



FLIR A6700sc SLS

Longwave Infrared Thermal Camera

The FLIR A6700sc SLS incorporates a cooled Strained Layer Superlattice (SLS) detector that operates in the 7.5 to 9.5 micron waveband producing crisp LWIR thermal imagery at 640x512 pixel resolution.

FAST INTEGRATION TIMES

Working in snapshot mode, the FLIR A6700sc SLS is able to capture all pixels from a scene simultaneously. This is particularly important when monitoring fast moving objects where an uncooled thermal imaging camera would suffer from image blur. The camera supports image frame rates up to 480 frames per second when operating in windowing mode.

STANDARD VIDEO INTERFACES

Using a standard GigE Vision® or USB3 Vision™ interface to transmit full dynamic range digital video, and GenICam for camera control, the FLIR A6700sc SLS is a true “plug and play” thermal imaging camera. Additional interfaces include a BNC analog video output. The Gigabit Ethernet and analog video are simultaneously active yet independently controlled allowing greater flexibility for recording and display purposes.

CUSTOM COLD FILTERS AVAILABLE

Custom cold filtering options for specific spectral detection and measurement are available.

SOFTWARE

FLIR A6700sc SLS camera works seamlessly with FLIR ResearchIR Max software enabling intuitive viewing, recording and advanced processing of the thermal data provided by the camera. A Software Developers Kit (SDK) is optionally available.

COMPATIBLE WITH 3RD PARTY SOFTWARE

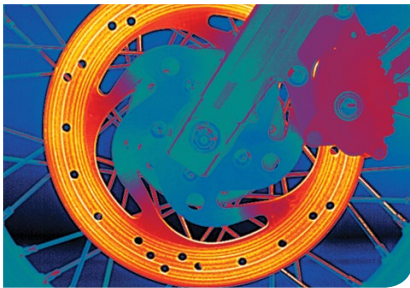
Control the A6700sc SLS and capture data directly into MathWorks® MATLAB software for custom image analysis and enhancement.

KEY FEATURES

- EXCELLENT LWIR IMAGE QUALITY: 640 X 512 PIXELS
- HIGH SPEED IMAGE ACQUISITION: UP TO 480 HZ
- SYNCHRONIZATION WITH OTHER INSTRUMENTS AND EVENTS
- WIDE CHOICE OF OPTICS & EXTENDER RINGS
- MATLAB COMPATIBILITY



Circuit board



Motorcycle disc brake system

GEN*i*CAM  MathWorks®

Imaging Specifications

Detector		A6700sc SLS	
Detector Type	Strained Layer Superlattice (SLS)		
Spectral Range	7.5 - 9.5 μm		
Resolution	640 x 512		
Detector Pitch	15 μm		
NETD	<30mK		
Well Capacity	7.2 M electrons		
Operability	>98%		
Sensor Cooling	Closed Cycle Rotary		
Electronics / Imaging			
Readout	Snapshot (FLIR 4 Channel)		
Readout Modes	Asynchronous Integrate While Read; Asynchronous Integrate Then Read		
Synchronization Modes	Sync In		
Integration Time	480 ns to 687 sec		
Frame Rate (Full Window)	Up to 60Hz		
Subwindow Mode	1/2 or 1/4 Window		
Max Frame Rate (@ Min Window)	480Hz @ 1/4 window		
Dynamic Range	14-bit		
Digital Data Streaming	Gigabit Ethernet or USB 3.0		
Analog Video	NTSC, PAL		
Command & Control	Gigabit Ethernet or USB 3.0		
Measurement			
Standard Temperature Range	-20°C to 350°C (-4°F to 662°F)		
Optional Temperature Range	Up to 1,500°C (2,732°F) Up to 2,000°C (3,632°F)		
Accuracy	$\pm 2^\circ\text{C}$ or $\pm 2\%$ of reading		
Optics			
Camera f/#	4.0		
Available Lenses	13mm, 25mm, 50mm, 100mm, 200mm		
Focus	Manual		
Filtering	Behind the Lens, Custom Cold Filtering		
Image Presentation			
Analog Palettes	Grayscale + Color		
AGC	Manual, Linear, Plateau Equalization, DDE		
Zoom	Video Zoom is Auto Selected: Full Res = 1x, 1/4 Res = 2x		
General			
Operating Temperature Range	-40°C to 50°C (-40°F to 122°F)		
Storage Temperature Range	-55°C to 80°C (-67°F to 176°F)		
Altitude	0 to 10,000 Feet Operational; 0 to 70,000 Feet Non-Operational		
Shock / Vibration	40 g , 11 msec 1/2 sine pulse / 4.3 g RMS Random Vibration, All 3 Axis		
Power	24 VDC (< 50 W steady state)		
Weight w/o Lens	5 lbs		
Size (L x W x H) w/o Lens	7.7" x 4.0" x 4.0"		
Mounting	2 x 1/4"-20, 1 x 3/8"-16, 4 x 10/24		

Back Panel



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