

hr25MCL

HR Camera Link



Camera Link has its advantages regarding data transfer speed, a deterministic timing and a 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 multi-channel 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 multi channel LED strobe controller
- > Industrial TTL-24V I/O interface with SafeTrigger, programmable logic functions, sequencer, timer, RS232
- > Power over Camera Link (PoCL)

HR Series

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Resolution	5120 x 5120 px
Frame rate (max.)	31 fps (1X10-1Y) 25 fps (1X8-1Y)
Chroma	mono
Interface	Camera Link 80-Bit

Sensor

Sensor	NOIP1SN025KA-GDI
Manufacturer	ON Semiconductor
Sensor type	Area CMOS
Shutter type	global shutter
Sensor size (h x v)	23.04 x 23.04 mm
Optical diagonal	32.58 mm
Sensor format	APS-H (32,58mm)
Pixel size (h x v)	4.5 x 4.5 µm

Camera

Exposure modes	MANUAL;AUTO;EXTERNAL
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	21 µs
Exposure time (max)	1 sec (external ∞)
Pixel format / max	bayer8, bayer10 / 10 bit
Gain modes / max	manual, auto / 18 dB
Pixel clock	85 MHz
Internal memory	512 MB SDRAM, 160 MB Flash

Feature Set

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

Housing

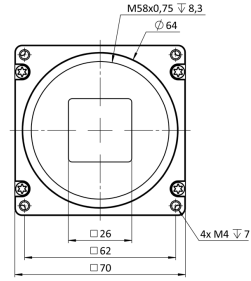
Lens mount	M58x0.75
Dimensions (w x h x d)	70 x 70 x 56.3 mm
Weight	380 g
Operating temperature (housing)	-10 to 65 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP40

I/O-Interfaces

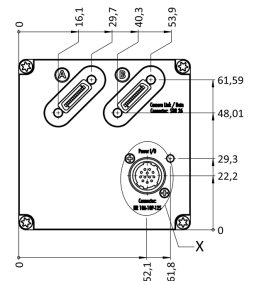
Input up to 24V	2 x
Input OPTO	1 x
Output open drain	4 x
I/O RS-232	1 x
Power supply	10 to 25 V (DC)
Power consumption	10 W (dep. on operating mode)

Dimensions [mm]

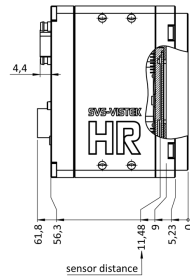
front view



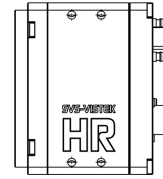
back view



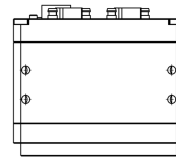
cross section



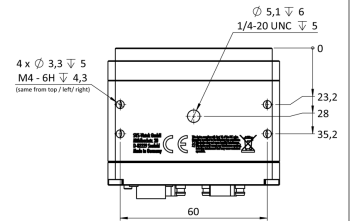
right view



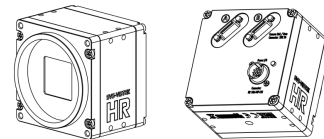
top view



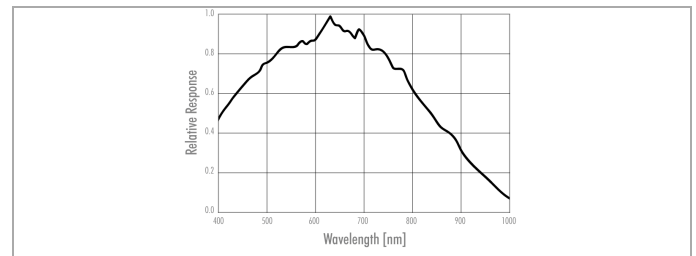
bottom view



3D view



Spectral Response *



* Sensor data — excludes camera cover- or IR-cut filter characteristics