

FLIR T450sc / T430sc

Compact, Portable Thermal Imaging Cameras



The FLIR T450sc / FLIR T430sc are thermal imaging cameras with a rotating optical block and touch screen interface. These handheld cameras are perfect for bench-top testing in the lab or dynamic testing in the field. The tiltable IR unit gives you great flexibility and allows you to conduct your experiments fast and in a comfortable position.

IMAGE QUALITY AND THERMAL SENSITIVITY

Both cameras are equipped with an uncooled Vanadium Oxide (VoX) microbolometer detector that produces thermal images of 320 x 240 Pixels. They generate crisp and clear detailed images that are easy to interpret, resulting in reliable imaging with high accuracy. Both cameras are also equipped with a visual camera.

TOUCH SCREEN

The high quality LCD touch screen presents sharp and bright images. Bringing interactivity and user comfort to a new level. In combination with the large backlit buttons and joystick the cameras are very easy to use.

RADIOMETRIC RECORDING

Both cameras allow for full dynamic video streaming to PC using USB or to mobile devices using Wi-Fi. They can also create visual and thermal non radiometric MPEG-4 video files. The T450sc can record radiometric IR sequences in real-time directly on camera to SD card storage. These sequences include all temperature data and can be post analyzed on the camera or PC.

RICH FEATURE SET

Both cameras come with features like Multi Spectral Dynamic Imaging (MSX), UltraMax™ image enhancement, auto-image rotation, image sketch and autofocus. They are equipped with Auto Hot/Cold Spot & Audible/Visual Alarms. On-screen emissivity tables, up to 5 temperature measurement spots, and Delta T functionality mean you can quickly acquire and easily compare temperature data.

SOFTWARE

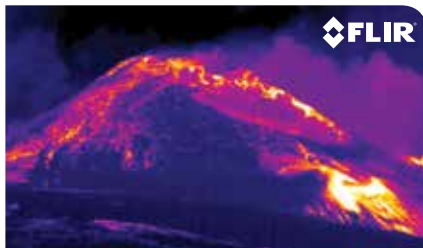
FLIR T450sc / T430sc cameras work seamlessly together with FLIR ResearchIR Max software enabling intuitive viewing, recording and advanced processing of the thermal data provided by the camera.

MATHWORKS® MATLAB

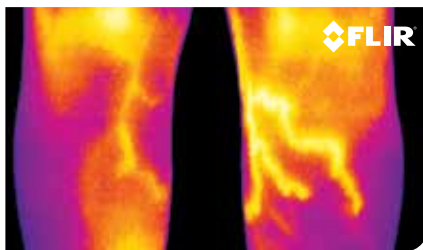
Control and capture data directly into MathWorks® Matlab software for advanced image analysis and processing.

KEY FEATURES

- THERMAL AND VISUAL CAMERA
- VOX UNCOOLED MICROBOLOMETER: 320 X 240 PIXELS
- MULTI-SPECTRAL DYNAMIC IMAGING (MSX)
- ULTRAMAX FOR UP TO 640X480 PIXEL THERMAL RESOLUTION
- SOFTWARE INCLUDED



Thermal surveillance of volcanos



Vein cartography



Imaging Specifications

System Overview	T450sc	T430sc
Detector Type	Uncooled Microbolometer	
Spectral Range	7.5 – 13.0 μm	
Resolution	320 x 240	
Detector Pitch 25 μm	25 μm	
NETD	<30 mK	
Electronics / Imaging		
Time Constant	<12 ms	
Frame Rate	30 Hz	
Dynamic Range	14-bit	
Digital Data Streaming	Real-time Radiometric = USB to PC Real-time Non-radiometric = MPEG via USB to PC	
On Camera Radiometric Recording	Real-time Temperature Calibrated Movie Recording at 30Hz to SD card	No
Analog Video	Composite Video / RCA connector	
Command & Control	USB, WiFi	
Measurement		
Standard Temperature Range	-40°C to +650°C -40°F to +1202°F	
Accuracy	$\pm 1^\circ\text{C}$ or $\pm 1\%$ (limited range) $\pm 2^\circ\text{C}$ or 2%, whichever is greater, at 25°C nominal	$\pm 2^\circ\text{C}$ or 2%, whichever is greater, at 25°C nominal
Optics		
Camera f/#	f/1.3 Integrated Lens 18 mm (25°)	
Available Lenses	76 mm (6°), 30 mm (15°), 10 mm (45°), 4 mm (90°)	
Close-up Lenses / Microscopes	Close-up (25 μm), (50 μm), (100 μm)	
Focus	Automatic or Manual (Motorized)	
Image Presentation		
On-Camera Display	Touch Screen/3.5 in LCD Display (320 x 240)	
Auto-Orientation Keeps Onscreen Temperature Data	Keeps Onscreen Temperature Data Upright in Portrait or Landscape"	
Automatic Gain Control	Manual, Linear, Histogram, DDE	
Image Analysis	Spot Meters, Areas, Auto Hot / Cold Detection, Difference Temp, Isotherms, Alarms	
Image Annotations	60 Sec Voice, Text, 4 x Markers, Sketch	
Visible Image	3.1 Megapixel from Integrated Visible Camera	
MSX® Enhancement/ Picture in Picture	Adds Visible Detail to Thermal/P-i-P Overlays Thermal on Visible Image	
UltraMax™ Image Enhancement	Increases Number of Pixels up to 4x Via Software	
General		
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)	
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)	
Encapsulation	IP 54 (IEC 60529)	
Bump / Vibration	25 g (IEC 60068-2-29) / 2 g (IEC 60068-2-6)	
Power AC Adapter 90-260 VAC, 50/60 Hz	AC Adapter 90-260 VAC, 50/60 Hz or 12 V from a Vehicle	
Battery System	Li Ion, 4 Hours Operating Time	
Weight w/ Battery	0.88 kg (1.94 lb)	
Size (L x W x H)	106 x 201 x 125 mm (4.2 x 7.9 x 4.9 in)	
Mounting	¼"-20	



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Specifications are subject to change without notice
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