

Teledyne FLIR  
Public Safety Solutions

# THERMAL FIREFIGHTING

 **TELEDYNE**

# K-SERIES

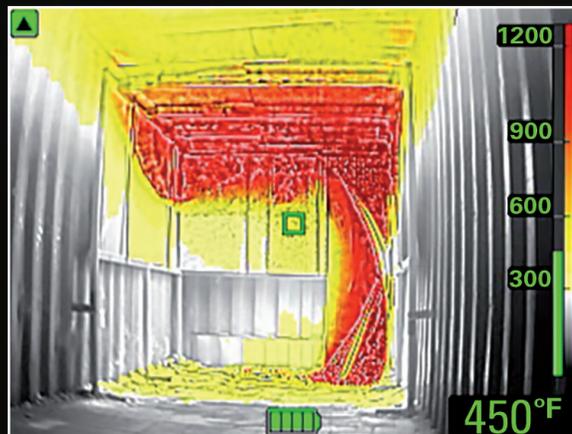
## AFFORDABLE, DEPENDABLE, ESSENTIAL

Just like your air pack, radio, and protective gear, FLIR TICs are essential tools for firefighting. With a TIC in hand, you can attack fires more strategically, maneuver through smoke more easily, and save lives. And with a range of technologies and prices from the FLIR K1 Situational Awareness Camera through the NFPA®-compliant FLIR K65, it's easier than ever for departments to afford to issue a TIC to every firefighter.

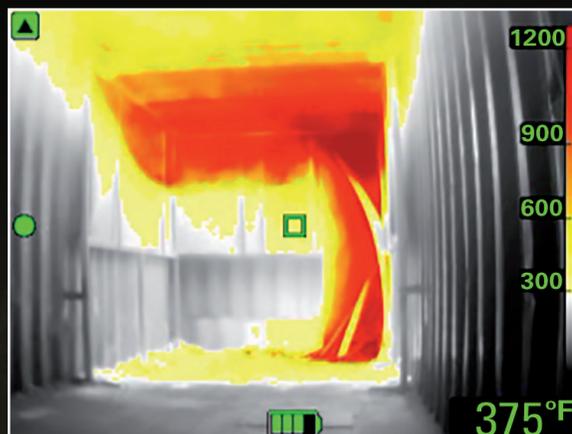
### FSX® - FLEXIBLE SCENE ENHANCEMENT\*

Digital image processing enhances the thermal image in the camera, producing an ultra-sharp view with more scene detail. FSX makes it easier for firefighters to find their way in smoke-filled rooms, even in scenes with extreme temperature dynamics.

WITH FSX



WITHOUT FSX







# When NFPA® Compliance is a must FLIR K65 TIC IS THE ANSWER

FLIR designed the K65 thermal imaging camera with sealed connectors and a secured battery for full compliance with the NFPA 1801:2021 Standard for Thermal Imagers covering usability, image quality, and durability. This advanced TIC produces detail-rich 320 x 240 pixels thermal images to help you navigate easier in smokey conditions. Plus, the K65 can record and store up to 200 photos or video files you can play back on the camera or review from a computer for post-fire analysis.



## FULL PROTECTION:

FLIR'S 2-5-10 Warranty

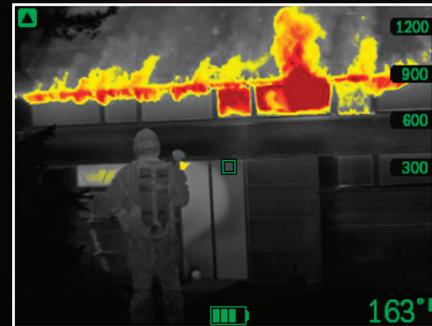
- 2 Years Battery
- 5 Years Parts and Labor
- 10 Years Detector



## IMAGE MODES

### TI BASIC

For initial fire attack and rescue operations; colors represent temperature.



