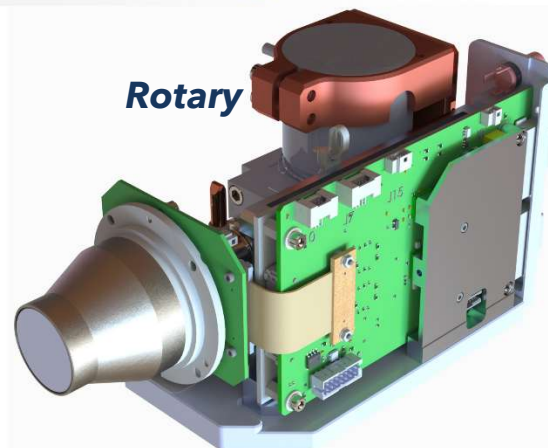
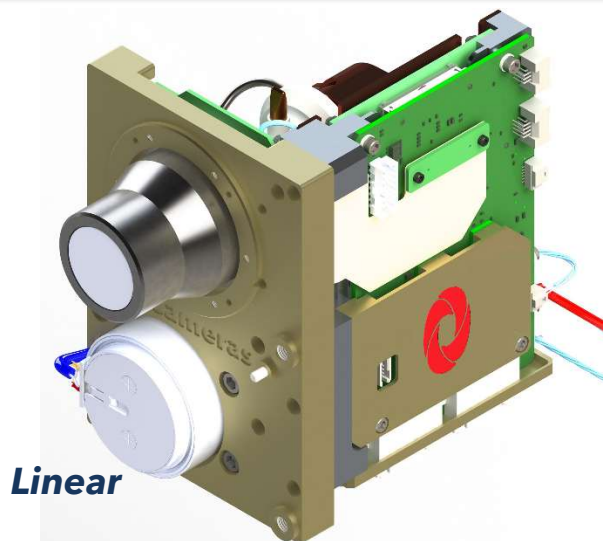


COMPACT CORE COMPLETE SERIES

IRCameras' CompactCore open frame cameras provide a range of compact and lightweight solutions for airborne or other applications with little or no available cooling airflow. With a choice of InSb, nBn or SLS focal plane arrays, CompactCore systems support applications in the lab or field. These cameras also cover a wide range of terrestrial and airborne applications including general imaging and spectroscopy.

IRCameras offers customization options that are tailored to the client's unique application requirements, further differentiating us from other suppliers. With resolution options of 640x512 or 1280x1024, our digital FPAs have zero electronics crosstalk between columns or rows - even at thousands of frames per second.

IRCameras also offers high efficiency cold filters to support your mission objectives including our 2-band CO₂ notch cold filter, 3-band SWIR-MWIR and 5-band SWIR-MWIR filters which match atmospheric windows from 1000 nm to 5000 nm with >95% inband transmission.



CAMERA CAPABILITIES

- Choice of InSb, nBn or SLS sensors
- <1 μm to >5 μm spectral response (nBn, InSb)
- 3 - 12 μm spectral response (SLS)
- 14-bit digital output
- SuperFraming for extended dynamic range
- High frame rates & windowing



COMPACT CORE COMPLETE SERIES

Compact Core Model:	Rotary 640	Rotary 1280	Linear 1280 InSb	Linear 1280 nBn	Linear SLS
Detector Type	Indium Antimonide (InSb)	nBn	Indium Antimonide (InSb)	nBn	Strained Layer Superlattice
Spectral Response	0.9 μ m to 5.4 μ m	1.0 μ m to 5.1 μ m	0.9 μ m to 5.4 μ m	1.0 μ m to 5.1 μ m	<3 μ m - >12 μ m
Resolution (pixels)	640 x 512	1280 x 1024	1280 x 1024	1280 x 1024	640 x 512
Pixel Pitch	20 μ m	12 μ m	12 μ m	12 μ m	20 μ m
Imaging Electronics					
Frame rate @ max window size	119 Hz	119 Hz	119 Hz	119 Hz	475 Hz
Integration time	<550 ns to full frame				
Dynamic range	14-bits with 13-bit option to increase frame rate at small window sizes				
Windowing	User defined in 4x1 increments; min width=320, min height=32				
Integration type	Snapshot, automatic selection of integrate while read or integrate then read				
Ultra low latency sync	Sync I/O (<200 ns latency), Integration Out Signals				
Image data	Camera Link (Full)				
Communications	Camera Link Serial Interface				
Non-Uniformity Correction (NUC)	NUC at max frame rate; NUC via software or hardware				
Superframing & States	Cycle between up to 4 integration times per SuperFrame Number of User-defined states limited only by memory; Selective integration times via command				
Software control	Cross Platform GenICam Compliant, WinIRC software, serial command list, optional Windows SDK				
Performance					
NE δ T	< 18mK	< 38mK	< 32mK	< 38mK	< 45mK
Well capacity (electrons)	7M	2M	2M	2M	7M
Operability	99.8%	99.6%	99.6%	99.6%	99.0%
Cryocooler	Rotary	Rotary	Dual Piston Linear	Dual Piston Linear	Dual Piston Linear
Optics					
Camera f/#	f/2, f/2.3 & f/4.0 standard; custom cold shields available on request				
Cold filter	No Cold Filter standard, optional 3.0 μ m – 5.0 μ m, CO ₂ , SWIR or custom filters on request				
Lens mount	Open Frame Chassis with No Lens Mount. A Bayonet Adapter is available as an option.				
Optional Filter Wheel	No filter wheel option				
General					
Power @ 24 VDC	16 watts	16 watts	20 watts	20 watts	21 watts
System weight	4.5 pounds		6 pounds		
Size	3.3"W x 3.7"H x 7.0"L		3.33"W x 4.82"H x 5.53"L		
Mounting holes	1x 1/4-20, 6x #8-32		4x #10-32 on Faceplate		
Operating temperature range	-20C to +50C (-4°F to +122°F)				
Storage temperature range	-40C to +70C (-40°F to +158°F)				

Solutions

for Every EO Test Requirement

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