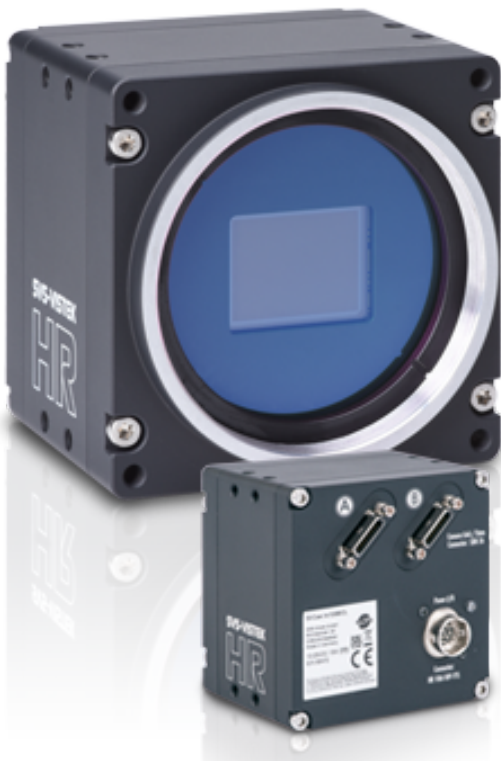


hr120MCL

HR Camera Link



Camera Link has its advantages regarding data transfer speed, a deterministic timing and very direct access to the imaging sensor itself. Thus, it permits settings and operating modes that are not available with other interfaces. HR series with Camera Link provides a wide range of unique camera core features.

A sophisticated I/O interface provides a rich choice of industrial hardware and software features, including a GenICam multichannel LED strobe control. Best suited for applications such as optical metrology, surface control, quality control or monitoring of large areas.

Technical Highlights

- > User defined defect pixel correction
- > Lens shading correction
- > ROI, LUT, binning, gamma, offset
- > Integrated multichannel LED strobe controller
- > Industrial TTL-24V I/O interface with Safe Trigger, programmable logic functions, sequencer, timer, RS232
- > Power over Camera Link (PoCL)

HR Series

hr120MCL

Resolution [MP]	122 MP
Resolution (h x v)	13272 x 9176 px
Frame rate (max.)	6.8 fps (1x10-1y) 5.5 fps (1x8-1y)
Chroma	mono
Interface	Camera Link 80-Bit
	SDR

Sensor

Sensor	120MXSM
Manufacturer	Canon
Sensor type	Area CMOS
Shutter type	rolling shutter
Sensor size (h x v)	29.2 x 20.19 mm
Optical diagonal	35.5 mm
Sensor format	APS-H
Pixel size (h x v)	2.2 x 2.2 µm

Camera

Exposure modes	MANUAL;AUTO
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	16 µs
Exposure time (max)	10 sec
Pixel format / max	mono8, mono10 / 10 bit
Gain modes / max	manual, auto / 8 dB
S/N ratio (max)	39.6 dB (dep. on environment)
Dynamic range (max)	60.3 dB (dep. on environment)
Pixel clock	85 MHz
Internal memory	512 MB SDRAM, 160 MB Flash

Feature Set

AOI	yes
LUT	yes
Offset	yes
Binning	yes
Shading correction	yes (external)
Defect pixel correction	yes
Sequencer	yes

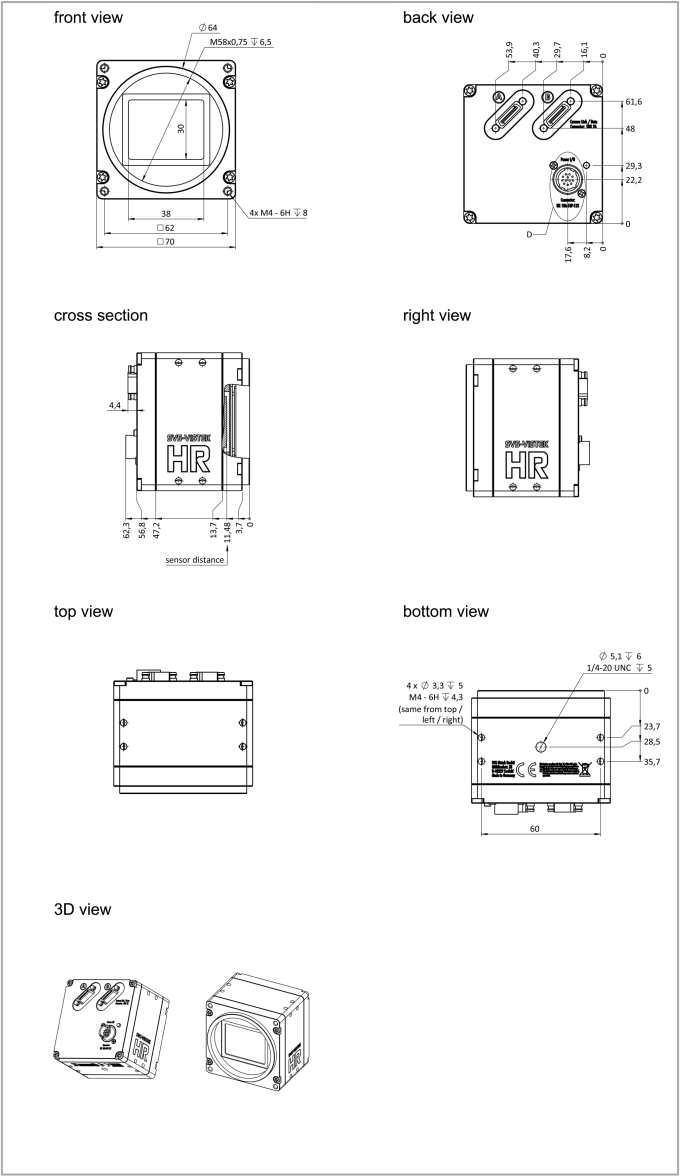
Housing

Lens mount	M58x0.75
Dimensions (w x h x d)	70 x 70 x 56.8 mm
Weight	380 g
Operating temperature (housing)	-10 to 55 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP40

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	12 W (dep. on operating mode)

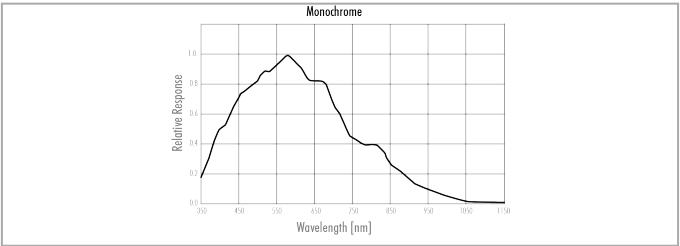
Dimensions [mm]



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