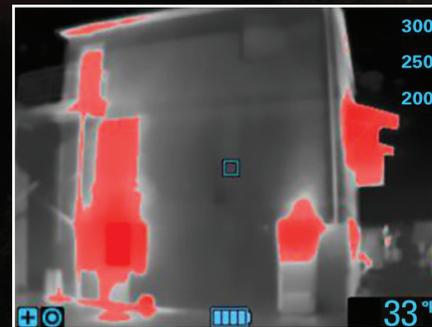
### BLACK & WHITE

Same representations of temperature as the TI Basic mode, but in grayscale.



### HEAT DETECTION

Used for finding hotspots. The hottest 20% of the scene is colored red.



### FIRE

For scenes with higher background temps where open flames are present, particularly in structural fires.



### SEARCH & RESCUE

For use with lower temperature situations, such as initial rescue efforts after traffic accidents, searches in wooded areas, etc.



### COLD DETECTION\*

Colorizes coldest 20% of the scene to aid in finding drafts and determining air flows.

\* K2 only



# ADVANCED TECHNOLOGY WITHOUT COMPROMISE

The FLIR Kx5-Series with FSX<sup>®</sup> displays detail-rich imagery on a large, bright 4-inch LCD to help you navigate the smokiest environments, instantly distinguish people and room features, and make critical decisions.

## FULL PROTECTION:

FLIR'S 2-5-10 Warranty

- 2 Years Battery
- 5 Years Parts and Labor
- 10 Years Detector



### FLIR K65

320 × 240 pixel detector

#### NFPA 1801 COMPLIANT\*

With fully-sealed connectors and a secured battery, the K65 is designed to be compliant with the NFPA 1801:2021 Standard for Thermal Imagers covering usability, image quality, and durability.

\*National Fire Protection Association and NFPA are registered trademarks of the National Fire Protection Association. The NFPA does not test, certify, or approve any products.



### FLIR K55

320 × 240 pixel detector

#### HIGH-PERFORMANCE

The K55 produces uncompromising, detail-rich imagery you can view in real-time, save as JPEGs, or record as video. Choose one of five image modes designed to help you better navigate heavy smoke, find hidden hot spots, or search for potential victims.



### FLIR K45

240 × 180 pixel detector

#### RUGGED AND RELIABLE

The K45 meets the challenges of intense fire scenes with a drop-resistant, water-resistant design made to operate in 500°F heat for up to five minutes. This affordable TIC saves thermal JPEGs you can play back in the camera or download for later review.

# VISION FOR EVERY FIREFIGHTER

FLIR is on a mission to make TICs standard-issue equipment for every firefighter. With modern fires progressing faster than ever, equipping each crew member with a TIC could be the difference between disorientation and life-saving vision.

## FULL PROTECTION:

- FLIR'S 2-5-10 Warranty
- 2 Years Battery
- 5 Years Parts and Labor
- 10 Years Detector



### FLIR K53

320 × 240 pixel detector

#### PREMIUM FEATURES, LOWER PRICE

The K53 combines simplified, one-button controls with advanced features such as FSX enhancement and smooth, 60 Hz image capture to provide reliable vision at an affordable price.



### FLIR K33

240 × 180 pixel detector

#### FIREPOWER SIMPLIFIED

Start the K33 in TI-Basic mode with just a press of the button and freeze the image on-screen with a trigger-pull. This affordable handheld produces crisp imagery with FSX enhancement, helping you navigate fire scenes safely.



#### K2 Mount



### FLIR K2

160 × 120 pixel detector

#### EASY TO HANDLE

The K2 offers a glove-friendly, one-button control for quick access to the simplified interface, so you can focus on the challenging, fast-changing job at hand. Lightweight but rugged, the K2 can withstand a two-meter drop onto concrete, is water resistant (IP67), and is fully operational up to 500°F (three minutes).

# RELIABLE SITUATIONAL AWARENESS

FLIR K1 compact thermal cameras make 360° assessment possible in complete darkness and through smoke. Quickly detect and document key findings with internal recording of up to 10,000 thermal/visible image sets.



