



Images through standard glass for high temperature measurements



Effective for solar cell design and testing



Visualizes subjects obscured by fog



# FLIR A6260sc

## Advanced SWIR Performance Camera

The new FLIR A6260sc camera sets the standard for SWIR cameras for science and R&D applications by pairing high-speed performance with fully customizable features. The newly-designed high resolution detector offers improved sensitivity and linearity across the full dynamic range, making it ideal for radiometry and temperature calibrated applications.

#### **High Quality SWIR Images**

The A6260sc is equipped with an indium gallium arsenide (InGaAs) detector optimized to the 0.9 - 1.7  $\mu$ m or 0.6 - 1.7  $\mu$ m waveband, which produces crisp, 640 x 512 pixel thermal images. The sensor includes three user-selectable gain states offering a 75x gain factor, making it an exceptionally flexible tool for imaging both bright objects (laser beam profiling) and low light scenes (nightglow imaging).

#### **Adjustable Frame Rates and Triggering**

The A6260sc offers full customization of all settings, including integration time and frame rate, so you can tailor the controls to each unique application. Synchronize and trigger the camera with external events and devices, for maximum flexibility. The A6260sc also provides a built-in flat field shutter that can be either manually or automatically controlled for spatially-uniform image quality.

#### **Temperature Calibration and Measurement**

When optimized for the 0.9 - 1.7  $\mu$ m waveband, the A6260sc can be factory- or user-calibrated to measure temperatures above 400°C. Couple this with the ability to see through materials such as glass, and the A6260sc becomes a perfect tool for high temperature thermal measurement in an oven, furnace, or environmental chamber.

#### **Connectivity and Compatibility**

The FLIR A6260sc camera works seamlessly with FLIR ResearchIR Max software, enabling intuitive viewing, recording, and advanced processing of thermal data. The A6260sc is fully compliant with GigE Vision® and GeniCam, making it plug and play with other software programs, such as MathWorks® MATLAB. Use the optional SDK for integration into your own custom software program.

#### **Key Features**

- InGaAs detector: 0.9 1.7 μm or 0.6 1.7 μm waveband
- 640 x 512 pixel resolution image quality at 125 fps
- Superior sensitivity and linearity down to zero light
- Synchronization with other instruments
- Full GigE Vision® and GeniCam support
- Optional temperature calibration



### **Specifications**

System Overview	A6260sc
IR Resolution	640 × 512
Detector Type	Indium gallium arsenide (InGaAs)
Detector Pitch	15 µm
Spectral Range	0.9 - 1.7 μm or 0.6 - 1.7 μm
Noise (NEI)	Low Gain: 8.35E9 photons/sec/cm <sup>2</sup> Medium Gain: 2.89E9 photons/sec/cm <sup>2</sup>
Quantum Efficiency	> 60% from 1 to 1.6 µm
Well Capacity	Low Gain: 1.44 M electrons Medium Gain: 95.7 K electrons High Gain: 19.1 K electrons
Operability	99.5% (99.8% typical)
Electronics/Imaging	
Sensor Temperature	30°C (TEC Stabilized)
Readout	Snapshot
Readout Modes	Asynchronous integrate while read Asynchronous integrate then read
Synchronization Modes	Sync In, Sync Out, Trigger In
Integration Time	0.48 µs to 687 seconds
Frame Rate (Full Window)	Programmable 0.0015 Hz to 125 Hz
Subwindow Modes	User-defined size, centered in image
Max Frame Rate	25,614 Hz (32 x 4 window)
Dynamic Range	14-bit
Digital Data Protocol	GigE Vision® 2.0
Analog Video	NTSC, PAL
Command & Control	GenlCam
Measurement	
Optional Temperature Calibration	400°C up to 3000°C
Optics	
Camera f/number	Lens dependent
Available Lenses	25 mm, 50 mm, 100 mm
Focus	Manual
Filtering	25.4 mm diameter by 1 mm thick filter mount, behind the lens
Analog Video	
Analog Palettes	Selectable 8-bit
AGC	Manual, Linear, Plateau Equalization, DDE
Zoom	Video zoom is auto-selected: 1x for full and 1/2 window, 2x for 1/4 window
General	
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F)
Storage Temperature Range	-55°C to 80°C (-67°F to 176°F )
Shock / Vibration	40 g, 11 msec ½ sine pulse / 4.3 g RMS random vibration, all 3 axes
Power	24 VDC (<50 W steady state)
Weight w/o Lens	5 lbs
Size (L x W x H ) w/o Lens	21.6 x 10.2 x 10.9 cm (8.5 x 4.0 x 4.3 in)
Mounting	2 x ¼ in -20, 1 x 3/8 in – 16, 4 x 10/24

Specifications are subject to change without notice.

For the most up-to-date specifications, go to www.flir.com

Cat 6 Ethernet port On/Off switch Status LEDs AUX port Power in Sync Video port

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