



3 Megapixel Resolution - for detailed images

- Extremely flexible in resolution and speed
- 3 Megapixel resolution up to 285 frames per second at 1,696 (H) x 1,710 (V) pixel resolution
- adjustable Region of Interest (RoI) with correspondent increased frame rate:
628 fps at 1,280 (H) x 1,024 (V) pixel resolution
893 fps at 1,280 (H) x 720 (V) pixel resolution
816 fps at 1,000 (H) x 1,000 (V) pixel resolution
- Stepless adjustable frame rate up to 285,000 frames per second at reduced resolution
- Maximum photo sensitivity:
1,200 ASA monochrome, 1,000 ASA RGB
- Full Camera Link® Interface with 850 MByte/second
- Monochrome or color with Bayer-Filter
- Extended dynamic range up to 90 dB
- Small and compact design
- C- or F-Mount lens adapter

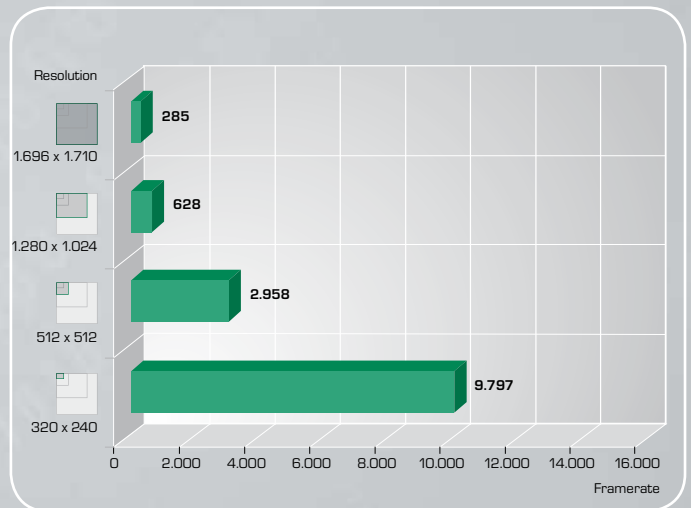


Extremely flexible in resolution and speed

The EoSens® 3CL meets the requirements for most varied applications, because resolution and speed are variable adjustable. A resolution of 1,696 (H) x 1,710 (V) pixels ensures superb image quality with razor-sharp images. By free choice of the Region of Interest (RoI), the camera's frame rate can be increased up to 285,000 frames per second.

Dynamic Range Adjustment for extreme contrasts

The camera's Dynamic Range Adjustment option allows to change the CMOS sensor's linear range into a non-linear one. Thus, EoSens® 3CL provides clear details even at extreme dark/light contrasts.



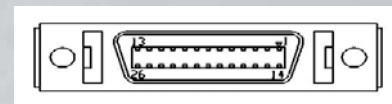
"Freeze Frame" full frame shutter

The EoSens® 3CL features a "Freeze Frame" shutter that is able to process and store a complete frame while exposing the next image. At exposure times down to 2 µs, this enables even capturing fast moving objects at high definition in synchronous, free run and asynchronous triggered mode.



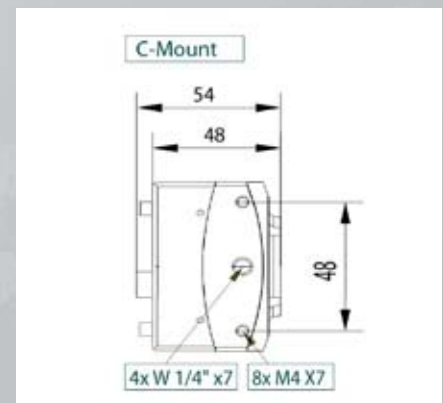
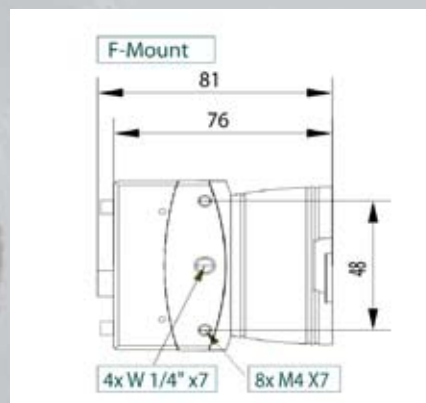
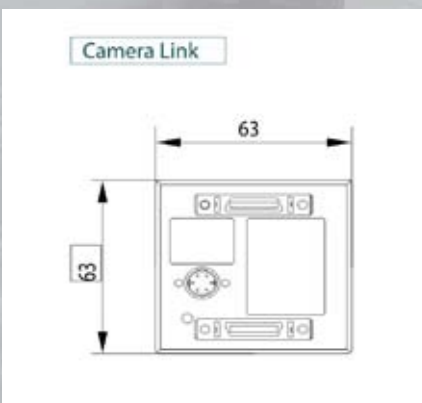
Technical Data	
Sensor	CMOS sensor 1,696 (H) x 1,710 (V) pixel active area 19,27 mm (diagonal) 13.57 (H) x 13.68 (V) mm 8-bit monochrome or RGB-color with BAYER-filter
Pixel size	8 x 8 µm
Light sensitivity	1,200 ASA monochrome, 1,000 ASA color
Image speed	1 - 285 fps* at full 1,696 (H) x 1,710 (V) resolution. Up to 285,000 fps at reduced resolution
Shutter	global electronic shutter from 1 µs to 1 s, in 2 µs steps
Internal dynamics	up to 90 dB using dynamic shutter control
Spectral bandwidth	400-900 nm
Pixel clock	85 Mhz
Fill Factor x quantum efficiency	40 %
Video output	Full Camera Link®, 8 x 8-bit, 10 x 8-bit
Camera configuration	Serial interface via Camera Link® 9,6 - 115 kBd, n, 8, 1
Amplification	Digital Gain 1, 1.5 & 2
Camera size	63 x 63 x 54 mm
Weight	300 g, without lens
Lens mount	C- Mount or F- Mount
Environment	+5 ... 50 °C
Shock/Vibration	70 g, 7 grms
Power supply	8 - 24 V DC external power supply
Power consumption	5 W max.

Connectors			
6-pin. Hirose power connector			
Pin	Signal	Pin	Signal
1	VCC	4	DGND*
2	VCC	5	GND
3	STRB	6	GND
*DGND...digital GND for STRB signal			
Two 26-pin Camera Link® Connectors			
All signals according to „Full“ Camera Link® specification			
Signal		Description	
CC1		EXP	



Recording Data			
resolution	frame rate	resolution	frame rate
1,696 (H) x 1,710 (V)	285 fps	640 (H) x 480 (V)	2,598 fps
1,280 (H) x 1,024 (V)	628 fps	512 (H) x 512 (V)	2,958 fps
1,280 (H) x 720 (V)	893 fps	320 (H) x 240 (V)	9,797 fps
1,000 (H) x 1,000 (V)	816 fps	100 (H) x 100 (V)	54,279 fps

* fps = frames per second



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