

FLIR T-Series Thermal Imaging Cameras



T-Series

Professional Level Performance

Now with the Highest Quality 640 × 480 Detector

Flexible, Ergonomic Design Makes It Easy to
Capture Images from Any Angle

Get the Shot Without the Stress

If you've ever spent hours straining to look for a bus duct problem with a point-and-shoot thermal camera or hunting for loose connections with one down at floor level, you know the toll it can take on your neck, shoulders, and back. Fortunately, with FLIR T-Series you don't have to work that way anymore.



Work Comfortably

T-Series features an ergonomically-designed rotating optical block that lets it tilt up or down along its 120-degree range of motion while keeping the touchscreen display right in front of you. Work in comfort and safety while viewing targets above your head, below your knees, or around corners.

T-Series. The best way to capture the best thermal images from any angle.

Now with more resolution options.

Professional-Grade Thermal Imagery:

• T300/400 -

76,000 pixels

Excellent accuracy and sensitivity.

• T620/640 -

307,200 pixels

Best IR resolution in the industry.

Unmatched Warranty

FLIR's exclusive Double Diamond warranty covers the whole camera for 2 years, the battery for 5 years, and the detector for 10 full years. No one but FLIR can offer peace of mind like this because no one but FLIR builds their own detectors.



T300 & T400 Features

Affordable, feature-rich infrared cameras offer maximum efficiency and flexibility for professional thermographers with demanding workloads.

Superior IR Images – Razor-sharp thermal images with up to 76,800 pixels (320 × 240) for greater accuracy from farther away

High Thermal Sensitivity – Clear, low-noise images that reveal subtle problems and temperature differences

Visible Light Digital Camera with Video Lamp – 3.1 megapixel resolution with video lamp provides clear images in any lighting conditions

Rotating Optical Block – Ergonomic lens system rotates up to 120° for easy, comfortable viewing when capturing images from challenging angles

Advanced Optics – The widest range of optics to fit the view and spot size you need for your application; built-in 24° and optional 6°, 15°, 45°, 90°, and microscope lenses available

Laser Pointer – Pinpoint a reference spot and align marker to image for precise detection

Temperature Measurement Precision – Accuracy calibrated within 2% or $\pm 2^\circ$ to meet the standard you can always trust FLIR to deliver

Scalable P-i-P and Thermal Fusion – Display both the thermal and visible images onscreen for easy identification and control the size of the Picture-in-Picture window

Delta T & Multiple Measurement Spots – Powerful tools include differential temperature, 5 measurement spots, 5 box areas, isotherm, and auto hot/cold measurements for detailed analysis

MeterLink – Wirelessly transmit vital diagnostic data such as amperage, voltage, and resistance from clamp meters directly to the camera for annotating thermal images

Annotation – Add voice and text comments to images or use the touchscreen to sketch notes

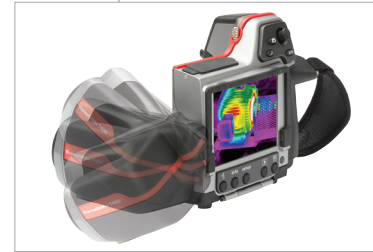
InstantReport – Generate a professional PDF document in the camera without an external computer and complete the job before you leave the site



3.5" Touchscreen LCD



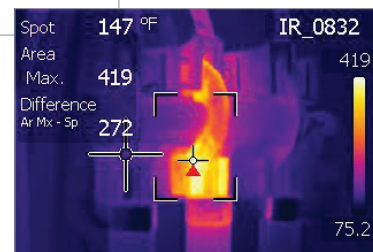
Digital Camera with Lamp



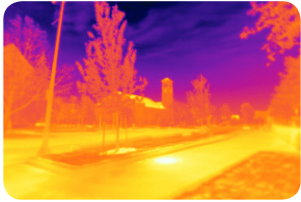
Rotating Optical Block



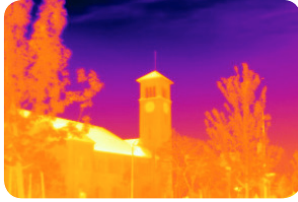
Thermal Fusion



Delta T Differential Temperature



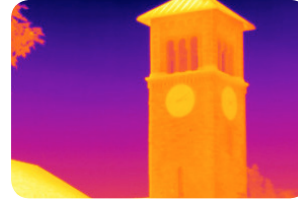
90° Lens



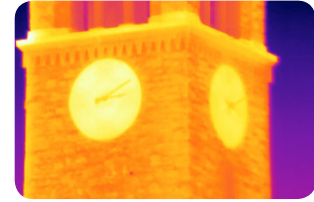
45° Lens



24° Lens



15° Lens



6° Lens

3.1 MP Camera with Lamp & Laser Pointer for Visible Light Reference Pictures



3.5" LCD with Stylus for Easy Touchscreen Access to Images and Camera Tools

Rotating Optical Block for Comfortable Operation & Viewing Angles

T300

Includes:

