

FLIR T650sc

Exceptional Value and Image Quality for Thermographic Studies and Temperature Measurements

The T650sc infrared camera offers thermal and visual imagery, spot size resolution, and reliable temperature measurement accuracy—all at an affordable cost. Technicians, engineers, and scientists will appreciate T650sc features including a built-in digital camera, voice annotation, laser target locator, GPS, and much more.

Sensitivity – 640 × 480 infrared detector features 0.03°C sensitivity and ±1°C (1.8°F) accuracy resulting in outstanding resolution and image quality for precise readings on small targets.

Temperature Range – -40°C to 2,000°C.

Visible and Thermal Imagery – The integrated thermal camera and 5.0 megapixel visual camera have matching FOV lenses that allow the correlation of targets over various distances with thermal and visible image fusion.

On-Camera Snapshot and Video Recording – Thermal and visual snapshots and video can be stored directly on the camera to high-capacity SD cards.

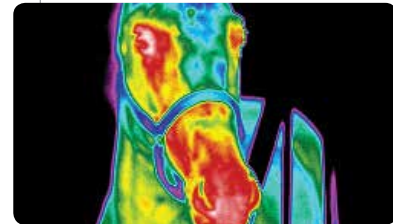
Versatile Data Transfer/Storage – USB streams 14-bit fully radiometric real-time video directly to a PC.

Annotation and GPS – Text comments or 60 seconds of digital voice commentary can be embedded with each IR image, eliminating the need to keep separate notes. Built-in GPS system for geo-referencing.

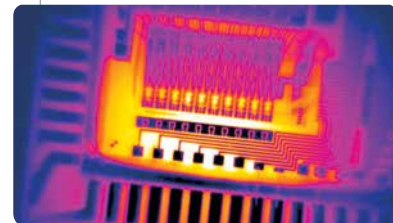
Increased Convenience and Productivity – 4.3" widescreen LCD and multi-angle handle with an integrated joystick and buttons allow fast, ergonomic point-and-shoot operation. Other advanced features include continuous auto-focus, freeze-frame, image storage, and a target illuminator lamp.

Rugged, Ergonomic Design – Tough, portable, and ergonomic, the magnesium housing meets the IP54 standard for protection of internal parts from shock, vibration, dust, and water – all in a package weighing only 3.8 pounds.

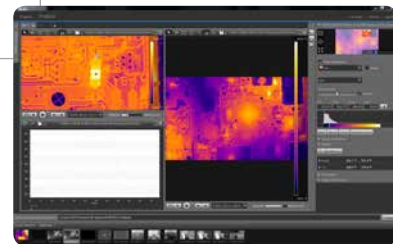
Included ResearchIR Data Acquisition and Analysis Software – Specifically developed for use in research and scientific environments, FLIR ResearchIR allows T650sc users to remotely control their camera, record movies & snapshots, and conduct detailed thermal analysis in “live” or “playback” mode.



Veterinary medicine



Microchip



Imaging Specifications

Detector	T650sc
Detector Type	Uncooled Microbolometer
Spectral Range	7.5 – 13.0 μm
Resolution	640 x 480
Detector Pitch	17 μm
NETD	< 30 mK
Electronics / Imaging	
Time Constant	<8 ms
Frame Rate (Full Window)	30 Hz
Dynamic Range	14-bit
Digital Data Streaming	Real-time Radiometric = USB to PC Real-time Non-radiometric = USB to PC
Analog Video	DVI over HDMI
GPS	Location Data Stored with Every Image
Command & Control	USB, WiFi
Measurement	
Standard Temperature Range	-40°C to 2,000°C (-40°F to 248°F)
Accuracy	$\pm 1^\circ\text{C}$ or $\pm 1\%$ of Reading (Limited Temperature Range) $\pm 2^\circ\text{C}$ or $\pm 2\%$ of Reading
Optics	
Camera f/#	f/1.0
Available Lenses	88.9 mm (7°), 41.3 mm (15°), 24.6 mm (25°), 13.1 mm (45°), 6.5 mm (80°)
Close-up Lenses / Microscopes	Close-up (100 μm , 50 μm)
Focus	Continuous Automatic or Manual (Motorized & Tactile)
Image Presentation	
On Camera Display	Adjustable 4.3" Touchscreen Display (1024 x 600) & LCD Viewfinder (800 x 600)
Automatic Gain Control	Manual, Linear, Histogram, DDE
Image Analysis	Spot Meters, Areas, Auto Hot / Cold Detection, Isotherms
Image Annotations	60 Sec Voice, Text, 4 x Markers, GPS
Zoom	1-8x Digital Continuous
Visible Image	5.0 Megapixel from Integrated Visible Camera
Thermal / Visible Fusion	IR Above / Below / Interval, Picture-in-Picture
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 90-26- VAC, 50/60 Hz or 12 V from a vehicle
Battery System	Rechargeable Li ion, 7.2 V, 4.4 Ah (>2.5 hours run time at 25°C/68°F)
Weight w/ Battery w/o Lens	1.3 kg (2.87 lb)
Size (L x W x H) w/o Lens	143 x 195 x 95 mm (5.6 x 7.7 x 3.7 in)
Mounting	1/4"-20



T650sc Includes:

- Hard Transport Case
- T650sc Camera with Lens
- 2 x Batteries, Battery Charger, Power Supply
- Headset
- Memory card with adapter
- USB, Video Cables
- User Documentation CD-ROM
- ResearchIR Recording and Analysis Software



BOSTON

FLIR Systems, Inc.
9 Townsend West
Nashua, NH 03063
USA
PH: +1 866.477.3687

PORTLAND

Corporate Headquarters
FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA
PH: +1 866.477.3687

CANADA

FLIR Systems, Ltd.
920 Sheldon Ct.
Burlington, ON L7L 5L6
Canada
PH: +1 800.613.0507

MEXICO/LATIN AMERICA

FLIR Systems Brasil
Av. Antonio Bardella
320 - B. Boa Vista- Cep:
18085-852 - Sorocaba - SP - Brazil
PH: +55 15 3238 8070