FLIR Thermal Imaging Cameras
## for Predictive Maintenance

◆FLIR®

E-Series

T-Series

The Next Generation of Test & Measurement

The Power of Thermal Imaging

FLIR thermal imaging cameras are must have tools for electricians and maintenance technicians. They give you the power to see problems in a way no other technology can, and allow you to inspect equipment quickly and take accurate temperature measurements from a safe distance. FLIR cameras help you find impending trouble before it hurts someone, shuts things down or wastes energy.
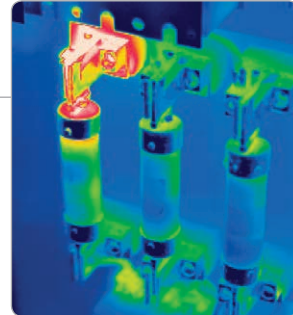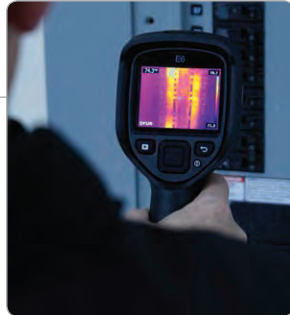
Which Camera is Right for You?

Whether you're new to infrared inspections or already a Level III thermographer, a variety of important factors will figure into your thermal camera decision: how often you use the camera, what you're inspecting, the angles you're shooting from, target size, high temperatures, distance, and other considerations. That's why we've created this guide to help you determine the right fit for your application, budget, and the way you like to work.

For example, many utilities prefer our T640 because the camera's rotating lens system makes it comfortable to aim up at overhead components – significant when doing a full day of intensive substation inspections. 640 resolution and interchangeable lenses make detecting distant, small targets easier for them, too. Those same companies may also outfit crews with handy E4 or E6 cameras for quick scans and safety checks before entering underground vaults or using a disconnect stick.

Obviously, different requirements mean one thermal imager may or may not fit all. So, along with this guide, we encourage you to consult with your FLIR dealer or representative who will gladly help you hone your decision.
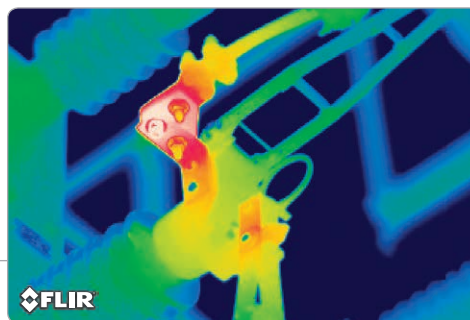
Visit www.flir.com, or call 866.477.3687

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.

MSX: A Bold New Form of Thermal Imaging

If you plan to share saved images with customers or co-workers, a thermal image alone isn't always enough to help them understand what they're seeing. That's why FLIR developed MSX® Multi-Spectral Dynamic Imaging to bring together the best of both spectrums in a striking, innovative way. Now onboard the full line of new FLIR E-Series and T-Series cameras, MSX instantaneously generates a definitive, all-in-one thermal picture that easily orients you to the location of the problem as soon you see it on the screen or in a report. No more guesswork or messing around with extra photos.
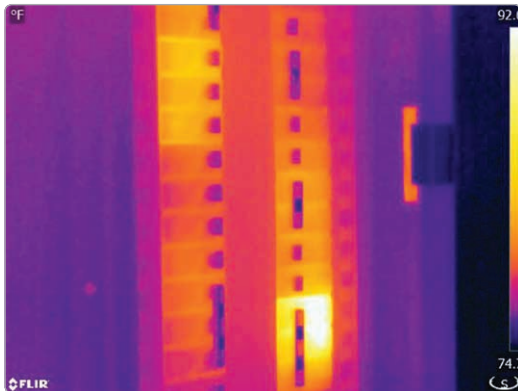
Why You Need MSX

Key details apparent to the naked eye like numbers, labels, signage, and structural features can get lost in a regular thermal image, often requiring a separate digital photo to reference the location of the temperature issue you've found. Thermal imagers of the past have featured ways to blend or insert a portion of a thermal image into a visible light picture. But these modes have only provided a partial solution and typically take extra time to dial in and interpret. They also tend to dilute or obscure the thermal view of the scene.

