hr25CCX

HR CoaXPress

The interface standard CoaXPress was developed to meet the need for higher band-width generated by recently launched sensors. In particular the latest high resolution CMOS sensors from Sony and ON Semi are capable of extremely high frame rates. CoaXPress therefore is the first choice for applications where speed is of prime importance.

Technical Highlights

> ROI, LUT, binning, offset, gamma
> Lens shading correction
> Integrated multi channel LED strobe controller
> CoaXPress (4 x 6.25 Gbit/s)
> Industrial TTL-24V I/O Interface with SafeTrigger, programmable logic, sequencer and timers, RS232
> Power over CXP

HR Series — hr25CCX

Resolution [MP]	25 MP
Resolution (h x v)	5120 x 5120 px
Frame rate (max.)	81 fps
Chroma	color
Interface	4 CXP-6 Connections

Sensor

Sensor	NOIP1SE025KA-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)	35 μs
Exposure time (max)	1 sec (external ∞)
Pixel format / max	bayer8, bayer10 / 10 bit
Gain modes / max	manual, auto / 18 dB
Internal memory	512 MB SDRAM, 160 MB Flash

Feature Set

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Manual white balance	yes
Automatic white balance	yes
LUT	yes
Offset	yes
Binning	yes
Image flip	yes
Shading correction	yes (external)
Sequencer	yes

Housing

Lens mount	M58x0.75
Dimensions (w x h x d)	70 x 70 x 56.3 mm
Weight	420 g
Operating temperature (housing)	-10 to 60 °C
Ambient humidity	10 to 90 % (non-condensing)
Protection class	IP30

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	13 W (dep. on operating mode)

Dimensions [mm]

front view

back view

cross section

right view

top view

bottom view

3D view
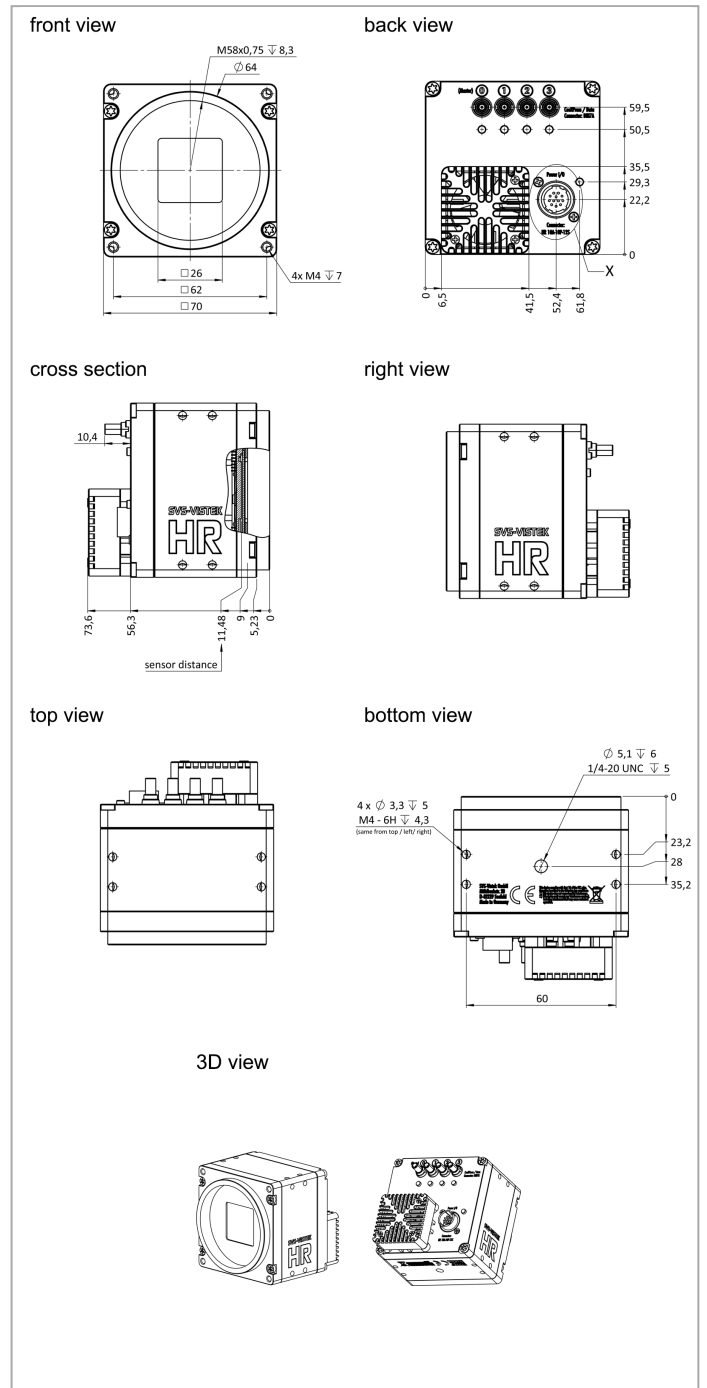
Pinout Mating Connector

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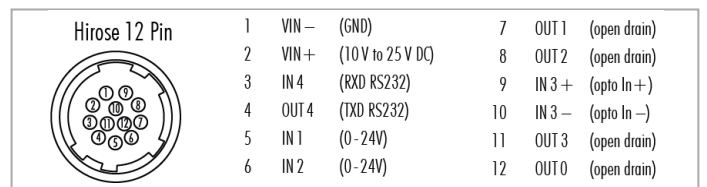
Spectral Response *
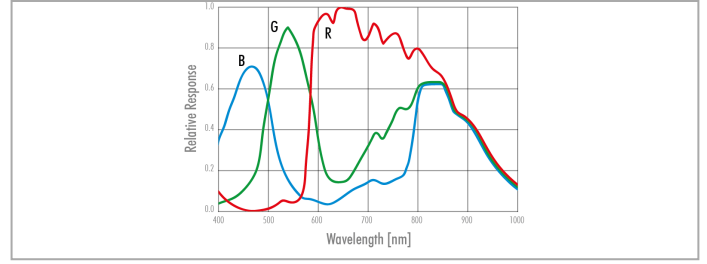
* Sensor data — excludes camera cover- or IR-cut filter characteristics