## FLIR T1K hd thermal imaging camera

# BUILT FOR THE EXPERT. BY THE EXPERTS.







The World's Sixth Sense\*

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



#### **KEY FEATURES**

FLIR OSX<sup>™</sup> 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 UltraMax<sup>TM</sup>

#### FLIR Image Processing

MSX<sup>®</sup>, UltraMax<sup>™</sup> 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 tactile manual focus ring

## 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<sup>™</sup> 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:**

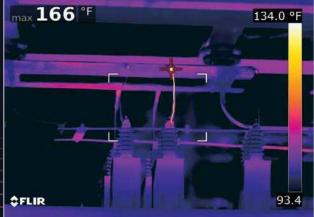
- High Definition thermal imagery, to help you see more
- Up to 3.1 MP resolution with UltraMax<sup>™</sup>
- Pin-point accurate temperature measurements
- Continuous autofocus for greater efficiency
- Take longer range measurements, from 2x farther away
- Thermal sensitivity that's 2.5x better than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

## FLIR 2-5-10 WARRANTY

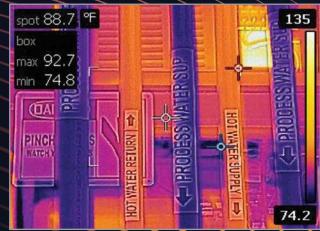
The T1K is covered by our revolutionary FLIR 2-5-10 Warranty when registered within 60 days of purchase.

- 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



## THE OPTICS ADVANTAGE:

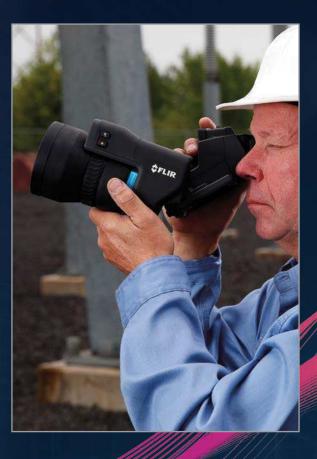
- Lenses designed specifically for use with HD detectors
- HDIR optics deliver crisp, high quality images
- Exceptional range performance
- Ultrasonic Drive delivers powerful continuous and manual focus

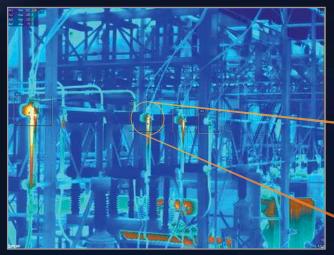


### **OPTIMAL ERGONOMICS:**

- 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



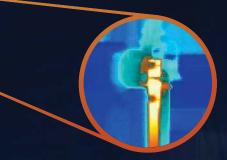




WITH ULTRAMAX™ SUPER-RESOLUTION, THE TIK EXCEEDS 3 MP IN RESOLUTION WHILE MAINTAINING MEASUREMENT PERFORMANCE

#### ULTRAMAX<sup>™</sup>

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
- One-click Rapid Report<sup>™</sup> 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. 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)	12º lens: 0.20 mrad; 28º lens: 0.47 mrad; 45º 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:				
I Infrared camera with lens, battery (2 eac)	h), battery charger, HDMI-HDMI cable, hard transport case, Bluetooth headset, SD card, large eyecup, lens cap, neck strap, power			

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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