# **\$FLIR**

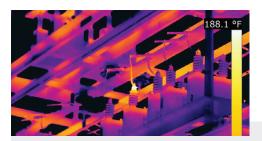


#### HD THERMAL IMAGING CAMERA

# 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<sup>TM</sup>, featuring MSX, UltraMax<sup>®</sup>, 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

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 mod	es	
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 tempera- tures from 5°C to 150°C (41°F to 302°F)
Alarms	_	Above, below, interval, moisture, insulation
Measurement function alarm	_	Audible/visible above/be- low alarms on any selected measurement function

Manaurament & analysis	T1010	T1020
Measurement & analysis	11010	
Compass, GPS	<u> </u>	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 ( Bluetooth headset*, lens cap, powe HDMI), FLIR Tools+, printed docume	er supplies, SD card, cables (Std	

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

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www.flir.com NASDAQ: FLIR

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18-2816-INS-T1K datasheet



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