



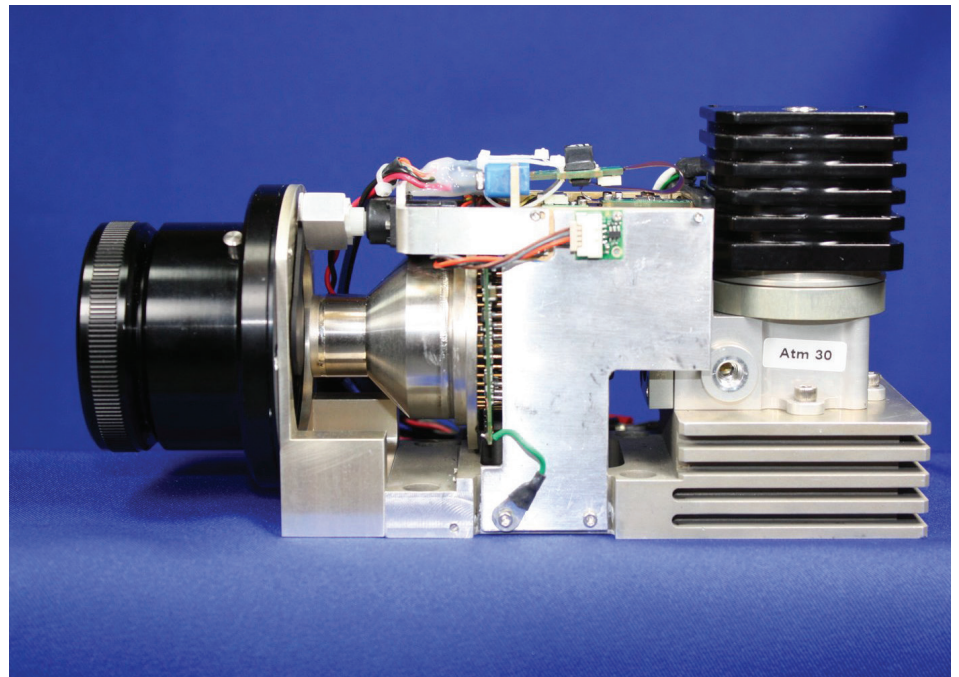
IRCameras

QUAZIR™ SI InSb CAMERA CORES

for scientific, industrial and OEM applications

QuazIR™, IRC's new family of QuazIR™ SI InSb OEM camera cores are among the most advanced cooled OEM sensor packages produced today. Available in either 320 x 256 or 640 x 512 formats, IRC's QuazIR™ camera cores provide the superior performance of an InSb sensor in a package specifically configured for scientific, industrial and OEM applications.

The QuazIR™ SI cores can be equipped with a choice of fixed optics, and can be adapted to support custom optical designs for integration with spectrometers and other scientific instruments. Flexible digital and analog outputs, low power consumption and unmatched sensitivity result in a high performance infrared imaging solution. IRC's unique ability to customize the wavelength response of the QuazIR SI allows the camera to be used for SWIR, MWIR and broadband imaging applications.



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Specifications/features subject to change without notice

The products described by this document are subject to the controls of ITAR 22_CFR 121.1. Transfer of these products by any means to a foreign person or entity, whether in the US or abroad, without appropriate export authorization, is prohibited and may result in substantial penalties.

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DETECTOR	QuazIR™ SI ₃₂₀	QuazIR™ SI _{SD}
Detector type	Photovoltaic Indium Antimonide	
Spectral response	3.0 μm – 5.0 μm, <1.0μm - 2.5μm, <1.0 μm – 5.3 μm broadband	
NEdT	< 15 mK typical	
Operability	>99.5%	
Resolution (pixels)	320 x 256	640 x 512
Pixel pitch	30 μm x 30μm	20 μm x 20 μm
DEWAR/COOLER		
Cooler type	Rotary or linear Stirling cryocooler	
Detector operating temperature	77°K or depending on sensor material	
Cool down time	< 6 Minutes @ 23°C - < 8 minutes @ 60° C ambient typical	
Cold shield f#	f/2.3, f/4.0 standard; others available on request	
ELECTRONICS		
Maximum frame rate –full frame	366 Hz	94 Hz
Display formats	480i or 480p	
Analog display video	NTSC or PAL	
Digital data	Camera Link, GigE	
Video compression	H.264 (optional)	
Synchronization modes	Internal/external sync and clock	
Lens direct technology	Native support for motorized focus and continuous zoom lenses	
IMAGE PRESENTATION		
Processing	Local area processing dynamic contrast enhancement, noise reduction, edge enhancement, AGC/ALC, electronic zoom, multi color palettes, symbology, reticle	
GENERAL		
Power	+12 V DC Nominal, +24 V DC Optional	
Power consumption	<8 W capable @ 23° C ambient steady state (w/o lens) <12 W capable @ 23° C ambient during cool down (w/o lens)	
Weight	<2 pounds (w/o lens)	
Size	5.5" (l) x 2.85" (h) x 2.5" (w) (Typical w/o lens)	
Operating temperature range	-40° to 65° C	
Storage temperature range	-50° to 70° C	
OPTICS		
Available f/2.3	Fixed focal length 13, 25, 50, 100 mm	
Custom lens options	Consult factory	