What Makes It Unique

MSX is completely different. Using FLIR's patented algorithm, MSX extracts the high-contrast highlights from the built-in visible camera's image and then virtually etches the skeletonized details onto the entire corresponding FLIR infrared image in real time. The result: totally recognizable thermal video and snapshots integrated with all the texture, depth and definition you need to isolate the problem in one simple picture.
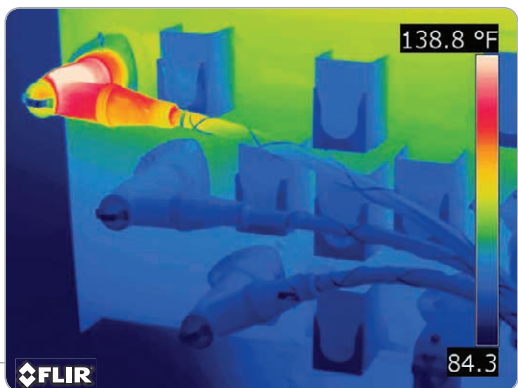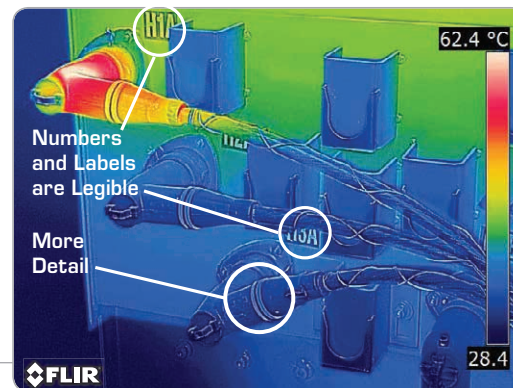

Without MSX

With MSX

Numbers are Legible

More Detail

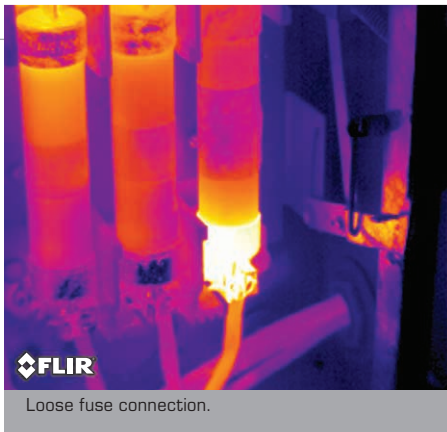Without MSX

With MSX

Numbers and Labels are Legible

More Detail
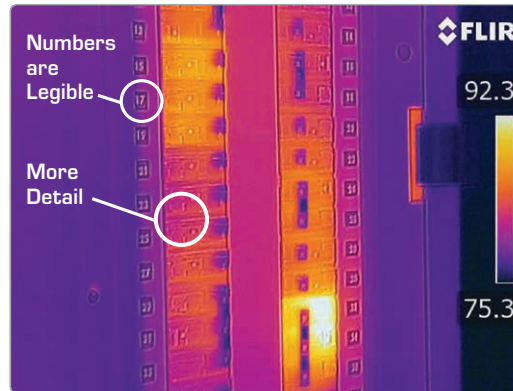
A Broad Range of Applications

FLIR thermal cameras can be used in many different areas of your business, which can accelerate your return on investment. Most electrical and mechanical devices get hot before they fail. Finding these problems early allows you to do repairs on a more convenient schedule rather than in an emergency. But there are plenty of other areas you can use your camera to save money, including flat roof water damage detection, process control and energy loss. Check out FLIR.com and the Infrared Training Center (ITC) to learn about more applications.

Loose fuse connection.

Overheated motor bearing.

Spot 175 °F

07/31/2007 5:15 PM

High voltage disconnect.

Electrical

Find hidden problems quickly, make timely repairs, prevent unscheduled shutdowns, and improve plant safety.
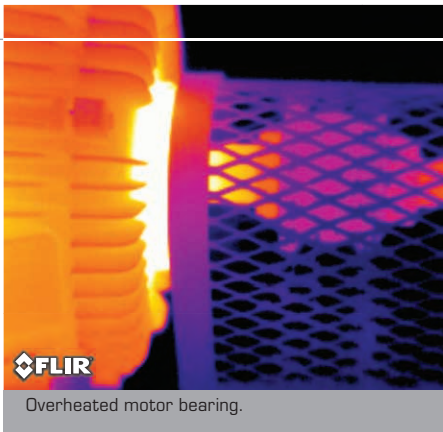
Mechanical

Discover overheated bearings, linkages, and other components before they can interrupt your operations or create safety hazards.
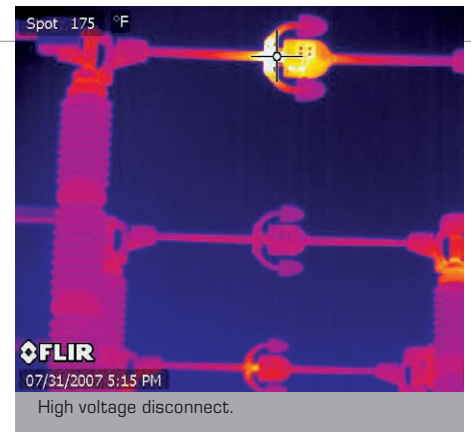
Utility

Scan large areas and hundreds of connections quickly and efficiently to prevent unexpected service outages and lost revenues.

