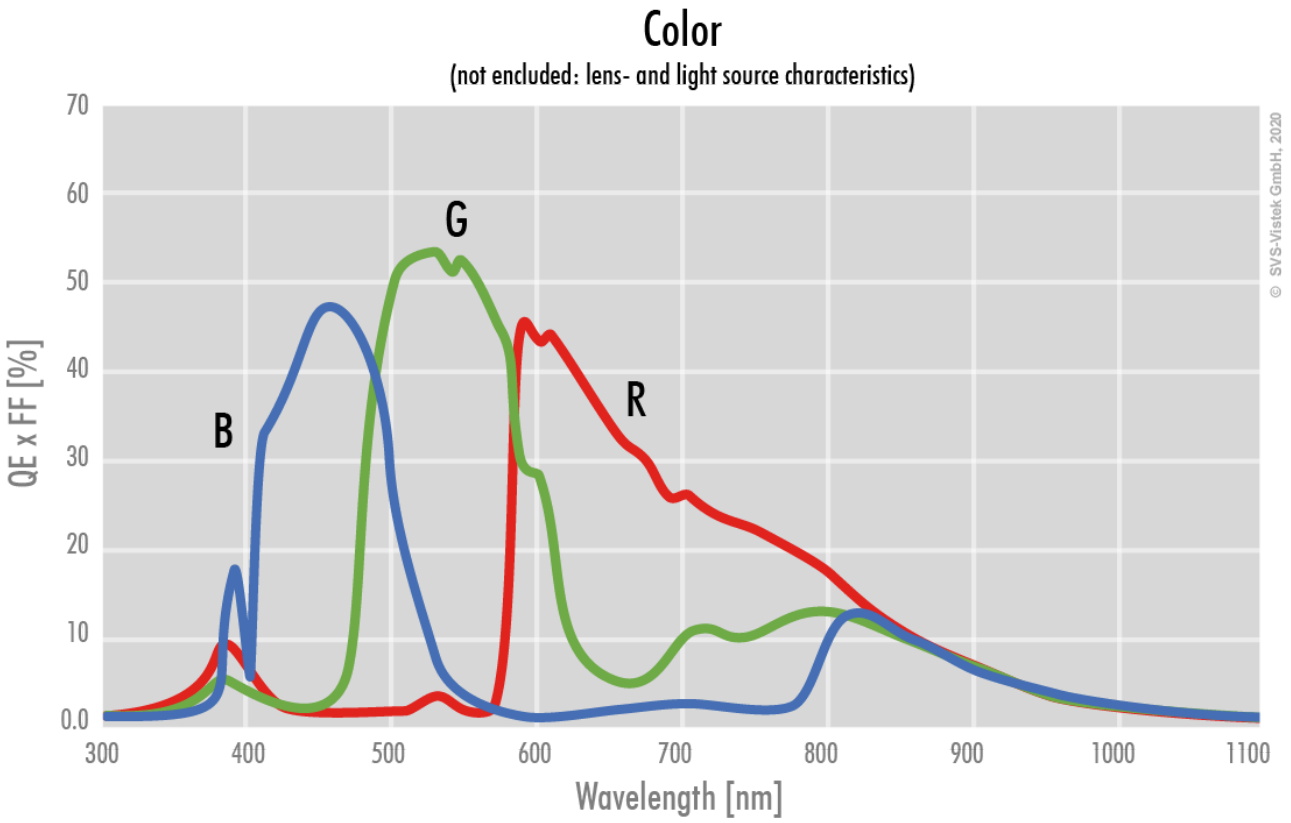
FW-Funktionen – Bildsteuerung

Belichtungsmodi	manual, auto
Verstärkungsmodi	auto, manual
Weißabgleichmodi	auto, manual
Bildsteuerungsfunktionen	roi, lut, mirror-image

FW-Funktionen – Kamerasteuerung

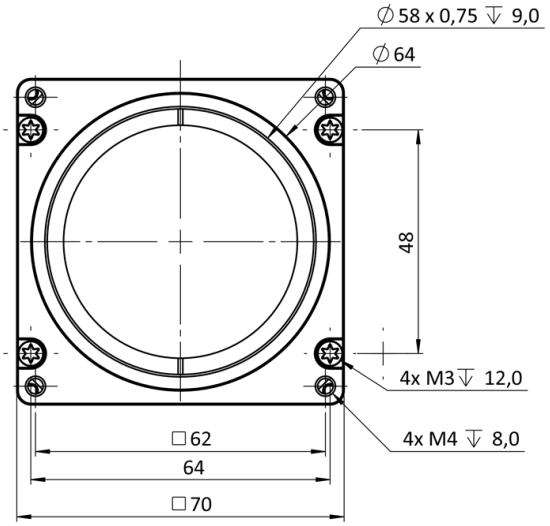
Triggermodi/Synchronisation	internal, software, external
Kamerasteuerungsfunktionen	User Sets, POE, PWM(4), Sequencer,

