

hr455MCX

HR CoaXPress



The interface standard CoaXPress was developed to meet the need for higher bandwidth 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

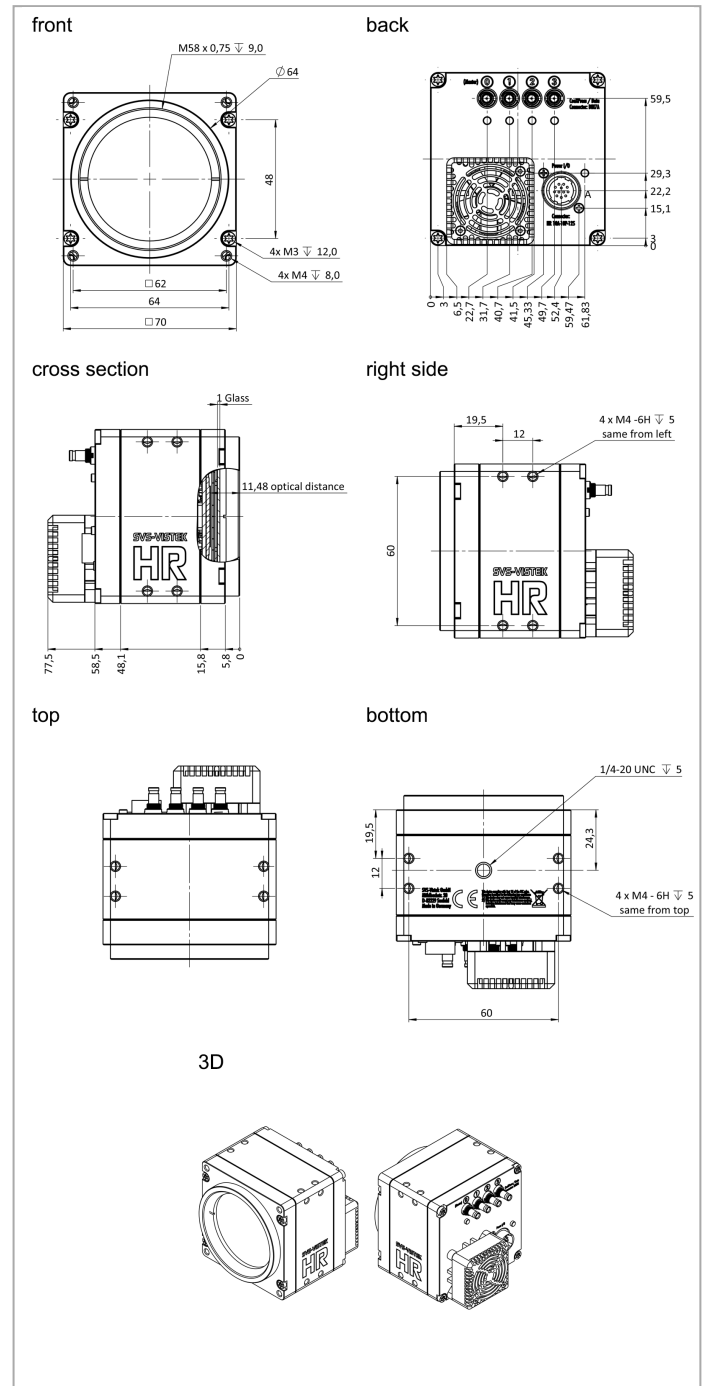
- > ROI, LUT, binning, offset, gamma
- > Lens shading correction
- > Integrated multi channel LED strobe controller
- > CoaXPress (4 x 6.25 Gbit/s)
- > Industrial TTL-24V I/O Interface with SafeTrigger, programmable logic, sequencer and timers, RS232
- > Power over CXP

HR Series

hr455MCX

Resolution [MP]	61 MP
Resolution (h x v)	9568 x 6380 px
Frame rate (max.)	18 fps
Chroma	mono
Interface	CXP-6 4 Lanes
Sensor	
Sensor	IMX455LLA
Manufacturer	Sony
Sensor type	Area CMOS
Shutter type	rolling shutter
Sensor size (h x v)	35.98 x 23.99 mm
Optical diagonal	43.24 mm
Sensor format	43.3mm (Type 2.7)
Pixel size (h x v)	3.76 x 3.76 μm
Camera	
Exposure modes	MANUAL;AUTO
Trigger modes	INTERNAL;SOFTWARE;EXTERNAL
Exposure time (min)	34 μs
Exposure time (max)	1 sec
Pixel format / max	mono8, mono10, mono12, mono16 / 16 bit
Gain modes / max	manual, auto / 36 dB
S/N ratio (max)	47 dB (dep. on environment)
Dynamic range (max)	81.4 dB (dep. on environment)
Internal memory	512 MB SDRAM, 160 MB Flash
Feature Set	
AOI	yes
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 77.5 mm
Weight	420 g
Ambient temperature	-10 to 45 °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

Dimensions [mm]

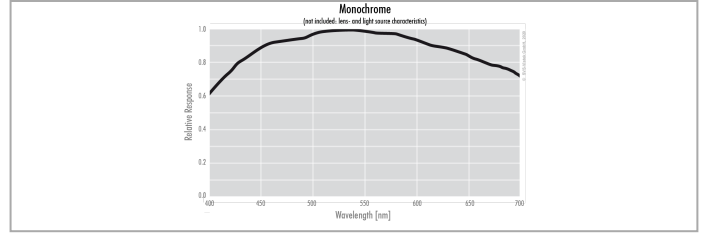


Pinout Mating Connector

	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 *

Power supply	10 to 25 V (DC)
Power consumption	14 W (dep. on operating mode)



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