Visit www.flir.com, or call 866.477.3687

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.
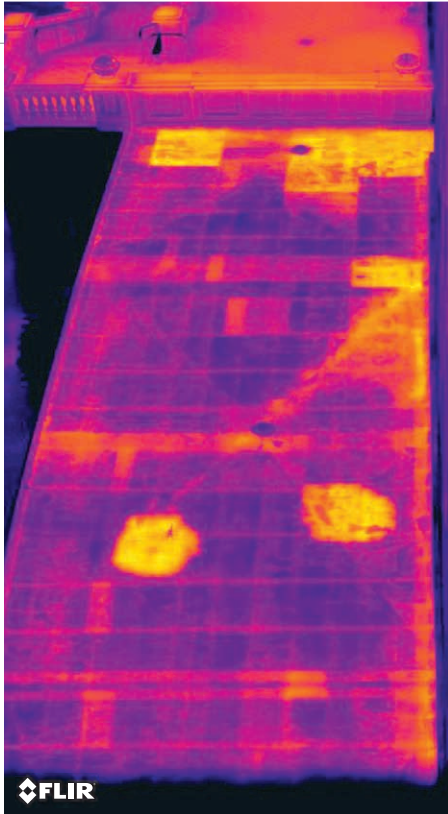
Wet insulation on flat roof.

Moisture damage on ceiling, wall, and floor.

Rotary kiln showing elevated skin temperature.

Steam leak underground.

Roofing

FLIR cameras can help you find leaks and wet areas on flat roofing systems which can help save money by doing spot repairs as opposed to full replacements.

Building Diagnostics

Even small areas of moisture intrusion can be easy to spot with an infrared camera. Locate and repair hidden water damage before mold and rot begins.

Kilns and Furnaces and more

Some FLIR thermal cameras can measure up to 2000°C, helping you to monitor high temperature processes and refractory breakdown all from a safe distance. Underground steam leaks and many other problems can be found using FLIR cameras.

◆FLIR®

FLIR E4, E5, E6 and E8

The First with Thermal, Visible, and MSX Imaging Starting Under $1K

Now every technician can afford to keep an E-Series camera handy for quick equipment scans and safety checks. Easier to use than a smart phone, FLIR's economical thermal imagers offers everything you need for on-the-spot thermal inspections. These are invaluable tools that can help you clearly see and find hidden electrical and mechanical overheating in time to stop problems from turning into serious, expensive trouble. With an E4, E5, E6 or E8, you'll become a well-armed preventive action hero.

Excellent, Super Bright, 3" Color LCD Shows the Whole MSX Scene

Focus-free IR and Visible Camera for Point-and-Shoot Simplicity

Quick Button Access to Measurement, Parameter, and Imaging Tools

Protective Lens Cover Slides Open Easily

Trigger Captures Radiometric JPEG Images

Ruggedness You Can Trust Withstands 2 Meter Drop

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.

What New E4, E5, E6 & E8 Cameras Offer

- **MSX –** Recognize problem locations instantly when you see thermal images enhanced with visible camera details such as numbers, signage, labels, and other identifiable features.
- **IR Resolutions to Fit Your Application –** Choose from the E4's 4,800 pixel resolution all the way up to the impressive 320 × 240 thermal imagery of the E8.
- **Reliable Results –** FLIR's outstanding thermal accuracy (within 2% or +/- 2°C) and broad measurement range (-4°F to 482°F) for results you can count on.
- **Fully Radiometric Images –** Stores hundreds of thermal, MSX and visible image JPEGs with all temperature data intact ready to download to your Mac or PC.
- **Compact Design –** Light at about 20 ounces (575g) for easy one-handed operation, yet tough enough to stow with the rest of your tools.

Four Best-in-Class Imagers

- **E4 – 4,800 pixels**

  Highly-affordable MSX imagery
- **E5 – 10,800 pixels**

  Auto hot or cold spot efficiency
- **E6 – 19,200 pixels**

  Meets RESNET resolution standard
- **E8 – 76,800 pixels**

  4 times the resolution of E6
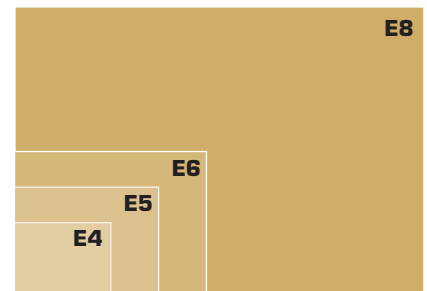
USB Output for Fast Image Downloads

E6 and E8 Meet RESNET Standard
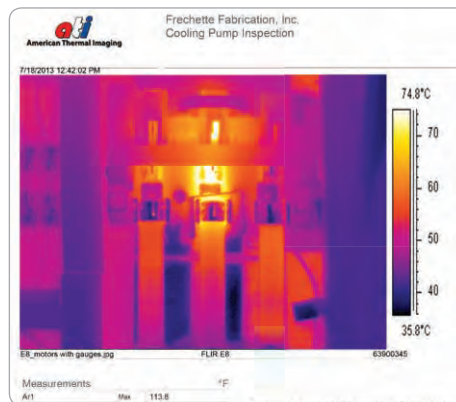
Reporting Software Included

