



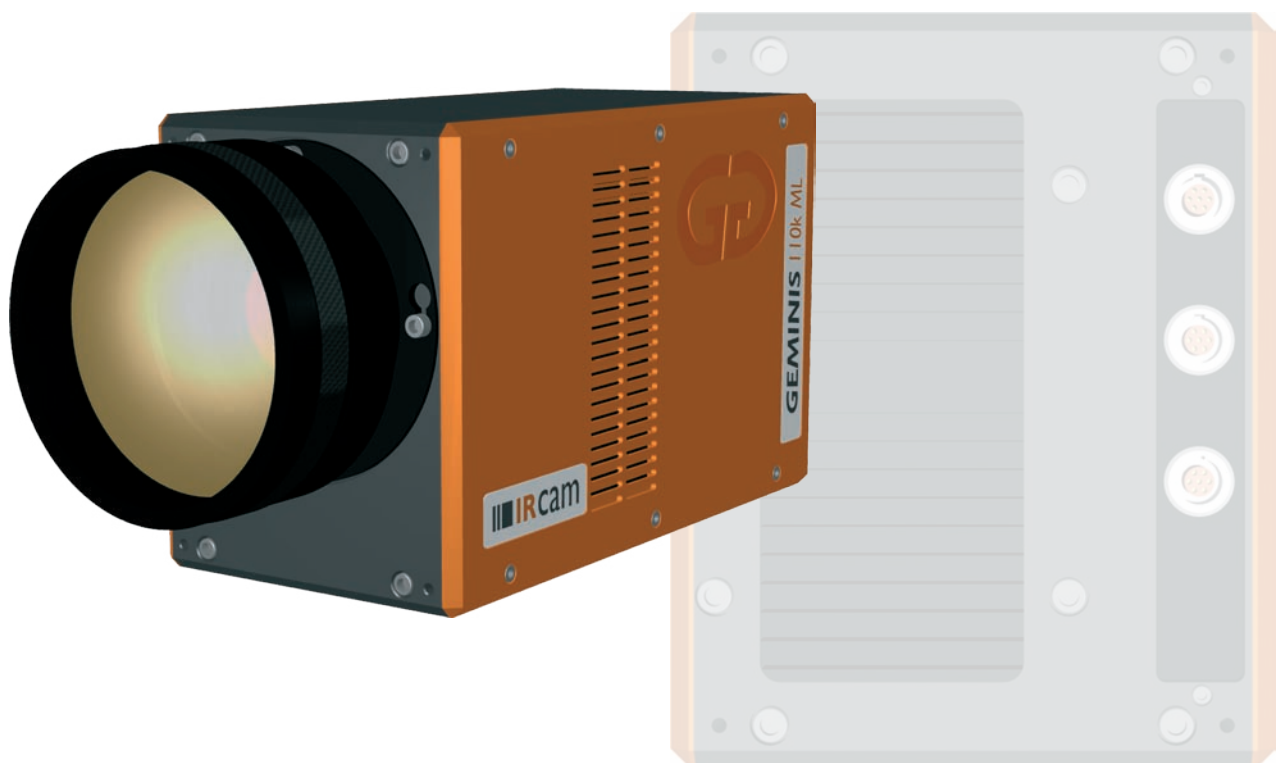
Dual Band Infrared Camera

GEMINIS 110k ML

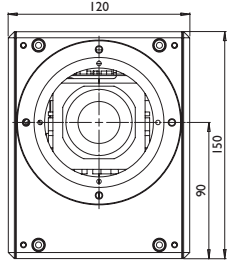
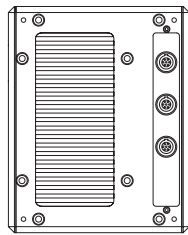
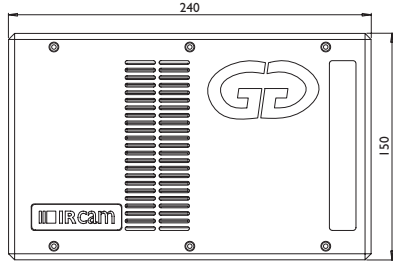
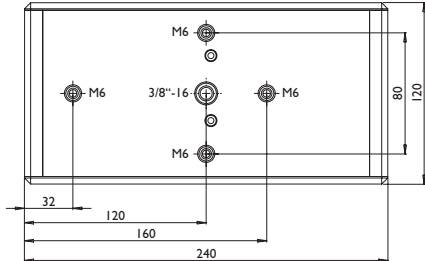


The world's first dual band infrared camera. High performance QWIP technology for simultaneous pixel exact detection in two spectral bands (MWIR / LWIR)

- Gallium arsenide / aluminium gallium arsenide (QWIP) focal plane array (FPA) detector
- 110 592 (384 × 288) pixels
- Spectral range: 4.4 to 5.4 μm (M) and 7.8 to 8.8 μm (L)
- 131 Mbyte/s data rate (2 × 34 Mpixel/s pixel rate)
- 310 Hz fullframe rate for each band
- NETD \leq 40 mK
- Camera Link interface



GEMINIS 110k ML

Technical Data (Camera)		Technical Drawings	
Detector type	Gallium arsenide / aluminium gallium arsenide (QWIP) FPA	front	
Spectral range	4.4 μm to 5.4 μm (MWIR) and 7.8 μm to 8.8 μm (LWIR)	rear	
Detector size	110 592 (384 x 288) pixel	side	
Pixel pitch	40 μm	bottom	
Pixel size	34 μm		
Cold stop (F-number)	F/2.0		
Data rate	131 Mbyte/s (typ.)		
Pixel rate	2 x 34 Mpixel/s (typ.)		
Fullframe rate	310 Hz ($t_{\text{int}} = 10 \mu\text{s}$) for each band		
Integration time range	tbd		
NETD	40 mK ($T_{\text{BB}} = 20 \text{ }^\circ\text{C}$)		
Integration mode	Snapshot		
A/D resolution	14 bit		
Windowing	central, variable		
Frame rate (windowing)	> 5 kHz ($t_{\text{int}} = 10 \mu\text{s}$)		
Stirling cooler lifetime	> 4 000 h guaranteed (> 10 000 h typ.)		
Detector temperature	60 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 $^\circ\text{C}$ to 45 $^\circ\text{C}$ 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 ML28, IR ML50, IR MLI00...			
Software: IRCAM Works, IRCAM Genius, IRCAM API			
Control unit: IRControl			
OEM configurations on request			
Transport cases			

Specifications are subject to changes without prior notice.
Version 12/05