## FULL PROTECTION:

- FLIR's 2-10 Warranty
- 2 Years Parts and Labor
- 10 Years Detector



## FLIR K1

160 x 120 pixel detector

### POCKET-PORTABLE AND RUGGED

The FLIR K1 helps you quickly assess the scene without losing line of sight and then document key findings with internal recording of up to 10,000 thermal/visual image sets. Designed to withstand a 2 meter (6.5 foot) drop onto concrete and water resistant (IP67), the K1 offers up to 5.5 hours of radiometric thermal imaging.



# MONITOR IN THE FIELD

The FLIR Scion® PTM captures clear thermal imagery in darkness or through glare and haze, making it the perfect choice to identify hot spots, delineate roadways obscured by smoke, and monitor the growth of wildfires. This rugged monocular has the long-range thermal visibility needed for land or water-based search and rescue efforts as well as hazardous materials incidents, and can provide command staff with the tactical information they need to fight wildland fires strategically.



## FULL PROTECTION:

FLIR Warranty

- Standard: 2 Years Components
- Extended: 3 Years Components, 10 Years Detector

## FLIR SCION PTM

640 × 480 pixel detector

### TRUSTED THERMAL PROTECTION

The Scion PTM helps you quickly assess scenes up to 1420 m (4659 ft) away and document key findings with internal memory or expandable microSD® memory. Polished menus allow easy access to features such as palettes, picture-in-picture zoom, video recording, and GPS functionality. The rugged exterior can withstand a 2 m (6.5 ft) drop and function at temperatures up to 50°C (122°F).