Quick-release Rechargeable Battery

FLIR E40, E50 and E60

Powerful, Flexible and Feature Rich Thermal Imaging Performance

If you're a busy electrician, plant maintenance engineer or facilities technician who plans to do frequent thermal imaging inspections of high energy or high temperature equipment at a distance, you'll appreciate the features in this line of cameras. You can add wide angle or telephoto lenses to measure small objects from a distance, connect to smartphones and tablets, and do reporting right from the field with a comprehensive set of measurement tools. You can also connect to select devices supporting MeterLink®. All E-Series models include MSX, a patented FLIR-only feature designed for busy electrical and mechanical users that gives you all of the vital visual data right inside your thermal image.

Connect to Smartphones and Tablets with FLIR Tools Mobile for Apple® and Android™ to Stream Video and Import, Process, and Share Images Fast

Large, bright touchscreen with intuitive user interface makes field analysis easy

3.1 MP Digital Camera

Bright LED Camera Lamp Illuminates Dark Areas

Laser Pointer Pinpoints Problems on the Visual Image

Visit www.flir.com, or call 866.477.3687

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.

Superior MSX Thermal Imaging up to 76,800 Pixels for Longer Range Clarity

Built Rugged to Withstand a 2 Meter Drop

Simple, One-handed Operation

Interchangeable Lenses

Productivity and Imaging Features

- **Lens Options –** If you have a large facility or will be looking for problems up high on an overhead bus or at lots of MCC's, you can add a 45° wide angle or a 15° telephoto lens to speed up your inspections or to accurately measure small hot spots from a distance.
- **Wireless Connectivity –** You can generate reports right in the field with smartphones and tablets and send them to coworkers instantly. It's also a great way to share what you are seeing with others on your team who need to stay at a safe distance from the camera and energized or moving equipment.
- **Touchscreen Control –** This allows you to do analysis right on the image, in the field. You can move multiple measurement spots and areas to assess rise above reference temperatures quickly and easily. All of this data is stored on the radiometric jpeg.
- **MeterLink® –** Connect to select FLIR and Extech multimeters, clamp meters and moisture meters to record measurements right on your thermal image for reporting and as a permanent reference. It's a great way to save load data right along with the thermal image.
- **Auto Orientation –** This is a helpful feature for managing the best orientation on scenes where you can't get the whole shot in landscape format. It automatically orients the temperature measurement data on the screen for the optimum view.

Auto-Orientation Keeps Diagnostics Overlays Upright

◆FLIR®

FLIR T-Series

Incredible Performance and Flexibility – the Ultimate Thermal Imager

If you want powerful communication and onboard infrared camera tools, superior thermal imaging, and the most ergonomic way to get more IR surveys done, T-Series is as good as it gets. Packed with every expert feature in a portable thermography system, FLIR T-Series cameras are designed for intensive inspections where long range or high temperature measurements are required, and high resolution and thermal sensitivity are critical. Plus our flexible rotating optical block helps you scan overhead targets and from tough angles while keeping the display comfortably positioned – just one example how FLIR makes T-Series so user friendly.

Auto Focus and
Image Capture Button

Fine Focus Adjust

LED Lamp and Laser
Pointer for Visible Light
and MSX Images

Built-in 3.1 MP Digital Camera for
MSX and Reference Images

Rotating Optical Block for
Comfortable Aiming & Viewing

T420 & T440 Features

- **Superior IR Images –** Sharp thermal resolution at 76,800 pixels for solid accuracy from farther away.
- **Advanced Optics –** The widest array of lens options to fit the view and spot size you need for your application.
- **MSX Enhancement –** Multi-Spectral Dynamic Imaging adds visible spectrum definition to IR images in real time for extraordinary thermal detail that instantly highlights and orients problem locations.
- **Scalable P-i-P –** Overlay thermal images onto visible light pictures as an alternative reference.
- **Delta T & Multiple Measurement Tools –** Powerful onscreen analytics include differential temperature, 5 measurement spots, 5 box areas, isotherm and more for detailed diagnostics.
- **Sketch on IR/Visual –** Draw circles, pointers and notes or use pre-defined shapes using the touchscreen user interface to highlight points of interest.*
- **Auto Orientation –** Automatically orients onscreen temperature measurement data whether in portrait or landscape view.
- **Annotation –** Add voice or text comments to images or use the touchscreen to sketch notes and drawings; include additional measurements with MeterLink-enabled clamp and moisture meters.
- **Compass –** Adds camera pointing direction to every image for additional location documentation.

