

# T-SERIES

THERMAL IMAGING CAMERAS FOR  
PREDICTIVE MAINTENANCE

# UNLEASH THE ULTIMATE POWER OF FLIR

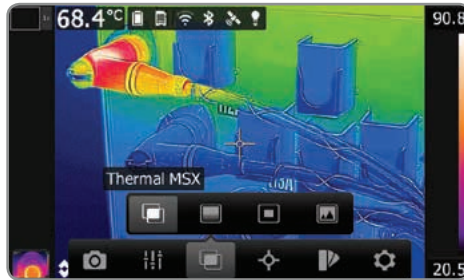


The World's **Sixth Sense**™

# T-SERIES

## THE ULTIMATE THERMAL IMAGER

TO KEEP EQUIPMENT RUNNING RELIABLY, YOU NEED DEPENDABLE TROUBLESHOOTING TOOLS THAT CAN HELP YOU FIND AND REPORT PROBLEMS FAST. THAT'S WHY FLIR INFRARED CAMERAS ARE INDISPENSABLE. THEY LET YOU SEE INVISIBLE HEAT CAUSED BY ELECTRICAL RESISTANCE, MECHANICAL WEAR, AND OTHER ISSUES EARLY ENOUGH TO HELP YOU KEEP THINGS OPERATING SAFELY AND HEAD OFF EXPENSIVE DOWNTIME. AND NO OTHER LINE OF THERMAL IMAGERS MAKES IT EASIER TO CAPTURE AND SHARE FINDINGS THAN T-SERIES.



### PRODUCTIVITY BOOST

- Touchscreen tools as intuitive as a smartphone's
- Simple buttons to access the interface with gloved hands
- GPS & Compass embed pointing direction and geo-location
- LEDs to light darker areas and a laser pointer to mark locations
- Easy voice, text, and sketch annotations, stored in radiometric images

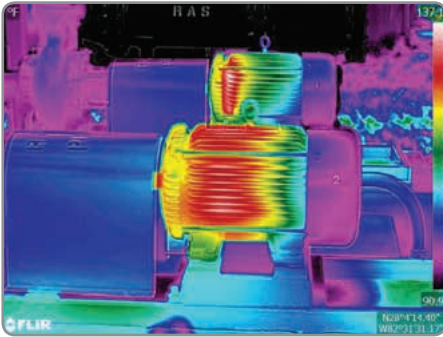
### FAST COMMUNICATION

- FLIR Tools Mobile app links T-Series to smartphones & tablets for immediate image analysis and sharing from the field plus streaming video and remote control for safer monitoring
- MeterLink® transmits FLIR T&M data to the camera, for instant integration into images and reports
- FLIR Tools software for PC & Mac provides extra documentation power and camera firmware updates
- Radiometric recording to memory card



### OPTIMUM ERGONOMICS

- Rotating optical block points 120° up and down for easier aiming and viewing
- Auto Orientation switches onscreen temperature data to portrait or landscape
- The fastest auto focus and manual control for precision imaging
- T640 & T660 feature Continuous Auto Focus for automatic clarity wherever you aim



## ULTIMATE RESOLUTION & SENSITIVITY

- Up to 640 x 480 native resolution
- Up to 1.2 MP thermal resolution with UltraMax™ – a 4x improvement
- MSX® Enhancement on live video, stored images, and UltraMax images
- Class-leading sensitivity of up to <math><0.02^{\circ}\text{C}</math> for outstanding image quality
- Temperature calibrations up to 2,000°C



VIEWFINDER FOR BRIGHT CONDITIONS

## HELPFUL ACCESSORIES

- A range of interchangeable advanced optics
- Additional batteries and chargers
- Spare cables and SD cards
- Camera pouches and tripod adapters
- FLIR IR Windows



# T-SERIES

## THE ULTIMATE FEATURES

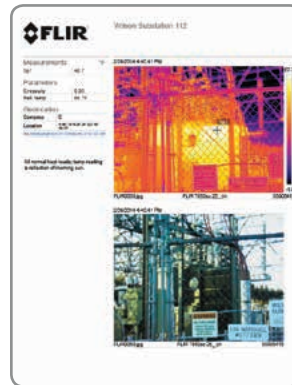


### INTUITIVE TOUCHSCREEN

Tap the screen or buttons to quickly access temperature measurement tools, parameters, image modes, and more.



### METERLINK



### FLIR TOOLS FOR PC & MAC OS

Included software for in-depth image analysis, report generation, and more.



Joystick & large backlit buttons for gloved operation.

3.5" bright touchscreen for quick access to images, camera tools, & analytics.

T460



T640 viewfinder makes surveys in the brightest environments even easier.

Large 4.3" capacitive touchscreen puts fast tools at your fingertips.

