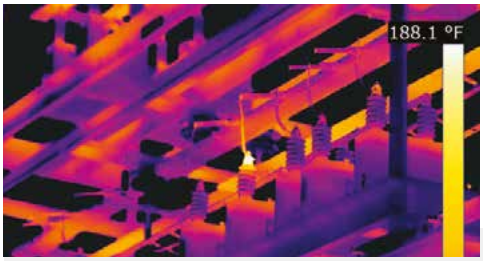
HD THERMAL IMAGING CAMERA

# FLIR T1K™

The FLIR T1010 and T1020 offer remarkable temperature measurement range, up to 3.1 MP resolution (with UltraMax®), and a modern, intuitive graphical user interface (GUI) that will streamline your workday. Features such as MSX® and 1-Touch Level/Span enhance image quality and contrast, so you can interpret images on-screen and make crucial decisions in the field. When paired with FLIR OSX™ Precision HDIR optics, these true HD cameras measure temperature with the highest accuracy and deliver stunning image quality. For the sharpest images, the truest temperatures, and the most flexibility, T1K cameras are the tool of choice for the thermography expert.

www.flir.com/t1k




## OUTSTANDING IMAGE CLARITY

See more detail and find hidden problems before they lead to costly system failures or shutdowns

- Get the best resolution of any FLIR hand-held camera with the T1K's 1024 × 768 detector
- Detect subtle temperature differences, down to <0.01°C, that may signal an electrical or mechanical problem
- Record smooth, low-noise images that are easy to interpret with FLIR Vision Processing™, featuring MSX, UltraMax®, and proprietary adaptive filtering algorithms

## EXCEPTIONAL MEASUREMENT PERFORMANCE

Get accurate temperature readings from any angle or distance, so you can troubleshoot systems

- Pinpoint small temperature anomolies from farther away with FLIR's high-fidelity OSX Precision HDIR lenses
- Enhance measurement accuracy with UltraMax, which improves the distance to spot-size ratio
- Monitor electrical and mechanical systems with a variety of temperature conditions thanks to measurement ranges up to 2000°C (3632°F)*

## DESIGNED FOR THE EXPERT USER

Compact format, a responsive new user-interface, and advanced reporting software make your workday more productive

- Navigate screens and set up work folders easily with intuitive, rapid-response GUI
- Adjust images and improve measurements in the camera with features such as 1-Touch Level/Span
- Capture full-resolution, full-frame radiometric video for comprehensive analysis*
- Analyze thermal images and report findings easily with included FLIR Tools+ software

*T1020 only

## SPECIFICATIONS

| Image and optical data | T1010 | T1020 |
|---|---|---|
| IR resolution | 1024 × 768 (786,432 pixels) | |
| UltraMax® | 3.14 Mpixels | |
| Field of view (FOV) | 45° × 34° (21 mm lens), 28° × 21° (36 mm lens), 12° × 9° (83 mm lens), 7° × 5.3° (142 mm lens) | |
| F-number | f/1.1 (21 mm lens), f/1.15 (36 mm lens), f/1.2 (83 and 142 mm lenses) | |
| Lens identification | Automatic | |
| Image frequency | 30 Hz | |
| Focus | One-shot, manual | |
| Digital zoom | 1-8x continuous | |
| **Detector data** | | |
| Detector type and pitch | Uncooled microbolometer, 17 µm | |
| Spectral range | 7.5 – 14.0 µm | |
| Thermal sensitivity/NETD | <25 mK @ 30°C (86°F) | <20 mK @ 30°C (86°F) |
| **Image presentation and modes** | | |
| Display | 4.3", 800 × 480 pixel capacitive touch screen with auto-orientation | |
| Viewfinder | — | Built-in, 800 × 480 pixels |
| Digital camera | 5 MP with built-in LED | |
| Color palettes | Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava | |
| Image modes | Infrared, visual, MSX | Infrared, visual, MSX, Picture-in-picture |
| Picture-in-picture | — | Resizable and movable |
| Time-lapse (infrared) | — | 15 sec to 24 hrs |
| **Measurement & analysis** | | |
| Object temperature range | -40°C to 150°C (-40°F to 302°F), 0°C to 650°C (32°F to 1200°F) | -40°C to 150°C (-40°F to 302°F), 0°C to 650°C (32°F to 1200°F), 300°C to 2000°C (572°F to 3632°F) |
| Accuracy | ±2°C (±3.6°F) or ±2% of reading at 25°C (77°F) | ±1°C (±1.8°F) or ±1% at 25°C (77°F) for temperatures from 5°C to 150°C (41°F to 302°F) |
| Alarms | — | Above, below, interval, moisture, insulation |
| Measurement function alarm | — | Audible/visible above/below alarms on any selected measurement function |

| Measurement & analysis | T1010 | T1020 |
|---|---|---|
| Compass, GPS | — | Yes; automatic GPS image tagging |
| METERLiNK® | — | Yes; several readings |
| Measurement presets | No measurement, center spot, hot spot, cold spot, User Preset 1, User Preset 2 | |
| Spotmeter | 1 | 10 |
| Area | 1 box with max/min/avg | 5 + 5 areas (boxes and circles) with max/min/avg |
| Laser pointer | Dedicated button | |
| **Data storage and streaming** | | |
| Storage media | Removable SD card | |
| Image file format | Standard JPEG with measurement data included | |
| Radiometric IR video recording | — | Real-time radiometric recording (.csq) |
| Non-radiometric IR or visual video | H.264 to memory card | |
| Radiometric IR video streaming | Yes, over USB | |
| Non-radiometric ir video streaming | H.264 over USB | H.264 over Wi-Fi or USB |
| Video out | — | HDMI 640 × 480, HDMI 1280 × 720, DVI 640 × 480, DVI 800 × 600 Additional Data Battery Type |
| **Additional features** | | |
| Battery type | Rechargeable Li-ion battery | |
| Battery operating time | Approx. 2.5 hours at 25°C (77°F) ambient temperature and typical use | |
| 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) | |
| Shock/vibration/encapsulation; safety | 25 g / IEC 60068-2-29, 2 g / IEC 60068-2-6, IP 54 /IEC 60529; EN/UL/CSA/PSE 60950-1 | |
| Tripod mounting | UNC ¼"-20 | |
| Weight/dimensions w/o lens | 2.1 kg (4.6 lbs), 16.7 × 20.5 × 18.8 cm (6.6 × 8.0 × 7.4 in) | |

### Box contents

Infrared camera with lens, battery (2 ea) battery charger, neck strap, hard transport case, Bluetooth headset*, lens cap, power supplies, SD card, cables (Std A to Micro-B USB, HDMI to HDMI), FLIR Tools+, printed documentation

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

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