Thermal imaging camera
Bench Test Thermal Kits

IR Camera, Optics and Software for
- Entry Level R&D
- Industrial Labs
- Education
- PCB and Circuit-Board Analysis

1.800.561.8187 www.itm.com information@itm.com

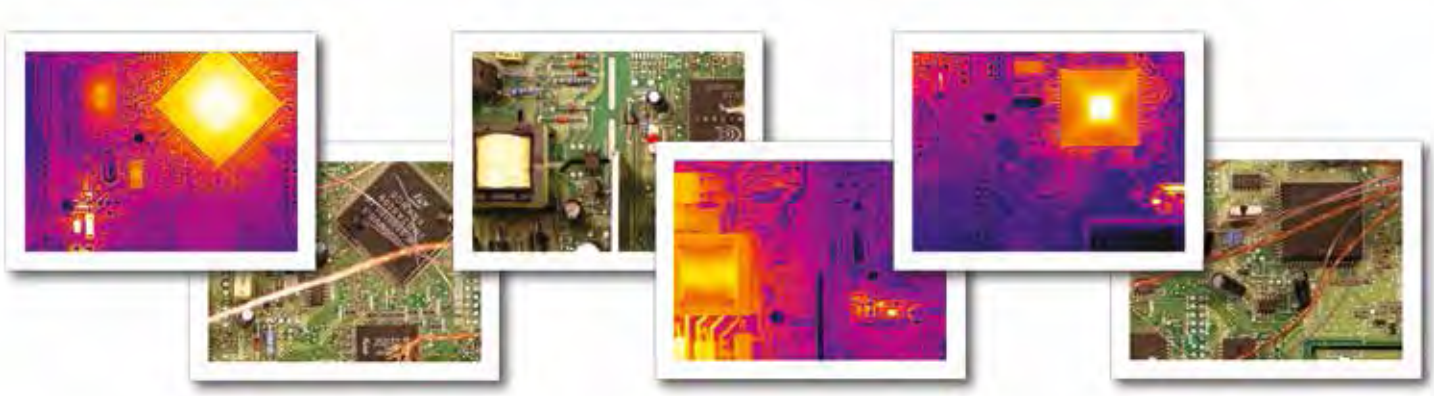
FLIR Bench Test Thermal Kit Camera

No one can afford costly product recalls and do-overs caused by inadequate temperature measurement devices. So FLIR developed an innovative alternative that you can't afford to pass up.

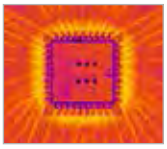
Throw out the rat's nest of thermocouples, the painstaking IR thermometer guns, and all the questionable results that go with them. Know exactly where to measure, trust your findings every time, and become far more productive with the FLIR Bench Test Thermal Kits.

Thermocouples are limited to a best guess of where the right measurement points might be and often create undesirable heat sinks that alter a target's thermal properties. A spot pyrometer isn't very effective either. Like a thermocouple, it only measures one point at a time. Worse, it merely senses the average temperature of an area, and the farther away from the object, the greater the discrepancy.

But with the thermal imaging camera in a FLIR Bench Test Thermal Kit, you can detect thousands of measurement points in each thermal image and get reliable data in seconds. Together with the kit's lens choices and advanced IR analysis software for use in Industrial and R&D labs, FLIR now offers the most dependable thermal imaging solution to help paint the complete picture and get it right the first time.

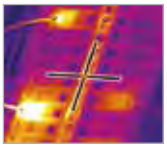


Features



Thermal images making the difference
Eliminate risky guesswork with instant non-contact readings that deliver up to 327,680 repeatable, accurate temperature measurements in each thermographic image.

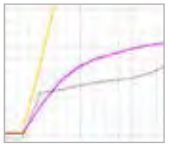
Portable & Easy-to-Operate
Compact at less than 1 kg for E40 and T420, and less than 300 gram for A35 and A65 models, the camera takes up little bench space and can be easily moved to other test stations.



Spot-on Detection
FLIR's high accuracy of up to ±2% (or ±2°C) of reading with down to <0.045°C sensitivity lets you see the fine thermal variations necessary for critical documentation.

On-Camera Measurement Analysis
Spot and area measurement tools are built into the touchscreen of both the T420 and E40 camera's providing quick temperature analysis on live thermal imagery or recorded snapshots.

Optics Options
View an entire printed circuit board from a distance or tighten in to a 50 µm spot size with additional close focus lens for example. (valid for T420 model).



Movie Recording & Data Logging
Stream to a PC via USB from an E40 or T420, or over Gigabit Ethernet from an A35, A65 to display, record, and further analyse images. Chart time vs. temperature for spot and area measurements with the kit's real-time IR analysis software ResearchIR.

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Complete value packs!

FLIR A65/35 Bench Test Thermal Kit Camera

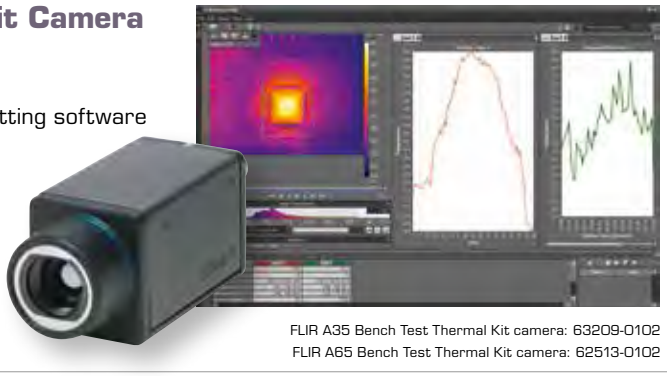
- A65 or A35 thermal camera
- Manual focus 48° on A35 and 45° on A65
- ResearchIR: Real-time image/data logging and plotting software
- Camera tripod adapter for locked-down targeting
- PoE injector (Power over ethernet)