*Available on T440 only
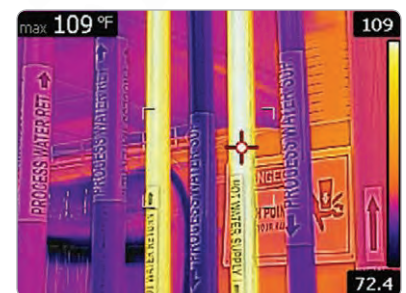
With MSX Enhancement
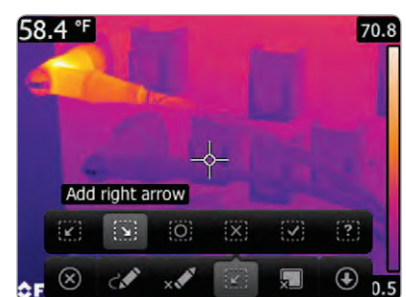
Predefined Stamps for Sketch

Joystick & Large Backlit
Buttons for Gloved Operation

T640 Viewfinder Makes
Surveys in the Brightest
Environments Even Easier

3.5" Bright Touchscreen for
Quick Access to Images,
Camera Tools, & Analytics

Large 4.3" Capacitive
Touchscreen Puts Fast
Tools at Your Fingertips

FLIR Tools Mobile App Connectivity to Apple® and
Android™ Devices for Fast Image Transfer, Processing,
and Sharing, Plus Streaming Video & Remote Control

Diopter

Auto Focus and
Image Capture Button

LED Lamps and Laser
Pointer for Visible Light
Photos

Integrated 5 MP Digital
Camera for Crisp
Reference Pictures

Rotating
Optical Block
for Easy
Viewing from
Tough Angles

Manual Focus

T600, T620, & T640 Features

- **Highest IR Resolutions –** Crisp thermal images with 172,800 pixels (480 x 360) on our new T600, or 307,200 pixels (640 x 480) on the T620 and T640.
- **Advanced Optics –** A range of lens options includes our new, light 7° telephoto lens that provides astounding clarity, accuracy, and portability for imaging overhead and distant targets.
- **Continuous Auto Focus –** Keeps your image sharp automatically no matter where you aim for the highest clarity, accuracy, and efficiency.*
- **MSX Image Enhancement –** Onboard and real time, MSX adds visible spectrum definition to IR images for extraordinary thermal detail that instantly highlights and orients problem locations.
- **Scalable P-i-P –** Overlay thermal images onto visible light pictures as an alternative reference.
- **More Measurement Tools –** Report all the details with 10 measurement spots, 5 box areas, Delta T temperature differential, isotherm, and more.
- **Sketch on IR/Visual –** Draw circles, pointers and notes or use pre-defined shapes using the capacitive touchscreen user interface to highlight points of interest.
- **GPS –** Built-in GPS automatically adds location data to images for including in reports.**

*Available on T640 only

** Available on T620 and T640
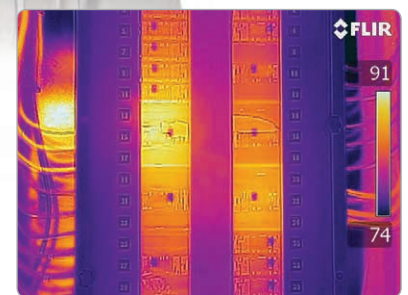
With MSX Enhancement

Auto Orientation

Which FLIR Camera is Right for You?

FLIR has an amazing selection of cameras for electrical and mechanical users; but which one is right for you? For the maintenance professional it's all about finding problems fast and getting accurate temperature measurements, so your first step is to establish what kind of equipment you will need to measure.

Shorter → **Measurement Distance**

Single spot → **Analysis Tools**

250° C → **Temperature Range**

80 x 60 → **Resolution**

E4 thru E8 are extremely handy for quick, shorter-range inspections

Utility troublemen, HVAC pros, and facility maintenance

- Perfect for quick scans and safety checks
- Far more effective than IR temp guns
- Rugged and affordable enough for everyone
- Includes excellent software for Mac and PC

E40 thru E60 for mid-range and short-range measurements of higher temperatures

Plant maintenance, electricians, & facility contractors

- FLIR Wi-Fi app communication, MeterLink® & touchscreen efficiency
- Higher temperature ranges & extra sensitivity
- Interchangeable telephoto & wide angle lenses
- Includes excellent software for Mac and PC

Visit www.flir.com, or call 866.477.3687

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.

Hot connections come in all sizes, but if you're working in a plant with hundreds of small motor control centers or small connections that are hard to reach, you will likely need a special lens to measure these hot spots from a safe distance. If you are going to do thermal inspections all day long, you should consider a T-Series camera for its flexibility and comfort for extended use.

If you need to measure high temperatures including kilns or furnace skins, be sure that you choose a camera that can be calibrated to meet those needs. Be sure to check out the product selector at FLIR.com/thermography for videos explaining what the key features do for you in the field. And you can always call us and talk to an applications expert at 866.477.3687.

