



Committed to matching state-of-the-art detectors with custom electronics in rugged, battle-ready packaging, Teledyne defines optimal resolution with our new Cruz MWIR 1280 camera systems. The InSb version, operating at 77K in the 3 μm – 5 μm range, renders subtle temperature variation as striking visual imagery; the nBn version, etching precise detail at a much higher operating temp., sets a premium on power.

Driven by Teledyne's versatile camera electronics, the SBF 207 digital FPAs in either version can run up to 120Hz at 1280 x 1024 full frame or effortlessly window to 1280 x 720 (i.e., the 720p HD format that fills your favorite monitor).

Teledyne has developed image processing algorithms that perform edge detection with our patented Adaptive Dynamic Range Compression (ADRC), target tracking, image stabilization, image fusion, and super resolution. Our cameras are optimized for Size, Weight, Power, Cost, and the highest quality of Imagery (SWaP CI).

Detector

Material Type	InSb
ROIC	SBF 207 digital FPA
Spectral Range	1 – 6 μm (cold filters available)
Resolution	1280 x 1024 with windowing
Pixel Pitch	12 μm

Electronics and Data Rate

Integration Type	Snapshot
Integration Time	1 ms - 16 ms
Dynamic Range	<0.1 ms to 99% of frame rate
Data Rate	120 megapixels per second
Max Frame Rate Full Window	Up to 120 Hz
SubWindowing	Available upon request

Performance Specifications

NE Δ T	30 mK
Well Capacity	2 million electrons
Operability	>99.5%
Operating Environment	-40°C to 55°C

Camera Specifications

Sensor f/#	f/4 (or custom)
Sensor Cooling	Split linear or rotary
Power	12 watts (20° ambient)

Communication and Data Transfer

Command, Control, Data Output	Camera Link and/or RS232
Software	GUI and SDK available

Physical Characteristics

Size (without lens)	6" x 5" x 3.6"
Camera Core Weight	730 grams
Environmental	Ruggedized to MIL-STD-810G

Optics

Bayonet Mount, Fixed Focal Length, Continuous Zoom, or Custom (upon request)

