

# FLIR T1K

HD THERMAL IMAGING CAMERA



BUILT FOR THE EXPERT.  
BY THE EXPERTS.



The World's **Sixth Sense**™

# FLIR T1K

EXCEPTIONAL PRECISION OPTICS,  
OUTSTANDING IMAGE CLARITY, RUGGED ERGONOMIC DESIGN –  
THE INNOVATIONS YOU'VE ALWAYS WANTED



## KEY FEATURES

### FLIR DSX™ Precision HDIR Optics

Superior range performance allows for accurate measurements from twice as far away

### Configurable to Your Needs

Four programmable buttons, rotating optical block, and dynamic focus that responds to your touch

### Most Accurate Temperatures

Move between extreme hot and cold conditions and still get accurate measurements

### Rugged and Reliable

Rubberized optics and rugged camera housing built for your tough environment

### Avoid Glare in Bright Surroundings

High resolution viewfinder with glare-reducing eyecup makes scanning easier in daylight conditions

### Outstanding Image Clarity

The 1024 x 768 detector delivers 2.5x the pixels of a 640 x 480 native resolution camera

### FLIR Image Processing

MSX®, UltraMax™ and adaptive filtering algorithms ensure smoothest, most detailed images

### Highly Responsive User Interface

Touch screen is FLIR'S fastest and most responsive

### Continuous Autofocus

Keeps pace with your movements so photos and videos stay in focus



## SPECIFICATIONS

Model Numbers	FLIR T1040
<b>Imaging and Optical Data</b>	
IR Sensor	1024 x 768, 3.1 MP with UltraMax™
Thermal Sensitivity/NETD	<0.02 °C at +30° C
Lens Choices	12°, 28°, 45°, 3x Close-up
Minimum Focus Distance	0.4 m (1.32 ft.)
Spatial Resolution (IFOV)	0.47 mrad
Image Frequency	30 Hz
Spectral Range	7.5 - 14 µm
4.3" Display	800 x 480 pixels
Auto Orientation	Yes
Touch Screen	Yes
<b>Image Presentation Modes</b>	
Thermal Image	Yes
Visual Image	Yes
MSX®	Embosses visual details on full resolution thermal image, for clear text and location identification
UltraMax™	Unique super-resolution process quadruples pixel count, up to 3.1 MP
<b>Measurement</b>	
Temperature range	-40 to +2000°C
Accuracy	±1°C (±1.8°F) or ±1% @25°C for temperatures between 5°C to 150°C ±2°C (±3.6°F) or ±2% of reading @ 25°C for temperatures up to 1200°C
<b>Measurement Analysis</b>	
Measurement Tools	10 spotmeters, 5+5 areas (boxes, circles) with min./max./average
Emissivity Correction	Variable from 0.01 to 1.0 or selected from materials list
Measurements Correction	Emissivity, reflected temperature, relative humidity, atmospheric temperature, object distance, external IR window compensation
Color Palettes	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava
<b>Storage of Media</b>	
Storage Media	Removable SD card (Class 10)
Image File Format	Standard JPEG, including digital photo and measurement data
<b>Video Recording/Streaming</b>	
Radiometric IR-Video Recording	Real-time radiometric recording to SD card
Non-Radiometric IR-Video Recording	H.264 to SD card
Radiometric IR-Video Streaming	Real-time radiometric streaming via USB
Non-Radiometric IR-Video Streaming	H.264 video using Wi-Fi or USB
<b>Digital Camera</b>	
Digital Camera	Field of View Match: adapts to the IR lens
Video Lamp	Built-in LED light
<b>Additional Information</b>	
USB, Connector Type	USB Micro-AB Data transfer to and from PC/Uncompressed colorized video
Battery	Rechargeable Li-ion polymer battery
Battery Operating Time	> 2.5 hours at 25°C (+68°F)
Charging System	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging Time	2.5 hours to 90% capacity
External Power Operation	AC adapter, 90-260 VAC input, 50/60 Hz or 12 V output from a vehicle (cable with standard plug, optional)
Power Management	Automatic power-off functionality, user-configurable
Storage Temp. Range	-40°C to +70°C (-40°F to 158°F)
Weight	1.9 kg (4.3 lb.)
<b>System Includes:</b>	
Infrared camera with lens, battery (2 each), battery charger, HDMI-HDMI cable, hard transport case, Bluetooth headset, SD card, large eyecup, lens cap, neck strap, power supply (including multi-plugs USB cable), standard A to Micro-B, calibration certificate, FLIR Tools+ license card, CD-ROM user documentation, printed documentation	