- High quality 76,800 pixel (320 x 240) resolution
- Thermal sensitivity of 0.05°C
- 3.1 MP visible light camera with lamp
- Temperature calibration standard at 650°C
- Difference temperature function
- 4x digital zoom
- Wide variety of lens options
- 3.5" Touchscreen LCD
- Record 60 seconds of voice comments on each image
- Picture-in-Picture to superimpose thermal images
- Standard JPEG images with full temperature data
- QuickReport analysis & reporting software
- Standard NTSC video output
- Copy images to USB thumb drive
- Realtime video frame rate

T400

Additional Features:

- 8x digital zoom
- On board MPEG4 digital video recording
- High temp calibration standard at 1,200°C
- Periodic image storage every 10 sec up to 24 hrs
- Panorama function stitches multiple images together
- Annotation with text, sketch, and image marker
- Fusion blending of thermal and visual light images
- Temperature screening with audible alarm
- InstantReport built-in PDF report generation

T620 & T640 Features

The exciting, new T620 and T640 move to the head of the class in professional and expert level cameras, providing the highest infrared resolution in the T-Series line and a fresh, long list of impressive features.

New! Highest IR Resolution in its Class – Crisp thermal images with up to 307,200 pixels (640 × 480) for greater accuracy and readability from longer distances

New! Higher Resolution Digital Camera – 5 megapixel detector with LED lamps provides sharper visible light images for clear reference pictures of target objects

New! Large Touchscreen – 4.3" LCD provides ~25% bigger display area with bright, sharp images, clear graphics, an intuitive interface, and efficient on-screen report generation

New! Viewfinder – Built-in color viewfinder on T640 makes thermal and visible images clearer and easier to see in brightly lit environments

New! Wi-Fi Connectivity – Send images and data to mobile devices like an iPhone® or iPad® loaded with FLIRViewer app so you can share critical information quickly

More Measurement Tools – Report all the details with 10 measurement spots, 5 box areas, Delta T differential temperature, isotherm, and auto hot/cold markers

Temperature Measurement Precision – Accuracy calibrated to within 2% or ±2° to meet the standard you can always trust FLIR to deliver

High Thermal Sensitivity – Detailed, low-noise imaging to detect the smallest temperature differences and subtle problems

Rotating Optical Block – Popular T-Series design allows 120° lens rotation for more comfortable operation when capturing images from challenging angles

Advanced Optics – A range of lenses to fit your application needs including the standard 25° and optional 15° and 45° optics

Bluetooth Communication – Link and store moisture and clamp meter readings with IR images wirelessly to support your findings

Thermal Fusion and P-i-P – Blend thermal and visible light images onscreen and scale picture-in-picture overlays to identify targets and locations easily



4.3" Touch-Screen LCD



5 MP Digital Camera with Lamp



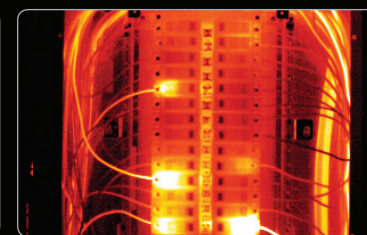
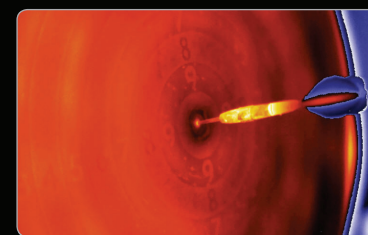
Rotating Optical Block



Connect to iPad/iPhone via Wi-Fi



T640 Color Viewfinder



T620

Includes:

- Highest quality 307,200 pixel (640 × 480) resolution
- 5 MP visible light camera with lamp
- 4.3" bright touchscreen LCD
- Connect to iPhone and iPad via Wi-Fi
- Bluetooth to MeterLink, Smartphone, and PC devices
- Temperature calibration standard at 650°C
- Thermal sensitivity of 0.05°C
- 4x digital zoom
- Voice, text, and sketch annotation
- P-i-P and fusion to superimpose thermal images
- MPEG4 non-radiometric IR or daylight video recording to SD card
- Realtime video frame rate
- MPEG4 streaming video over Wi-Fi
- FLIR Tools software for camera updates
- InstantReport

