

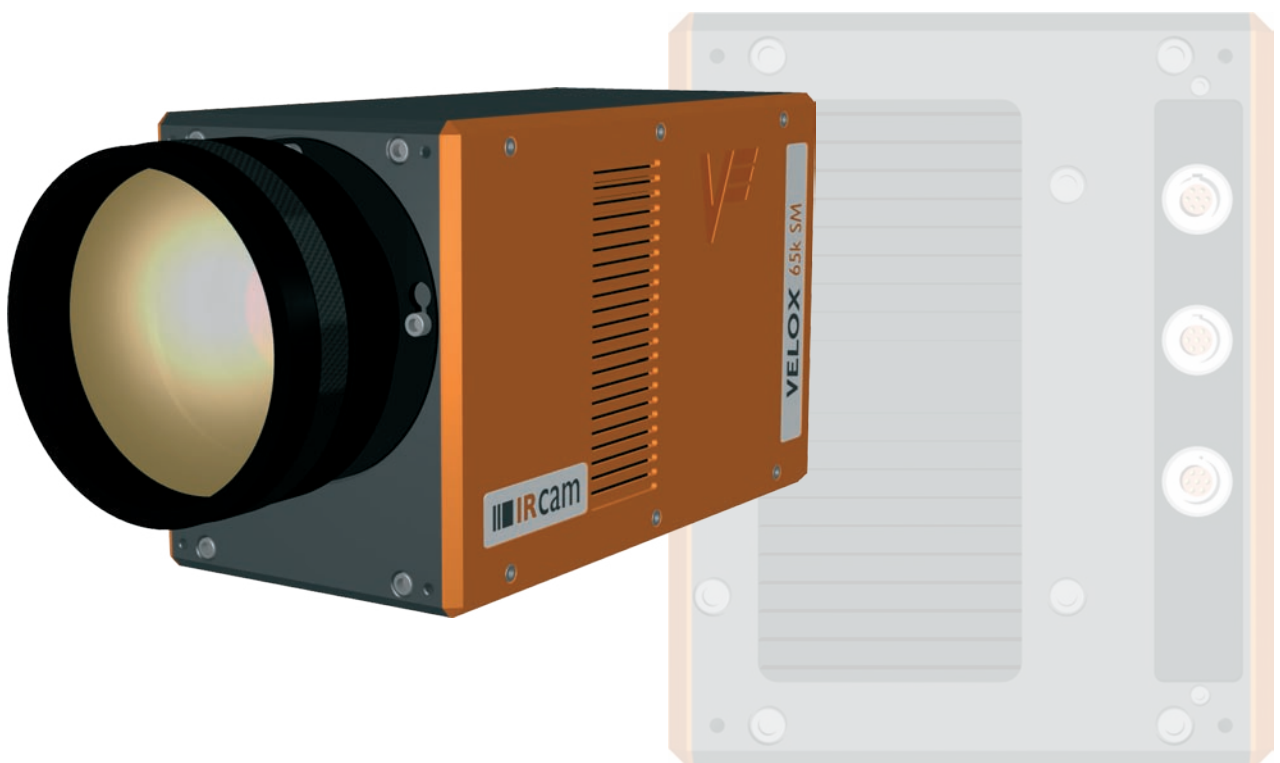
 Infrared Camera

VELOX 65k SM



High speed infrared camera with very high resolution and extended spectral range, particularly suitable for applications in research and development

- Mercury cadmium telluride (MCT) focal plane array (FPA) detector
- 65 536 (256 × 256) pixels
- Extended spectral range: 1.5 μm to 5 μm (SM)
- 110 Mbyte/s data rate (57.5 Mpixel/s pixel rate)
- 880 Hz fullframe rate
- Integration time: 1 μs to 1 ms
- NETD \leq 10 mK
- Variable windowing with frame rate > 30 kHz
- Camera Link interface



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Technical Data (Camera)	
Detector type	Mercury cadmium telluride (MCT) FPA
Spectral range	1.5 μm to 5 μm (SWIR / MWIR)
Detector size	65 536 (256 x 256) pixel
Pixel pitch	40 μm
Pixel size	37 μm
Cold stop (F-number)	F/2.0
Data rate	110 Mbyte/s (typ.)
Pixel rate	57.5 Mpixel/s (typ.)
Fullframe rate	880 Hz ($t_{\text{int}} = 1 \text{ ms}$)
Integration time range	1 μs – 1 ms (10 μs increment)
NETD	10 mK ($t_{\text{int}} = 1 \text{ ms}$, $T_{\text{BB}} = 20 \text{ }^\circ\text{C}$)
Integration mode	Snapshot (integrate while read)
A/D resolution	14 bit
Windowing	Position and size variable
Frame rate (windowing)	> 30 kHz ($t_{\text{int}} = 10 \mu\text{s}$)
Stirling cooler lifetime	> 4 000 h guaranteed (> 10 000 h typ.)
Detector temperature	80 K
Dimensions (w/o lens)	240 mm x 120 mm x 150 mm (L x W x H)
Mass (w/o lens)	5 kg
Housing material	Aluminium
Power supply voltage	24 VDC
Power consumption	< 80 W
Operating temperature	0°C to 45°C ambient
Degree of protection	IP 50 (higher on request)
Data Interface	Camera Link (base config., 80 MHz)

Technical Data (Power Supply)	
Input voltage	198 – 264 VAC (115 VAC on request)
Dimensions	192 mm x 109 mm x 54 mm (L x W x H)
Mass	850 g
Cable length	5 m

Accessories (optional)	
Infrared lenses: IR M8, IR M50, IR M100, IR Macro 1x, IR Micro 5x...	
Software: IRCAM Works, IRCAM Genius, IRCAM API	
Control unit: IRControl	
OEM configurations on request	
Transport cases	

Technical Drawings	
front	
rear	
side	
bottom	

Specifications are subject to changes without prior notice.
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