



Scientific Infrared Cameras

Teledyne Imaging Sensors develops and manufactures infrared imagers for integration into higher level assemblies used for test and analysis. The cameras can either be closed cycle (cooler) or liquid nitrogen filled depending on the application and form/fit requirements within the instrument.

Our designs enable our customer's ability to manipulate integration times, frame times and cold filters to meet the most precise testing requirements. A 1/3 liter LN2 pour-filled Dewar assembly maintains temperature for up to 20 hours unpowered and 9 hours powered; this makes our pour-filled cameras perfect for Scientific Imaging, Process Analysis and Quality Assurance. A developer's kit is available for users who wish to create their own applications.

Camera Basics

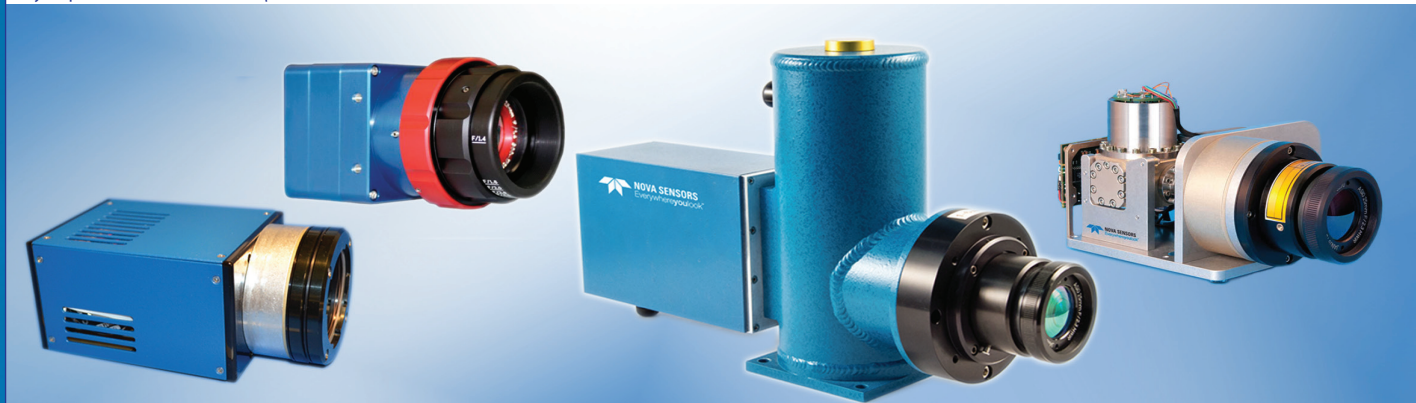
Liquid Nitrogen Filled Camera Models

	Catalina PF 128-40	Cruz PF 640-24	Cruz PF HS 640-24	Cruz PF 1280-12	Cruz PF 640-15	Anacapa PF 320-30
Resolution (pixels)	128 x 128 (64 x 64 and 32 x 32)	640 x 512	640 x 512	1280 x 1024 (with smaller windows)	640 x 512	320 x 256
Spectral response	2.0 μm to 10.5 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm
Pixel pitch	40 μm	24 μm	24 μm	12 μm	15 μm	30 μm
Frame rate @ max window size	1610 Hz	87 Hz	478 Hz	119 Hz (higher frame rates offered with windowing)	105 Hz	105 Hz

Closed Cycle Cameras

	Cruz 640-20	Cruz 640-24	Cruz HS 640-20	Cruz 640-15	Mini Cruz 640-15	Cruz 1280-12	Anacapa 640-25
Resolution (pixels)	640 x 512	640 x 512	640 x 512	640 x 512	640 x 512	1280 x 1024 (with smaller windows)	640 x 512
Spectral response	1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*1.0 μm to 5.3 μm	*.9 μm to 1.7 μm
Pixel pitch	20 μm	24 μm	20 μm	15 μm	15 μm	12 μm	25 μm
Operating Temperature	80K	80K	80K	80K	75K	80K	80K
Frame rate @ max window size	119 Hz	87 Hz	478 Hz	105 Hz	105 Hz	119 Hz (higher frame rates offered with windowing)	100 Hz (high speed windowing)

*By request InSb can reach .400 μm



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