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# INTRODUCING THE FLIR T1K

## OUTSTANDING INFRARED PERFORMANCE, BUILT ON 50 YEARS OF EXPERIENCE

**Born out of five decades of infrared expertise, the FLIR T1K is designed for thermography experts who need the highest quality without compromise.**

Designed and built by FLIR, the OSX™ Precision HDIR optical system provides unsurpassed image clarity, detail, and temperature accuracy, from wide angle to telephoto.

With its dynamic focus control, continuous auto focus, and responsive user interface, the T1K definitely raises the bar on user-friendly performance. Its rugged, ergonomic design and rotating optical block take the stress out of a day-long list of inspections, making it easier to scan at difficult angles.

For the sharpest results, the truest temperatures, the most flexibility – the T1K delivers the quality an expert like you expects from experts like us.

### EXPERT FEATURES FOR EXPERT NEEDS:

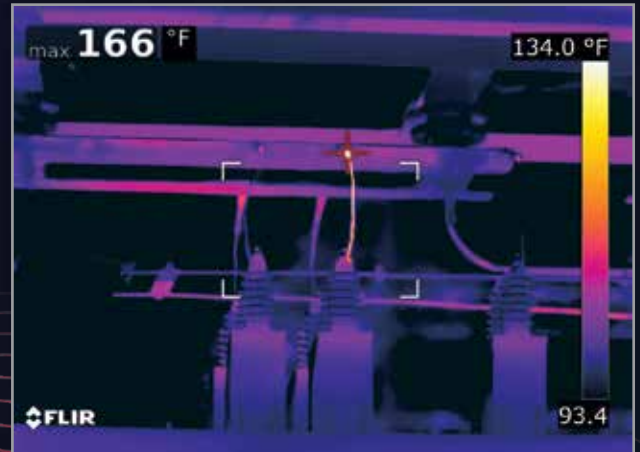
- High Definition thermal imagery, to help you see more
- Up to 3.1 MP resolution with UltraMax™
- Pin-point accurate temperature measurements
- Continuous autofocus for greater efficiency
- Take longer range measurements, from 2x farther away
- Thermal sensitivity that's 2.5x better than industry standard
- Never miss a hot spot – record continuous radiometric video
- Customized functionality to fit your expert needs

### FLIR 2-5-10 WARRANTY

The T1K is covered by our revolutionary FLIR 2-5-10 Warranty when registered within 60 days of purchase. (Please register your product - visit [www.flir.com/warranty/ins/](http://www.flir.com/warranty/ins/))

- 2 Years on camera parts and 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 its critical camera components from the ground up.