Farther

Measurement Distance
This is likely the most important factor in choosing a FLIR camera. Make sure you choose a camera and lens that will meet your need. Call us, we can help.

Maximum Feature Options

Analysis Tools
If you are going to do analysis in the field, as opposed to doing post analysis in software, be sure to choose a camera with the right onboard tools.

2000° C

Temperature Range
Be sure to think about all of the equipment you might want to inspect down the road. FLIR technology has many applications in product development and process control, so think ahead.

640 x 480

Resolution
Resolution influences measurement distance, as well as image quality and accuracy. For surveying long range targets or smaller components, and if you're going to be generating lots of reports, step up to the highest quality resolution you can justify.

T420 thru T640 for intensive inspection schedules and fast reporting

Substation & solar farm surveys, roofing companies, and RCM programs

• Ergonomic and hi-res for hero shots from any angle
• Short-, mid- & long-range imaging of small or high-temp targets
• Feature-rich performance
• Includes excellent software for Mac and PC

◆FLIR®

Imaging Specifications

Specifications	Point & Shoot				Performance		
Model	**E4**	**E5**	**E6**	**E8**	**E40**	**E50**	**E60**
Accuracy	±2°C (±3.6°F) or ±2% of reading				±2°C (±3.6°F) or ±2% of reading		
Thermal Resolution	4,800 (80 × 60)	10,800 (120 × 90)	19,200 (160 × 120)	76,800 (320 × 240)	19,200 (160 × 120)	43,200 (240 × 180)	76,800 (320 × 240)
Thermal Sensitivity	<0.15°C	<0.10°C	<0.06°C	<0.06°C	<0.045°C		
Temperature Range	–4° F to 482°F (–20° to 250°C)				-4° F to 1,202°F (-20°C to 650°C)		
Measurement Presets	2 presets: center spot; no measurements	4 presets: center spot; hot spot; cold spot; no measurements			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		
User Presets							
Spot Mode	Center/Fixed				3 moveable		
Area Mode		•		•	•	•	•
Profile							
Color Alarm (isotherm)			Blue below or red above		Blue below, red above, yellow interval		
Frame Rate	9 Hz				60Hz		
Field of View	45° × 34°				25° × 19°		
Optional Lenses					15° Telephoto; 45° Wide Angle		
Focus	Focus free				Manual		
Continuous Auto Focus							
Min. Focus Distance	1.6 ft. (0.5 m)				1.31 ft (0.4 m)		
Radiometric JPEG via USB	•	•	•	•	•	•	•
Radiometric JPEG to SD Card					•	•	•
MPEG4 to SD (non-radiometric IR)					•	•	•
MPEG4 via USB (non-radiometric IR/Visual)					•	•	•
Radiometric streaming via USB					•	•	•
Display Size	3.0"				3.5"		
Touchscreen					•	•	•
Auto Orientation					•	•	•
MSX Thermal Image Enhancement	•	•	•	•	•	•	•
Viewfinder							
Color (Palettes)	3: Iron, Rainbow, and Gray				7: Arctic, White hot, Black hot, Iron, Lava, Rainbow, and Rainbow High Contrast		
Battery Operating Time	~4 hrs				>4 hrs		
Built-in Digital Camera	640 × 480				3.1 MP		
Built-in Illuminator LED					•	•	•
Digital Zoom					2×	4×	
MeterLink® connectivity					•	•	•
Laser Pointer + Laser Locator (on IR image)					•	•	•
Compass							
GPS							
IR Window Correction					•	•	•
Difference temperature/Delta T					•	•	•
Picture in Picture			Fixed PIP	Fixed PIP	Fixed PIP	Scalable PIP	
Notes							
Sketch on IR/Visual Image							
Voice/Text Annotation					•	•	•
FLIR Tools for PC and Mac	•	•	•	•	•	•	•
FLIR Tools Mobile app (Wi-Fi)					•	•	•
Streaming Video via app (Wi-Fi)					•	•	•
Remote Control via app (Wi-Fi)							
Drop (2 meter/6.6 feet)	•	•	•	•	•	•	•
Weight (including battery)	1.27 lbs (0.575 kg)				1.94 lbs (0.88 kg)		

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.