Quanteneffizienz

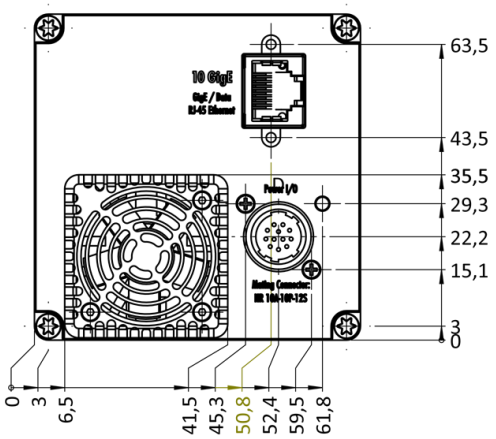


Technische Zeichnung

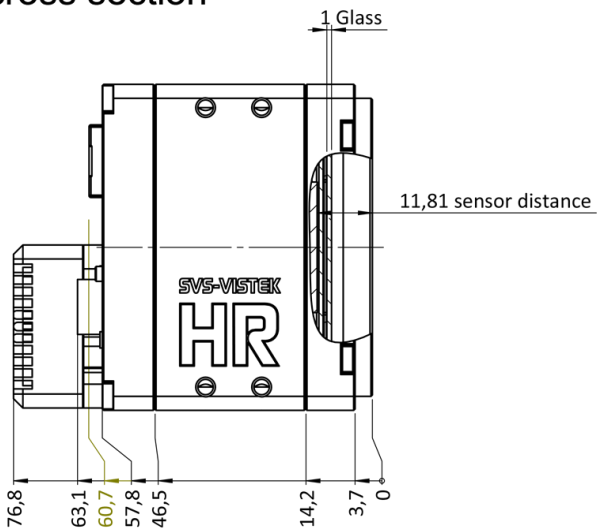
front



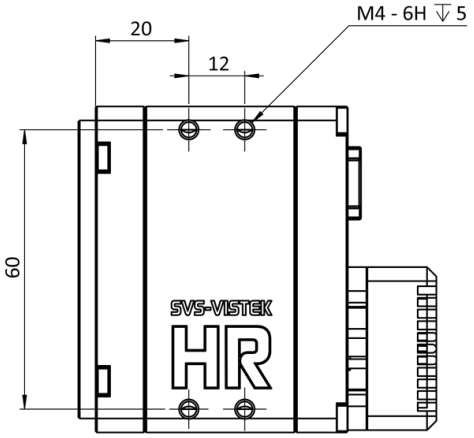
back



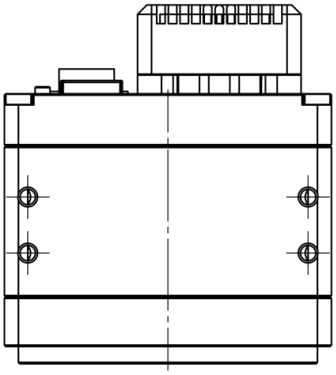
cross section



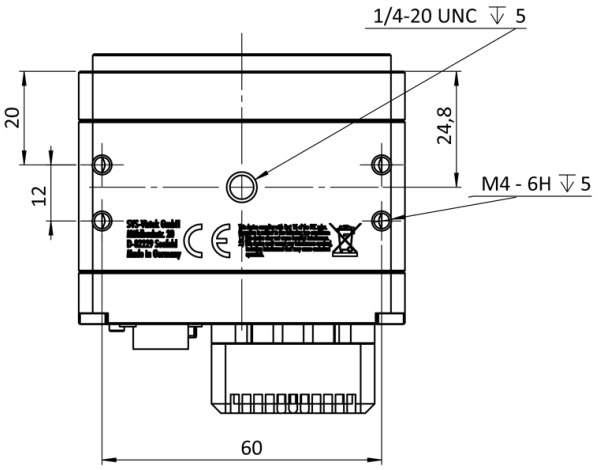
right side



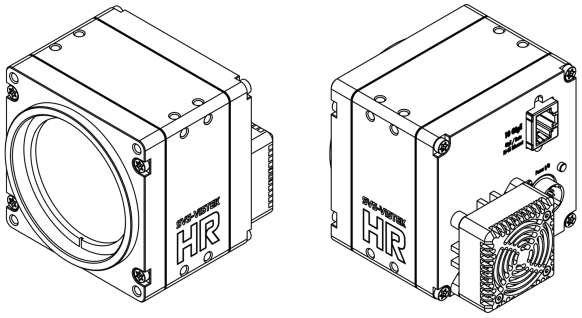
top



bottom

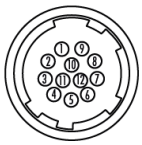


3D



I/O-Pin-Belegung

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)