T640

Additional Features:

- Built-in color viewfinder for easier viewing in bright environments
- Thermal sensitivity of 0.04°C
- Temperature range standard to 2,000°C
- 8x digital zoom
- Measurement presets
- Line profile

Imaging Specifications

	T300	T400	T620	T640
Camera Specifications				
Resolution	320 x 240	320 x 240	640 x 480	640 x 480
Total Pixels	76,800	76,800	307,200	307,200
Thermal Sensitivity	<0.05°C	<0.05°C	<0.05°C	<0.04°C
Accuracy	+/-2% or 2°C	+/-2% or 2°C	+/-2% or 2°C	+/-2% or 2°C
Temperature Range	-4°F to 1,202°F (-20°C to 650°C)	-4°F to 2,192°F (-20°C to 1,200°C)	-4°F to 1,202°F (-20°C to 650°C)	-4°F to 3,632°F (-20°C to 2,000°C)
Hi-Temp Option to 1,200°C	x	Standard		
Lens Options	Standard: 25° x 19°; Optional: 90°, 45°, 15°, 6°; Close-up: 100 μ, 50 μ		Standard: 25°; Optional: 45°, 15°, 100 μ, 50 μ	
Zoom	2x Continuous Digital	8x Continuous Digital	4x Continuous Digital	8x Continuous Digital
Focus	Auto & Manual		Auto & Manual	
Uncooled Microbolometer	x	x	x	x
Color LCD Touchscreen	3.5"	3.5"	4.3" Bright Touch	4.3" Bright Touch
Color Viewfinder				x
Video Camera w/Lamp	3.1 MP	3.1 MP	5 MP	5 MP
Fusion	PIP Scalable	PIP Scalable & Moveable	PIP Scalable & Moveable	PIP Scalable & Moveable
Laser Spot	x	x	x	x
Video Out	Composite	Composite	HDMI/DVI	HDMI/DVI
Frame Rate	30 Hz		30 Hz	
Analysis				
Professional‡	x	x	x	x
Delta T	x	x	x	x
Annotation				
Voice (60 seconds)	x	x	x	x
Text & Sketch		x	x	x
Draw Direct			x	x
Panorama		x		
Periodic Image Storage		x	x	x
File Storage				
Radiometric JPG (>1,000)	x	x	x	x
MPEG4 Video Recording		x	x	x
Other				
Joystick Control			x	x
Wi-Fi to Mobile Devices			x	x
MPEG4 Streaming Video Wi-Fi			x	x
Bluetooth to PC/Smartphone			x	x
MeterLink	x	x	x	x
QuickReport	x	x		
InstantReport		x	x	x
FLIR Tools			x	x
ThermaTrak	x	x		
Battery Type/Op Time	Li-Ion/>4 hours	Li-Ion/>4 hours	TBD	TBD
Weight (including battery)	1.94 lb (0.88 kg)		2.87 lb (1.3 kg)	

‡ Professional analytics tools include DeltaT functionality and multiple movable spot

Wi-Fi Connectivity to Mobile Devices

Download the new FLIRViewer App from the Apple Store to your iPad or iPhone and link to the T620 or T640 via Wi-Fi. Transfer images to your mobile device, use it to add measurement spots, re-adjust span and level, change palettes, create reports, and show or email findings to decision makers easily. It's an efficient way to make a big impact.



MeterLink™

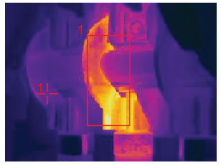
Be sure you're getting critical electrical load readings so you can make the right call. Quantify the severity of electrical problems with MeterLink-enabled clamp meters that use Bluetooth wireless communication to send data to the FLIR camera for annotation on stored thermal images. Contact FLIR to learn about other tools that connect with MeterLink.




InstantReport

Create professional reports on board your camera with InstantReport. FLIR's analysis software has always offered professional results and been easy to use. Now, create reports without a PC! InstantReport includes thermal and visual images along with your measurements and analysis tools, and text & sketch annotations, in a standard PDF document that's easy to share right from the touchscreen.

Thermogram 2010-07-21 10:47 AM



building 18 - electrical



Measurements	
Spot 1	77.3°C
Area 1 Max	217.7°C
Ar1max-Sp1	140.4°C

DC	08.5A
DC	08.5A

Parameters	
Emissivity	0.98
Refl temp	20.0°C
Obj dist	1.0m
FOV	25°