High-Performance				
T420	**T440**	**T600**	**T620**	**T640**
±2°C (±3.6°F) or ±2% of reading				
76,800 (320 × 240)		172,800 (480 × 360)	307,200 (640 × 480)	
<0.045°C @ 30°C		<0.04°C @ 30°C		<0.035°C @ 30°C
-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)	-40°F to 1202°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)
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; user preset 1; user preset 2			
	•	•	•	•
5 moveable		10 moveable		
•	•	•	•	•
	•	•		•
Blue below, red above, yellow interval				
60 Hz		30 Hz		
25° × 19°				
6°, 15° Tele, 45° & 90° Wide; Close up: 100 µm, 50 µm		7° & 15° Tele, 45° & 80° Wide; Close up: 100 µm, 50 µm, 25 µm		
Manual & Automatic				
				•
1.31 ft (0.4 m)		0.82 ft (0.25 m)		
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
3.5"		4.3"		
•	•	Capacitive touch screen	Capacitive touch screen	Capacitive touch screen
•	•	•	•	•
•	•	•	•	•
				•
7: Arctic, White hot, Black hot, Iron, Lava, Rainbow, and Rainbow High Contrast				
>4 hrs		>2.5 hrs		
3.1 MP		5 MP		
•	•	•	•	•
4x	8x	4x	4x	8x
•	•	•	•	•
•	•	•		•
•	•		•	•
			•	•
•	•	•	•	•
•	•	•	•	•
Scalable & Moveable				
•	•	•	•	•
Draw or add predefined stamps				
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
1.94 lbs (0.88 kg)		2.87 lbs (1.3 kg)		

FLIR®

The Next Generation of Test & Measurement

Building upon our 50-year history as the world leader in thermal imaging, FLIR introduces our new line of test & measurement tools.

FLIR has expanded into test & measurement because we identified a need for test tools that simplify electrical and mechanical troubleshooting on complex industrial equipment. The company's goal: to develop a new line of T&M products with world-class features that address advanced diagnostics, enhanced productivity, improved safety, and increased connectivity. Because you need to measure more than temperature to get the job done.

FLIR DM93

Prepare Yourself for VFD Troubleshooting

Finally, a digital multimeter that works as hard as you do

- Variable Frequency Drive Mode for enhanced diagnostics
- LoZ Mode reduces Ghost Voltage errors
- Extremely bright dual-LED worklight
- Bluetooth® connectivity to mobile devices
- METERLiNK® sends data to compatible FLIR cameras

Extremely bright dual-LED worklights

VFD Mode offers superior accuracy

Data recording finds sporadic faults

FLIR CM83

Power Analysis & VFD Diagnostics In One Package

World-class features that meet your real-world needs

- Advanced power analysis functions
- Extremely bright dual-LED worklight
- Bluetooth® connectivity to mobile devices
- METERLiNK® transmits data to compatible FLIR cameras

FLIR CM83 incorporates a bright dual-LED worklight

Visit www.flir.com, or call 866.477.3687

*The thermal images shown are for illustrative purposes only, and may not have been taken by the camera series depicted.

FLIR CM78

Multifunctional Meter Reduces Your Payload

Equip yourself to troubleshoot complex systems

- AC/DC (up to 1000A or 1000V)
- Spot-Laser IR Thermometer
- Type K Thermocouple
- Bluetooth® connectivity to mobile devices
- METERLiNK® links meter to FLIR IR cameras

FLIR CM78 transmits real-time electrical measurements to FLIR IR cameras via METERLiNK

FLIR VP50

Double-Duty Detector: Non ContactVoltage (NCV) Tester Plus Bright Worklight

Quick voltage checking and area lighting at your fingertips

- Tactile feedback alarms
- Powerful worklight
- Rugged, waterproof, CAT IV-rated

High sensitivity detects voltage in low-powered systems; visual & vibration alerts for noisy areas

MeterLink® Brings It All Together

Measure More than Temperature with Your Camera

FLIR thermal cameras can help you find electrical problems, moisture damage, and energy loss quickly and easily by detecting and measuring temperature differences. But in many cases, you'll need to quantify the severity of those problems with electrical load and moisture content readings.

FLIR's new METERLiNK-enabled DMM, clamp, and moisture meters transmit essential diagnostic data wirelessly to compatible FLIR cameras so thermal images can be automatically annotated with extra information that customers, colleagues, and insurance companies require.

FLIR

Powerful FLIR Software

FLIR Tools for PC & Mac OS

No matter what handheld FLIR thermography camera you choose, we want you to be able to share important images with others efficiently and professionally. To make sure, all come with FLIR Tools.

Key Features:

- Import images from your camera via USB.
- Search for images using file name, text description, and other image properties.
- Analyze and tune radiometric images and measure any point on the image.
- Create PDF reports from a variety of pre-defined template formats or customize your own.
- Remotely control USB Video, Ethernet, and Firewire cameras.
- Update camera firmware.

FLIR Tools Mobile

Connect your mobile device via Wi-Fi to an E40, E50, E60 or any T-Series camera to import, process, and share images quickly while you're still out in the field with the free app that speeds decisions.

Key Features:

- Stream live video wirelessly.
- Remotely control and record images from T-Series cameras.
- Post process images and create PDF reports.
- Share images and findings from the field via uploads and email.

FLIR Tools+

Expanded groundbreaking reporting power for the busiest thermographers.