T660

### METERLINK



### FLIR TOOLS MOBILE APP





BRIGHT 3.5" TOUCHSCREEN



MANUAL FOCUS

AUTO FOCUS/IMAGE CAPTURE



LED LIGHT & LASER POINTER

3.1 MP VISIBLE LIGHT CAMERA

### T420, T440 & T460

FLIR T420, T440, and T460 cameras deliver 76,800 pixels of vivid thermal resolution, UltraMax image enhancement, advanced interchangeable lenses to fit the view and spot size you need, and more productivity features than ever to help ease your demanding workload.

LARGE 4.3" CAPACITIVE TOUCHSCREEN

VIEWFINDER ON T640 AND T660

AUTO FOCUS/IMAGE CAPTURE

5 MP DIGITAL CAMERA

LED LAMPS & LASER POINTER

MANUAL FOCUS

### T600, T620, T640 & T660

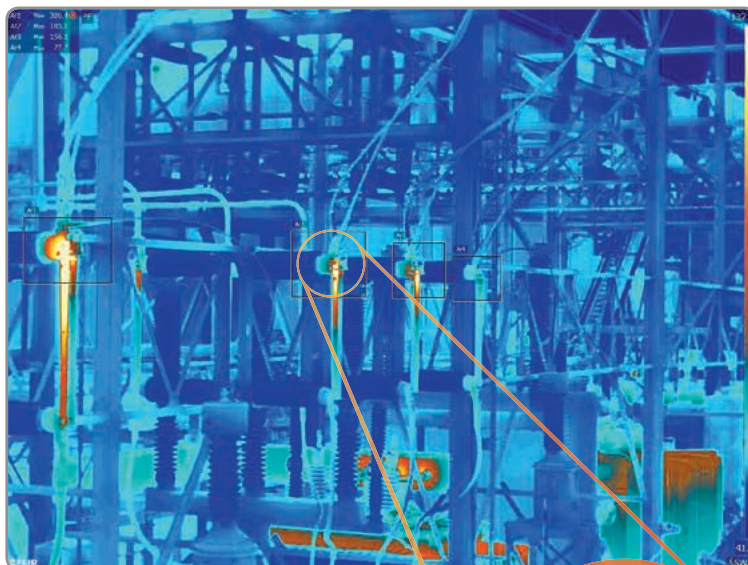
The T600 produces crisp 480 x 360 thermal imagery, while T620, T640, and T660 cameras offer the highest FLIR handheld IR precision at 640 x 480 resolution delivering 307,200 pixels, plus UltraMax image enhancement. The greater the resolution, the easier it is to see, find, and reliably measure heat issues on smaller, distant components.



# T-SERIES

## THE ULTIMATE RESOLUTION

ULTRAMAX AND MSX COMBINE TO TURN T-SERIES CAMERAS INTO THE MOST POWERFUL INFRARED IMAGING AND NON-CONTACT TEMPERATURE MEASUREMENT TOOLS ON THE PLANET, ALL IN A COMPACT, EASY-TO-USE DESIGN.

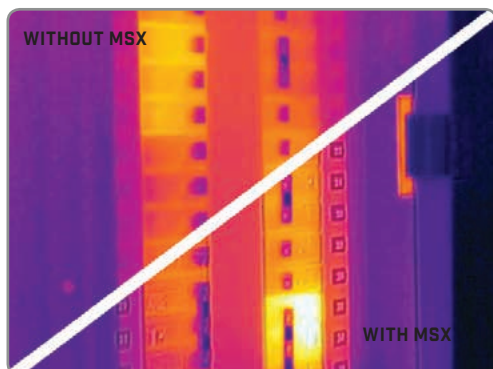


### ULTRAMAX

FLIR's new UltraMax is a unique image processing technique that allows you to generate reports with images that have four times as many pixels, and 50% less noise, so you'll be able to zoom in on smaller targets and measure them more accurately than ever.



**UNMATCHED RESOLUTION AND MEASUREMENT PERFORMANCE EVEN AT 8X ZOOM**



### MSX ENHANCEMENT

FLIR's patented multi-spectral dynamic imaging (MSX) etches vital image detail from the visible light image onto the thermal image to help you see where problems are quickly and easily without compromising any of your temperature measurement data.

## SPECIFICATIONS

Model	T420	T440	T460
Thermal Resolution	76,800 (320 × 240)		
Thermal Sensitivity	<0.04°C @ 30°C		<0.03°C @ 30°C
Accuracy	±/-2°C (±/-3.6°F) or ±/-2% of reading, whichever is greater, at 25°C (77°F) nominal		±/-1°C (±/-1.8°F) or ±/-1% of reading for limited temperature range; ±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.
Temperature Range	-4°F to 1,202°F (-20°C to 650°C) Optional: to 2,192°F (1,200°C)	-4°F to 2,192°F (-20°C to 1,200°C)	-4°F to 2,732°F (-20°C to 1,500°C)
Measurement Modes	7 presets: center spot; hot spot (box max); cold spot (box min); 3 spots; hot spot - spot (box max + spot + delta); hot spot - temperature (box max + ref temp + delta); no measurements	6 presets: center spot; hot spot (box max); cold spot (box min); no measurements; 2 user presets	
UltraMax	•	•	•
Radiometric Recording			CSQ to memory card
User Presets		•	•
Frame Rate	60 Hz		
Lens Choices	6°, 15° Tele, 45° & 90° Wide; Close up: 100 µm, 50 µm		
Focus	Manual & Automatic		
Display Size	3.5"		
Touchscreen	•	•	•
Viewfinder			
Built-in Visual Camera	3.1 MP		
Digital Zoom	4x	8x	
Compass	•	•	•
GPS			
Sketch on IR/Visual Image		Draw or add predefined stamps	