MEASURE TARGETS FROM A SAFE DISTANCE WITHOUT THE NEED FOR A TELEPHOTO LENS



FLIR'S PATENTED MSX® ALLOWS YOU TO READ TEXT AND SEE VISIBLE DETAIL WITHOUT SACRIFICING MEASUREMENT DATA



RECORD ENTIRE INSPECTIONS WITH REAL-TIME RADIOMETRIC VIDEO, AND USE THE FLIR T1K AS A PORTABLE ANALYSIS POWERHOUSE



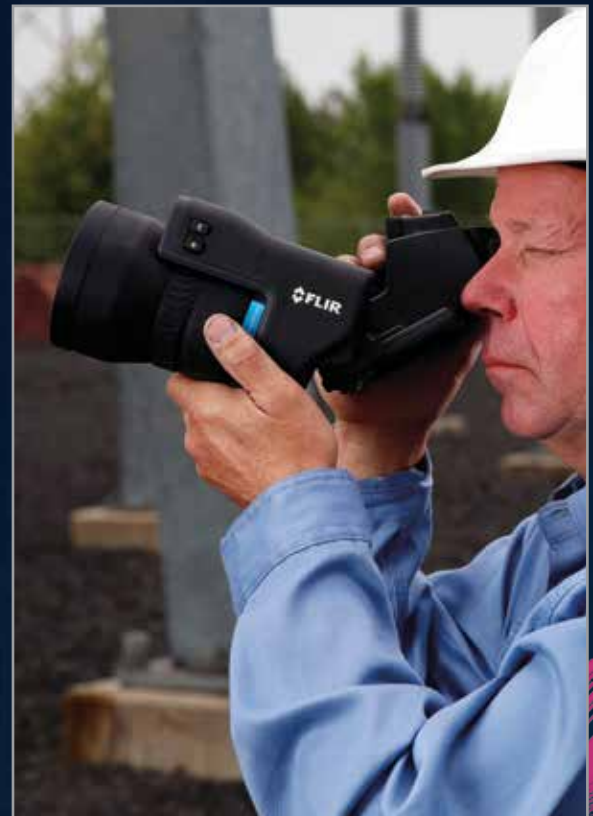
## THE OPTICS ADVANTAGE:

- Lenses designed specifically for use with HD detectors
- HDIR optics deliver crisp, high quality images
- Exceptional range performance
- Ultrasonic Drive delivers powerful continuous and manual focus

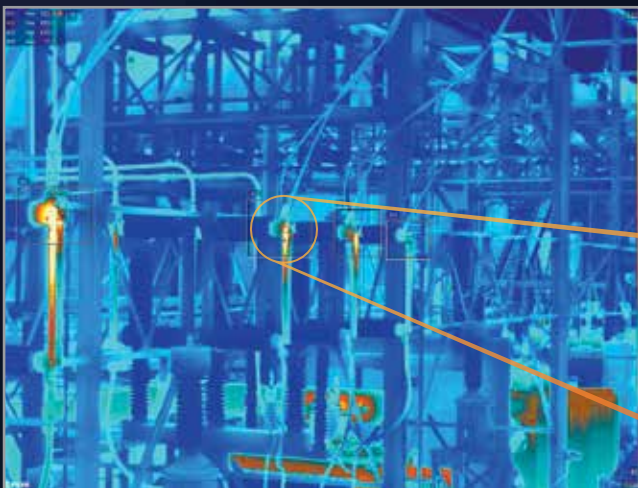


## OPTIMAL ERGONOMICS:

- Rotating optical block puts any target in comfortable viewing range
- Target and scan in bright daylight with high-resolution viewfinder
- Dynamic focus control adjusts to your touch
- Designed to be comfortable in your hand, for all-day surveys







## ULTRAMAX™

FLIR's UltraMax is a unique processing technique that allows you to generate reports with images that have up to four times as many pixels and 50% less noise than standard native images. More pixel coverage with UltraMax helps fill in inactive gaps, producing denser temperature measurements for greater thermal accuracy from even farther away.

WITH ULTRAMAX™ SUPER-RESOLUTION, THE T1K EXCEEDS 3 MP IN RESOLUTION WHILE MAINTAINING MEASUREMENT PERFORMANCE

## EASE OF USE:

- Highly responsive touch screen makes menu navigation easy
- One-click Rapid Report™ streamlines reporting/analysis workflow
- Wi-Fi for image sharing & remote control via smart devices
- Voice, text, or sketch annotations add important detail to images



## 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 take an initial training course and get certified as a Level 1 Thermographer, or receive advanced training in specialized fields of thermography. ITC training is a vital investment that will help you use your new thermal camera successfully.

More information, visit [www.flir.com.hk](http://www.flir.com.hk)