YEAR 2 FULL PRODUCT WARRANTY* YEAR 10 DETECTOR WARRANTY*

*After product registration on www.flir.com

GiGE VISION

GEN<i>CAM



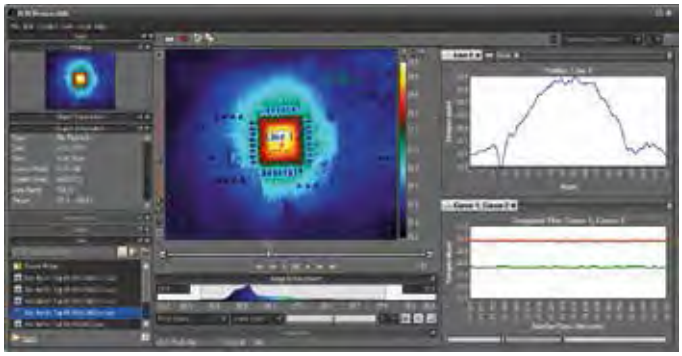
FLIR A35 Bench Test Thermal Kit camera: 63209-0102
FLIR A65 Bench Test Thermal Kit camera: 62513-0102

FLIR E40 Bench Test Thermal Kit Camera

- E40 thermal camera
- 19,200 pixels/spots per image
- 25° and 45° lens in the package
- Measurements down to 200µm with 45° lens
- ResearchIR: Real-time image/data logging and plotting software
- Possible to attach to a tripod.

YEAR 2 FULL PRODUCT WARRANTY* YEAR 10 DETECTOR WARRANTY*

*After product registration on www.flir.com

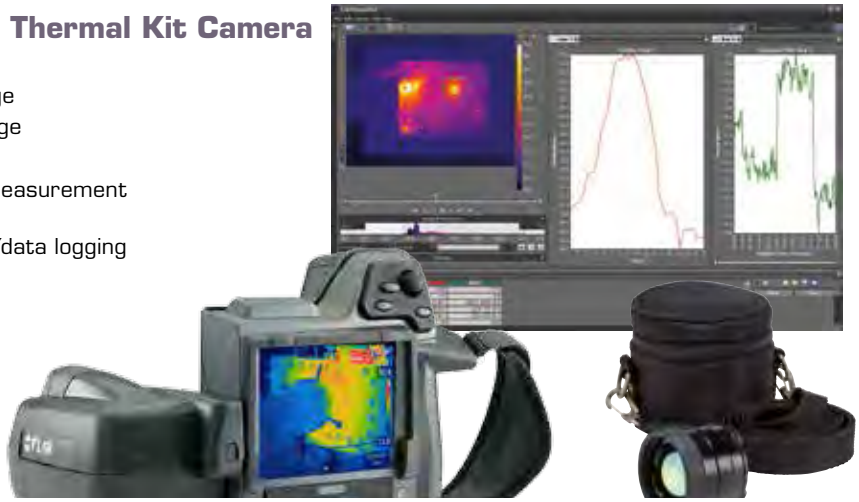


FLIR E40 Bench Test Thermal Kit camera: 64501-0103

FLIR T420 Bench Test Thermal Kit Camera

- T420 thermal camera
- 76,800 pixels/spots per image
- 25° and 45° lens in the package
- Remote and auto focus
- Optional close-up lenses for measurement at 50µm and 100µm exist
- ResearchIR: Real-time image/data logging and plotting software
- Possible to attach to a tripod

YEAR 2 FULL PRODUCT YEAR 10 DETECTOR



R&D - Science Software

Turning tools into solutions

At FLIR, we recognise that our job is to go beyond just producing the best possible thermal imaging camera systems. We are committed to enabling all users of our thermal imaging camera systems to work more efficiently and productively by providing them with the most professional camera-software combination.

FLIR ResearchIR

FLIR ResearchIR is aimed at R&D-Science users of thermal imaging cameras with a cooled or uncooled detector. FLIR ResearchIR takes the most out of your thermal imaging camera and allows high speed recording and advanced thermal pattern analysis. ResearchIR is the perfect tool for industrial R&D labs.

FLIR ResearchIR key features:

- View, record and store images at high speed
- Post-processing of fast thermal events
- Generate time-temperature plots from live images or recorded sequences
- Advanced Start/Stop recording conditions
- Unlimited number of analysis functions (Spot, Line, Area)
- File organizer
- Zoom & Pan allows a closer look
- Multiple user-configurable tabs for live images, recorded images or plot




Specifications	A35	A65	E40	T420
Resolution	320 x 256	640 x 512	160 x 120	320 x 240
Sensitivity/NETD	<0.05°C @ +30°C /50 mK	<0.05°C @ +30°C /50 mK	<0.07°C @ +30°C / 70 mK	<0.045°C
Accuracy	±5°C or ±5% of reading	±5°C or ±5% of reading	±2°C or ±2% of reading	±2°C or ±2% of reading
Temperature Range	-25°C to +135°C -40°C to +550°C	-25°C to 135°C	-20°C to 120°C 0°C to 650°C	-20°C to 650°C
Built-In Digital Camera	NA	NA	3.1 Mpixel	3.1 Mpixel
On-Camera Analysis	NA	NA	Center spot Hot spot Cold spot 3 spots Difference temperature (two versions)	Center spot Hot spot Cold spot 3 spots Difference temperature (two versions)
Digital Data Streaming to PC	Gigabit Ethernet	Gigabit Ethernet	via USB	via USB
ResearchIR Software Included	Yes	Yes	Yes	Yes

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