SEE FULL T-SERIES SPECIFICATIONS AT [WWW.FLIR.COM/THERMOGRAPHY](http://WWW.FLIR.COM/THERMOGRAPHY)

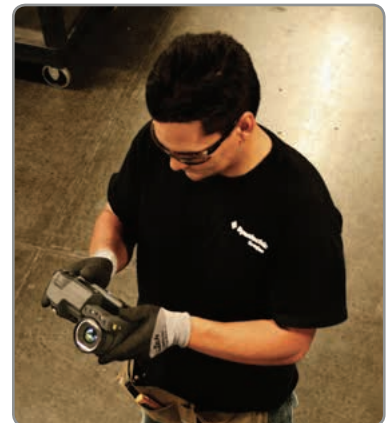


### FLIR 2-5-10 WARRANTY

All T-Series cameras are covered by our revolutionary FLIR 2-5-10 Warranty when registered within 60 days of purchase.

- 2 Years on Camera Parts & Labor
- 5 Years on Li-Ion Batteries
- 10 Years on the IR Detector

Only FLIR can provide peace of mind like this because only FLIR makes all of the camera's critical components from the ground up.





T600	T620	T640	T660
172,800 (480 × 360)	307,200 (640 × 480)		
<0.04°C @ 30°C		<0.03°C @ 30°C	<0.02°C @ 30°C
+/-2°C (+/-3.6°F) or +/-2% of reading, whichever is greater, at 25°C (77°F) nominal			+/-1°C (+/-1.8°F) or +/-1% of reading for limited temperature range; ±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.
-40°F to 1,202°F (-40°C to 650°C)	-40°F to 1,202°F (-40°C to 650°C) Optional: to 3,632°F (2,000°C)	-40°F to 3,632°F (-40°C to 2,000°C)	
6 presets: center spot; hot spot (box max); cold spot (box min); no measurements; 2 user presets			
	•	•	•
			CSQ to memory card
•	•	•	•
30 Hz			
25°, 7° & 15° Tele, 45° & 80° Wide; Close up: 100 µm, 50 µm, 25 µm			
Manual & Automatic		Manual, Automatic, and Continuous	
4.3"			
Capacitive touch screen			
		•	•
5 MP			
4x		8x	
	•	•	•
	•	•	•
Draw or add predefined stamps			



## SUPPORT FROM ITC

Expand your expertise, enhance your career, and get the most out of your camera with valuable courses from the Infrared Training Center. At ITC, you can get initial training and certified as a Level 1 Thermographer, or receive advanced training in specialized fields of thermography. ITC training is a vital investment to help you get the most out of your thermal camera.



## ABOUT FLIR

All infrared cameras are not created equal, because infrared camera manufacturers are not all the same. FLIR stands above the rest.

The largest commercial infrared company in the world, FLIR has nearly 50 years of experience building and integrating high-performance infrared cameras, giving us a command of these specialized technologies that no one else can touch. FLIR's products are at work every day saving lives, protecting troops, and helping to keep borders and facilities safe.

Now, FLIR's cameras are available for your personal use, too. You can have a FLIR on your boat, your car, or even as a home security camera. The same FLIR technology in your maintenance camera is in Audi and BMW cars as a pedestrian detection system. And if you enjoy hunting and outdoor activities, there's an inexpensive FLIR for you, too. You might not know FLIR by name, but you have seen our products at work since the 1960's.

If you are looking for infrared camera products, you've come to the right place.

### PORTLAND

#### Corporate Headquarters

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

### NASHUA

FLIR Systems, Inc.  
9 Townsend West  
Nashua, NH 03063  
USA  
PH: +1 866.477.3687  
PH: +1 603.324.7611

### CANADA

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

### BRAZIL

FLIR Systems Brasil  
Av. Antonio Bardella, 320  
Sorocaba, SP 18052-852  
Brasil  
PH: +55 15 3238 7080

### BELGIUM

FLIR Commercial Systems  
Luxemburgstraat 2  
2321 Meer  
Belgium  
PH: +32 (0) 3665 5100

[www.flir.com](http://www.flir.com)

NASDAQ: FLIR

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Specifications are subject to change without notice. For the most up-to-date specs, visit our website: [www.flir.com](http://www.flir.com). ©2014 FLIR Systems, Inc. All other brand and product names are trademarks of FLIR Systems, Incorporated. Imagery used for illustration purposes only. 7836 ver. 2 Printed 10/2014

