## FLIR T1K

HD THERMAL IMAGING CAMERA

BUILT FOR THE EXPERT. BY THE EXPERTS.





## INTRODUCING THE FLIR TIK

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<sup>™</sup>
- 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.

- 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 TIK AS A PORTABLE ANALYSIS POWERHOUSE

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



#### **KEY FEATURES**

#### FLIR OSX™ Precision HDIR Optics

Provides high fidelity imagery and helps you pin-point the smallest anomalies from farther 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 glarereducing 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 camera, up to 3.1 MP with Ultra $Max^{TM}$ 

#### FLIR Vision 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

#### Manual or Continuous Autofocus

Continuous autofocus keeps pace with your movements, or take full control with the tactile manual focus ring



#### THE OPTICS ADVANTAGE:

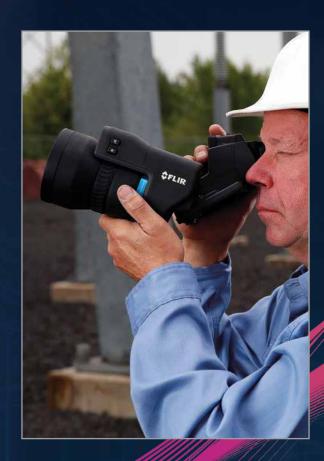
- Lenses designed specifically for use with HD detectors
- HDIR optics deliver crisp, high quality images
- Exceptional range performance
- Ultrasonic Drive delivers powerful continuous and manual focus

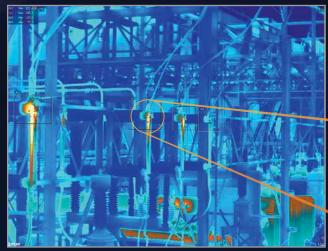


#### **OPTIMAL ERGONOMICS:**

- 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



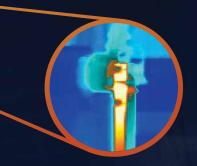




WITH ULTRAMAX  $^{\text{TM}}$  SUPER-RESOLUTION, THE TIK EXCEEDS 3 MP IN RESOLUTION WHILE MAINTAINING MEASUREMENT PERFORMANCE

#### ULTRAMAX™

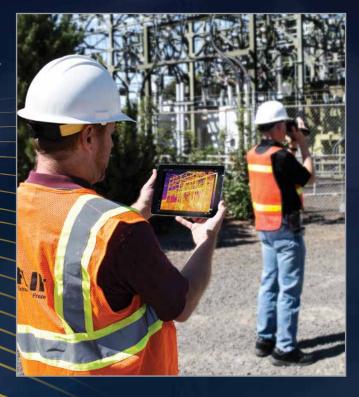
FLIR's UltraMax is a unique processing technique that allows you to generate reports with images that have up to four times as many pixels and 50% less noise than standard native images. More pixel coverage with UltraMax helps fill in inactive gaps, producing denser temperature measurements for greater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



#### EASE OF USE:

- Highly responsive touch screen makes menu navigation easy
- 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.

www.infraredtraining.com

#### **SPECIFICATIONS**

Model Numbers	FLIR T1020
Imaging and Optical Data	
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)	12° lens: 0.20 mrad; 28° lens: 0.47 mrad; 45° lens: 0.80 mrad
Image Frequency	30 Hz
Spectral Range	7.5 - 14 µm
4.3" Display	800 x 480 pixels
Auto Orientation	Yes
Touch Screen	Yes
Image Presentation Modes	
Thermal Image	Yes
Visual Image	Yes
MSX®	Embosses visual details on full resolution thermal image, for clear text and location identification
UltraMax <sup>™</sup>	Unique super-resolution process quadruples pixel count, up to 3.1 MP
Measurement	
Accuracy	±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal
Measurement Analysis	
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
Storage of Media	
Storage Media	Removable SD card (Class 10)
Image File Format	Standard JPEG, including digital photo and measurement data in one file
Video Recording/Streaming	
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
Digital Camera	
Digital Camera	Field of View Match: adapts to the IR lens
Video Lamp	Built-in LED light
Additional Information	
USB, Connector Type	USB Micro-AB Data transfer to and from PC/Uncompressed colorized video
Battery	Two 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.)
System Includes:	

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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