Key Features:

- Stitch FLIR IR images into radiometric panoramas regardless of the order they were taken.
- Record/replay radiometric thermal video sequences and create temporal plots.
- Automatically link to Google Maps™ for images with GPS coordinates.
- Allows you to create a customized Microsoft Word report fast.
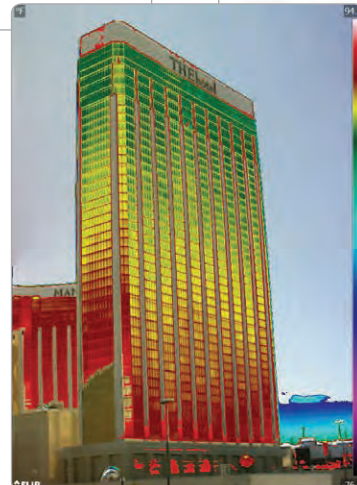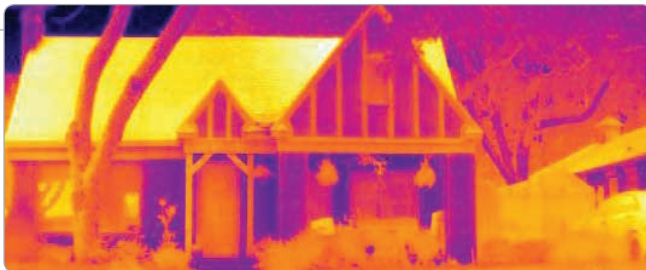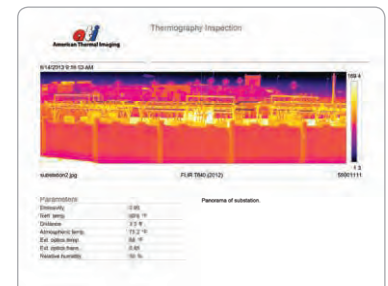
FLIR IRW-Series

IR Inspection Windows with PIRma-Lock™

FLIR's IR Windows add an extra layer of safety between you and energized equipment, eliminating the need to open live electrical cabinets during IR inspections, which can help protect you from the danger of arc flash. Far easier to mount and use, FLIR IR Windows allow you to perform scans more efficiently to comply with NFPA 70E requirements.

Key Features:

Easy Installation – Only one hole to drill and FLIR's single PIRma-Lock™ ring nut to tighten; same design as conduit connections that use standard US punch tools

Quick Access Hinged Cover – Simple flip-open cover with integrated equipment ID label stays permanently attached so it never gets dropped, mismatched, or lost

Broadband Transmission – Lenses support short-, mid-, and longwave IR cameras, visual inspections, and blended imaging; allows FLIR cameras with integrated lamps to capture video documentation

PIRma-Lock™ Ring Nut
Broadband Crystal Lens
Permanent Hinge
Permanent ID Label
Gasket
Thumb Screw Release
Quick-Access Flip Down Cover

The Infrared Training Center

Thermal Imaging Heroes Needed: Be Ready to Answer the Call

Today's cameras are simple to turn on, point at a target, and capture stills and video with. Determining whether you're actually seeing a problem, analyzing your images correctly, navigating software efficiently, and developing an accurate, actionable report is what's going to make you a thermography hero. That's going to require some training from ITC, the gold standard in thermal imaging education.

The greater your knowledge, the greater the dividends you'll realize for your organization and career. The ITC offers classes for practically every application, from advanced thermography certification training to online courses – all designed to help you grow into a leadership role in your IR program.

ITC classes include:

- Building Inspection
- Condition Monitoring
- Roofing Applications
- Custom R&D Applications
- Optical Gas Imaging
- Level I, II, & III Certification

Come to classes at our training center or at one of our many regional classes. Mobile Training Units and on-site training at your facility are encouraged if you would like to certify a group of 10 or more.

For a complete list and schedule of courses and more information, visit www.infraredtraining.com or call 1.866.872.4647.

itc INFRARED TRAINING CENTER

Scan for Full ITC Schedule

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 actives, there's an inexpensive FLIR for you too. You might not know FLIR by name, but you have been seeing our products at work since the 1960's.

FLIR 2-5-10 Warranty

All E-Series and T-Series cameras are covered by our revolutionary 2-5-10 Warranty when registered with FLIR within 60 days of purchase (see details at FLIR.com).

2 Years on Parts & Labor for the Camera
5 Years of Coverage on Batteries
10 Years of Protection on the IR Detector
Only FLIR can give you peace of mind with a warranty program like this, because only FLIR makes all of the camera's critical components from the ground up.

5-10-2 Protection

◆FLIR®

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

NETHERLANDS
FLIR Systems CVS BV
Charles Petitweg 21
4847 NW Teteringen - Breda
The Netherlands
PH: +31 (0) 765 79 41 94

www.flir.com
NASDAQ: FLIR