# Specifications

MODEL	K1	K2	K33	K45	K53
IR resolution	160 × 120 pixels	160 × 120 pixels	240 × 180 pixels	240 × 180 pixels	320 × 240 pixels
Thermal sensitivity	<100 mK	<100 mK @ 30°C (86°F)	<40 mK @ 30°C (86°F)	<40 mK @ 30°C (86°F)	<30 mK @ 30°C (86°F)
Image or contrast optimization	Digital image enhancement with MSX®	Digital image enhancement with FSX®			
Field of view (FOV)	57° × 44°	47° × 35°	51° × 38°	51° × 38°	51° × 38°
Image storage	Yes	No	No	Up to 200 JPEG images on internal flash memory	Up to 200 JPEG images on internal flash memory (dependent on the number of saved video clips)
Video storage	No	No	No	No	200 files in total, with a maximum duration of 5 min per video clip
In-camera video recording	No	No	No	No	MPEG-4 to internal flash memory
<b>IMAGE PRESENTATION</b>					
Display	Backlit 2.4 in, 320 × 240 pixel LCD	Backlit 3 in, 320 × 240 pixel LCD	Backlit 4 in, 320 × 240 pixel LCD		
IR image modes	T1 Basic (White hot with isotherm), White hot, Iron	Basic firefighting mode, Cold detection mode, Building analysis mode, Black-and-white firefighting mode, Fire mode, Search and rescue mode, Heat detection mode	T1 Basic firefighting mode	T1 Basic firefighting mode, Black-and-white firefighting mode, Fire mode, Search and rescue mode, Heat detection mode, Thumbnail gallery	T1 Basic firefighting mode
Auto range	No	Yes, Non-selectable	Yes, selectable on/off using FLIR Tools		
<b>MEASUREMENT</b>					
Object temperature range	High Gain Mode: -10°C to 140°C (14°F to 284°F) Low Gain Mode: -10°C to 400°C (14°F to 752°F) (at room temperature)	-20°C to 150°C (-4°F to 302°F) 0°C to 500°C (32°F to 932°F)	-20°C to 150°C (-4°F to 302°F) 0°C to 650°C (32°F to 1,202°F)		
Accuracy	Accuracy for ambient temperatures of 10°C to 35°C (50°F to 95°F): High gain mode, ±5°C or ±5% Low gain mode, ±10°C or ±10%	±4°C (±7.2°F) or ±4% of reading for ambient temperature, 10°C to 35°C (50°F to 95°F)			
Spotmeter	Center spot	1 spotmeter	1 spotmeter	1 spotmeter	1 spotmeter
<b>SAFETY TESTING</b>					
NFPA 1801:2021 compliant	No	No	No	No	No
<b>POWER SYSTEM</b>					
Battery type	Li-ion, 3.7 V rechargeable	Li Ion, > 4 hours operating time			
Charging time	4 hours to 90%, 6 hours to 100%	2.5 h to 90% capacity	2 hours to 85% capacity, status indicated by LEDs		
<b>ENVIRONMENTAL DATA</b>					
Operating temperature range	10°C to 90°C (14°F to 194°F) for up to 10 min, flashlight on -10°C to 115°C (14°F to 239°F) for up to 2 min, flashlight on	-10°C to 55°C (14°F to 131°F) 85°C (185°F): 15 min 150°C (302°F): 10 min 260°C (500°F): 3 min	Standard: -20°C to 85°C (-4°F to 185°F) Up to 150°C (302°F): 15 min Up to 260°C (500°F): 5 min		
Storage temperature range	-30°C to 55°C (-22°F to 131°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 85°C (-40°F to 185°F)		
Humidity (operating and storage/relative)	0°C to 37°C (32°F to 99°F) 37°C to 45°C (99°F to 113°F) 45°C to 55°C (113°F to 131°F)	IEC 60068-2-30/24 h 95% relative humidity 25°C to 40°C (77°F to 104°F) / 2 cycles 95% relative humidity 25°C to 40°C (77°F to 104°F) non-condensing			
Encapsulation, shock, vibration, and drop	IP67 (IEC 60529), 25 g (IEC 60068-2-27), 2 g (IEC 60068-2-6), 2 m (6.6 ft)	IP 67 (IEC 60529), 25 g (IEC 60068-2-27), 2 g (IEC 60068-2-6), 2.0 m / 6.6 ft, on concrete floor (IEC 60068-2-31)	IP 67 (IEC 60529), 25 g (IEC 60068-2-27), 2 g (IEC 60068-2-6), 2.0 m / 6.6 ft, on concrete floor (IEC 60068-2-31)		
<b>PHYSICAL DATA</b>					
Camera weight, incl. battery	0.410 kg (0.904 lb)	0.7 kg (1.54 lb)	1.1 ±0.05 kg (2.4 ±0.1 lb)		
Camera size (L × W × H)	208 × 85 × 65 mm (8.19 × 3.3 × 2.6 in)	250 × 105 × 90 mm (9.8 × 4.1 × 3.5 in)	120 × 125 × 280 mm (4.7 × 4.9 × 11 in)		
<b>PACKAGING</b>					
Contents	K1 infrared camera, printed documentation, wrist strap lanyard, USB-C to USB-A cable, tactical pouch	Infrared camera, battery (2x), battery charger, lanyard strap, power supply, USB cable	Infrared camera, hard transport case, battery (2x), battery charger, power supply, retractable lanyard, carabiner strap, USB cable, printed documentation		
<b>OPTIONAL ACCESSORIES</b>					
Hard transport case, carabiner strap, retractable lanyard, extra batteries, in-truck charger, car charger, cigarette lighter adapter kit, tripod adapter					

