





# FLIR **K33 & K53**\*

### Thermal Imaging Cameras for Firefighters

## STREAMLINED HIGH PERFORMANCE MADE EVEN MORE AFFORDABLE

FLIR's new K33 and K53 provide you with two new lower-cost, easier-touse options without sacrificing the reliable clarity and performance that FLIR K-Series TICs are well-known for. Both feature FLIR's FSX™ Flexible Scene Enhancement that intensifies structural and textural details in thermal images for better perspective and orientation.

By making it easier to see more clearly under the smokiest, darkest conditions, the K33 and K53 can help improve situational awareness and provide first responders a greater sense of confidence and safety as they forge ahead to fight fires and save lives.

#### **Fire Power Simplified**

Simple operation lets you stay focused on the job. A single, glove-friendly button gets you up and running. A squeeze of the trigger freezes a K33 image or captures K53 stills and videos for reviewing later.

#### **Uncompromising Resolution**

Higher-resolution thermal imaging once exclusive to FLIR Kx5 models is now available in a streamlined package. Choose the K33 for  $240 \times 180$  pixel IR or the K53 for  $320 \times 240$  guality.

#### Vivid FSX™ Thermal Images

A big, bright 4" LCD and onboard FSX digital processing enhances thermal image detail for greater visibility, making it easier for firefighters to find their way. 60Hz frame rate keeps up with the action.

#### **Affordability Redefined**

FLIR offers the broadest cost-effective range of high performance TICs to help you stretch your budget and put these essential tools into more hands.

#### The Best Warranty

FLIR's unique 2-5-10 Warranty covers the battery for two years, parts and labor for five, and the thermal imaging detector for 10.









#### **Specifications**

Model	K33	K53
IR Resolution	240 x 180 pixels	320 × 240 pixels
Thermal Sensitivity/NETD	< 40 mK @ 30°C (86°F)	< 30 mK @ 30°C (86°F)
Contrast Optimization	Digital image enhancement using FSX™	
Field of View (FOV)	51° × 38°	
Focus	Fixed focus	
Image Frequency	60 Hz	
Detector Type	Focal Plane Array (FPA), uncooled microbolometer	
Spectral Range	7.5–13 µm	
Start-up Time	< 17 sec. (IR-image, no GUI)	
Start-up Time from Sleep Mode	< 4 sec.	
Image Storage	No	Up to 200 JPEGS (co-dependent on the number of video clips)
Video Storage	No	Up to 200 files (5 minute max. per clip)
In-Camera Video Recording	No	Non-radiometric MPEG-4 to internal flash memory
Image Presentation		
Display	4" LCD, 320 × 240 pixels, backlit	
Image Modes	TI Basic	
Auto-Range	Yes, mode dependent	
Measurement		
Object Temperature Range	−20°C to 150°C (-4°F to 302°F), 0°C to 650°C (32°F to 1202°F)	
Accuracy	±4°C or ±4% of reading for ambient temperature, 10°C to 35°C (50°F to 95°F)	
Measurement Analysis		
Spotmeter	One spotmeter	
Isotherm	Yes, according to NFPA and mode dependent	
Automatic Heat Detection	Heat detection mode (hottest 20% of the scene is colorized)	
Set-up		
Color Palettes	Multiple palettes, mode dependent	
Regional Adjustments	Units, date, and time formats	
Data Communication Interfaces		
Interface	USB-mini USB-mini	
USB	USB Mini-B: Data transfer to and from PC/ uncompressed colorized video	
Power System		
Battery	Li lon, 4 hours operating time	
Charging System	2-bay charger, truck charger available	
Charging Time	2 hours to 85% (3 hours and 25 minutes) capacity, charging status indicated by LEDs	
Charging Temperature	0°C to 45°C (32°F to 113°F)	
Environmental Data	2000 - 2500 / 405 - 40505) 4500	(00005) 45 1 00000 (50005) 5 1
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.	
Storage Temperature Range	-40°C to 85°C (-40°F to 185°F)	
Humidity (Operating and Storage)	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	
Relative Humidity	Designed to meet NFPA 1801:2013 specification: • Vibration • Impact acceleration resistance • Corrosion • Viewing surface abrasion	
Directives	Heat resistance • Heat and flame • Product label durability	
EMC	• EN 61000-6-2:2005 (Immunity) • EN 61000-6-3:2011 (Emission) • FCC 47 CFR Part 15B (Emission)	
Magnetic Fields	EN 61000-6-2.2000 (Hillindinity) © EN 61000-6-3.2011 (Emission) © FCC 47 CFN Fait 15B (Emission)  EN 61000-4-8, Test level 5 for continuous field (severe industrial environment)	
Encapsulation		C 60529)
Shock	25 g (IEC 60068-2-27)	
Vibration	2 g (IEC 60068-2-6)	
Drop	2.0 m / 6.6 ft., on concrete floor (IEC 60068-2-31)	
Safety (Power Supply)	CE/EN/UL/CSA/PSE 60950-1	
Physical Data		
Camera Weight, Incl. Battery	< 1.1 kg / 2.4 lb	
Camera Size (L × W × H)	120 × 125 × 280 mm / 4.7 × 4.9 × 11 in.	
Tripod Mounting	UNC 14"-20	
Packaging		
	Infrared camera, battery (2 ea.), battery charger, hard transpor	rt case, power supply, printed documentation, USB cable, user
Packaging, Contents	documentation CD-ROM, lanyard strap, neck strap, retractable lanyard, tripod adapter	
Optional Accessories	Extra battery, battery charger, hard case, retractable lanyard, strap lanyard, neck strap, USB-cable, tripod adapter, in-truck charger	
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For more information on FLIR's firefighting thermal imaging cameras, please visit www.flir.com/fire.

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