



Teledyne's Anacapa™ SWIR 640B camera system comprises a core module and signal interface board. The compact, high performance short wave infrared (SWIR) imager has excellent sensitivity and image quality. It is the highest-frame-rate, fully-integrated, commercial, off-the-shelf SWIR 640 x 512 camera available, delivering ultrafast frame rates - up to 13,000 Hz - in windowing modes for high-speed applications. Creativity and efficiency produces quality plus value.

Applications include low-light-level imaging for man-portable and unmanned vehicle payloads, low-power security and surveillance products, spectroscopy, factory-automated inspection, and more. Our engineers can configure the camera as a core, into a gimbal or to custom specifications.

Detector

Type	InGaAs
Spectral Range	.9 μm - 1.7 μm
Resolution	640 x 512
Pixel Pitch	25 μm

Electronics and Data Rate

Integration Type	Snapshot
Integration Time	Variable
Dynamic Range	14 bits
Data Rate	>32 megapixels/second
Max Frame Rate Full Window	100 Hz
SubWindowing	340 Hz - 320 x 256 window

Performance Specifications

ROIC Noise	50 electrons per pixel
Well Capacity	39 K electrons (high gain) 1.9 M electrons (low gain)
Operability	>99.5%

Camera Specifications

22 mm lens	f/1.4 (or custom)
Operating Temperature	0 °C to 30 °C
Standard Spectral Range	.9 μm - 1.7 μm
Sensor Cooling	Thermal Electric
Lens Mount	M42X1 or C Mount
Power	3.5 watts steady state (23 °C ambient) cooler 1.5 watts (23 °C ambient)

Communication and Data Transfer

Command, Control, Data Output	Camera Link
Software	GUI, SDK and API available

Physical Characteristics

Size (without lens)	1.9" x 1.9" x 1.2"
Weight	162 grams (no lens); 312 grams (with lens)
Environmental	Ruggedized to MIL-STD-810G

CAMERAS BY TELEDYNE

Learn more about our products and capabilities at www.camerasbyteledyne.com