## Specifications Cont.

MODEL	K55	K65	Scion PTM
IR resolution	320 × 240 pixels		320 × 256 or 640 × 480 pixels
Thermal sensitivity	<30 mK @ 30°C (86°F)		N/A
Image or contrast optimization	Digital image enhancement with FSX	Digital image enhancement with FSX	N/A
Field of view (FOV)	51° × 38°	51° × 38°	12° × 9°, 18° × 13°, or 31° × 24°
Image storage	Up to 200 JPEG images on internal flash memory (dependent on the number of saved video clips)	Up to 200 JPEG images on internal flash memory (dependent on the number of saved video clips)	2 GB Internal storage Optional micro SD card (up to 128 GB)
Video storage	200 files in total, with a maximum duration of 5 min per video clip	200 files in total, with a maximum duration of 5 min per video clip	
In-camera video recording	MPEG-4 to internal flash memory	MPEG-4 to internal flash memory	
<b>IMAGE PRESENTATION</b>			
Display	Backlit 4 in, 320 × 240 pixel LCD		N/A
IR image modes	TI Basic firefighting mode, Black-and-white firefighting mode, Fire mode, Search and rescue mode, Heat detection mode, Thumbnail gallery	TI Basic NFPA firefighting mode, Black-and-white firefighting mode, Fire mode, Search and rescue mode, Heat detection mode, Thumbnail gallery	Scouting, Picture-in-Picture, Lock Span mode
Auto range	Yes, selectable on/off using FLIR Tools		N/A
<b>MEASUREMENT</b>			
Object temperature range	-20°C to 150°C (-4°F to 302°F) 0°C to 650°C (32°F to 1,202°F)		N/A
Accuracy	±4°C (±7.2°F) or ±4% of reading for ambient temperature, 10°C to 35°C (50°F to 95°F)		N/A
Spotmeter	1 spotmeter	1 spotmeter	None
<b>SAFETY TESTING</b>			
NFPA 1801:2021 compliant	No	Yes	No
<b>POWER SYSTEM</b>			
Battery type	Li Ion, > 4 hours operating time		6x CR123A 3V Lithium battery, up to 4.5 hours at 20°C
Charging time	2 hours to 85% capacity, status indicated by LEDs		N/A
<b>ENVIRONMENTAL DATA</b>			
Operating temperature range	-20°C to 85°C (-4°F to 185°F) 150°C (302°F): 15 min, 260°C (500°F): 5 min		-20°C to 50°C (-4°F to 122°F)
Storage temperature range	-40°C to 85°C (-40°F to 185°F)		-40°C to 70°C (-40°F to 158°F)
Humidity (operating and storage/relative)	IEC 60068-2-30/24 h 95% relative humidity 25°C to 40°C (77°F to 104°F) 2 cycles 95% relative humidity 25°C to 40°C (77°F to 104°F) non-condensing		N/A
Encapsulation, shock, vibration, and drop	IP 67 (IEC 60529), 25 g (IEC 60068-2-27), 2 g (IEC 60068-2-6), 2.0 m/6.6 ft on concrete floor (IEC 60068-2-31)		IP67 waterproof, 2 m drop
<b>PHYSICAL DATA</b>			
Camera weight, incl. battery	1.1 ± 0.05 kg (2.4 ± 0.1 lb)		565 g/1.25 lbs (PTM 166 model)
Camera size (L × W × H)	120 × 125 × 280 mm (4.7 × 4.9 × 11 in)		227 × 76.8 × 60.5 mm (9 × 3 × 2.4 in)
<b>PACKAGING</b>			
Contents	Infrared camera, hard transport case, battery (2×), battery charger, power supply, retractable lanyard, carabiner strap, USB cable, printed documentation	Infrared camera, hard transport case, battery (2×), battery charger, power supply, retractable lanyard, USB cable, carabiner strap, Torx screwdriver, printed documentation	Scion, battery tray, 6xCR123, USB-C cable, black MOLLE pouch, Quick Start Guide
<b>OPTIONAL ACCESSORIES</b>			
Hard transport case, carabiner strap, retractable lanyard, extra batteries, in-truck charger, car charger, cigarette lighter adapter kit, tripod adapter			Rechargeable battery kit (GPX310)



### FLIR Truck Charger

Optional

#### POWER ON THE GO

FLIR in-truck chargers help ensure your Kxx Series TIC and spare battery are always powered up and ready to go.

For more information contact: [Sales@TeledyneFLIR.com](mailto:Sales@TeledyneFLIR.com)  
or to find your local support number, visit: [flir.com/contactsupport](http://flir.com/contactsupport)

[www.teledyneflir.com](http://www.teledyneflir.com)  
NASDAQ: TDY

Specifications are subject to change without notice

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