FLIR K1

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Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions.

General description
Take your 360 to the next level with the new FLIR K1 Situational Awareness Camera. This rugged, compact thermal camera will be your extra set of eyes on the fire scene, allowing you to easily see in total darkness and through smoke. With a bright, integrated flashlight, the FLIR K1 illuminates the scene to help steer and manage your crew more effectively. Have it in your pocket, hanging on your belt, or base it in your vehicle for investigations in and around buildings, industrial settings, traffic accidents, wildland calls, or search and rescue activities.

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Benefits

- Gain a quick and complete 360° assessment of the scene:
  - Clear thermal image thanks to FLIR thermal resolution.
  - MSX image enhancement adds perspective.
  - Pistol grip offers line of sight viewing.
  - The 57° × 44° portrait view encompasses top to bottom view.
  - Integrated flashlight.
  - FLIR fire specific user interface.
- Gather compelling evidence and reporting:
  - Easy to interpret image.
  - Snapshot function.
  - Save images in radiometric format.
  - Include visual image.
  - Image post processing and reporting in FLIR Tools.
- Rugged, durable, and reliable construction:
  - Small form actor and lightweight.
  - Weatherproof, IP67.
  - Drop resistant to 2 meters (6 ft.)
  - Warranty: 2 years for parts and labor, 10 years for the detector, after camera registration.
  - Up to 5.5 hours battery power.
  - Worldwide service network.
- Affordable.

Typical applications

Industries:

- First responder department (Fire/Rescue/EMS Departments)
- Industrial fire fighting
- Forest/wildland services
- HAZMAT response teams

Job titles:

- Fire commander
- Fire officer
- Fire inspector
- Fire fighter
- Search & rescue officer
- Public safety officer
- Park ranger
- Forensic inspector

Imaging and optical data	
IR resolution	160 × 120 pixels
Thermal sensitivity/NETD	< 100 mK
Field of view (FOV)	57° × 44°
F-number	1.1
Image frequency	8.7 Hz
Focus	Fixed

Detector data	
Detector type	Focal plane array, uncooled microbolometer
Spectral range	8–13 µm
Pitch	12 µm

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Visual camera	
Resolution	2MP
Focus	Fixed
Field of view (FOV)	71° × 56°, adapts to the IR lens
Video lamp	Yes, use flashlight as video lamp.

Image presentation	
Resolution	320 × 240 pixels
Surface brightness (cd/m²)	400
Screen size	2.4 in.
Viewing angle	80°
Aspect ratio	4:3
Auto-rotation	No
Touchscreen	No
Display technology	TFT
Cover glass material	Polycarbonate
Image adjustment	Automatic

Image presentation modes	
Multi Spectral Dynamic Imaging (MSX)	Yes

Measurement	
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)
Accuracy	Accuracy for ambient temperatures of 10 to 35°C (50°F to +95°F): • High Gain Mode: ±5°C or ±5% • Low Gain Mode: ±10°C or ±10%

Measurement analysis	
Spotmeter	Center spot
Isotherm	Yes: • Yellow coloring 150 ~ 250 °C (302°F ~ 482°F) • Orange coloring 250 ~ 350 °C (482°F ~ 662° F) • Red coloring > 350°C (> 662°F)
Colors (palettes)	• TI Basic (White-hot with isotherm) • Iron • White hot

USB	
USB	USB Type-C
USB, standard	USB 2.0 High Speed

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Set-up	
Set-up commands	• Local adaptation of units, language, date, and time formats • Gallery • Flashlight • Power (auto power off) • Backlight level
Languages	Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, simplified Chinese, Spanish, Swedish, traditional Chinese, Turkish

Storage of images	
Storage media	Internal memory (3.9 GB) Approx. 10.000 pairs of images (FLIR radiometric .jpg and visual .jpg) can be stored.
File formats	FLIR radiometric .jpg and separate visual .jpg

Flashlight	
Flashlight	Bright LED flashlight
LED CCT	5700K
LED CRI	70
Beam angle	20°
Light output (Lumens)	300

Compatibility	
Compatible with FLIR software	Image post processing and reporting in FLIR Tools

Data communication interfaces	
Interfaces	USB 2.0
Bluetooth	No
Wi-Fi	No

Power system	
Battery type	Li ion
Battery voltage	3.7 V
Battery capacity	3000 mAh
Battery operating time	• MSX mode: 5.5 h • Flashlight only: 3.8 h
Charging system	Battery is charged inside the camera
Charging time	4 hours to 90%, 6 hours to 100%
Charging temperature	0°C to +45°C (32°F to +113°F)
Power management	Adjustable
Start-up time	15 s
Battery documents	For documents like MSDS and UN38.3 test reports/summaries, see: https://support.flir.com/resources/msds

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Environmental data	
Operating temperature range	• Continuous with flashlight on, –10°C to +45°C (14°F to +113°F) • Continuous with flashlight off, –10°C to +55°C (14°F to +131°F) • Up to 10 min. with flashlight on, –10°C to +90° C (14°F to +194°F) • Up to 2 min. with flashlight on, –10°C to +115° C (14°F to +239°F)
Storage temperature range	–30°C to +55°C (–22°F to +131°F)
Humidity (operating and storage)	• 0–90% RH (0°C to 37°C (32°F to +99°F) • 0–65% RH (37°C to 45°C (99°F to +113°F) • 0–45% RH (45°C to 55°C (113°F to +131°F)
EMC	• EN 61000-6-2:2005 (Immunity) • EN 61000-6-3:2011 (Emission) • FCC Title 47 part 15, subpart B
Hazardous substances	• WEEE 2012/19/EU • RoHs 2011/65/EU • REACH Regulation EC 1907/2006
Magnetic fields	EN 61 000-4-8 Class 3
Encapsulation	IP 67 (IEC 60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.)
Safety	Camera: IEC/EN 61010-1
Declaration of conformity	See: https://support.flir.com/resources/DoC

Physical data	
Camera weight, incl. battery	0.410 kg (0.904 lb.)
Camera size (L × W × H)	208 × 85 × 65 mm (8.19 × 3.3 × 2.6 in.)
Tripod mounting	UNC ¼″-20
Material	• PC • Silicon rubber • Aluminium, cast
Color	Black

Shipping information	
Packaging, type	Cardboard box
List of contents	• Infrared camera • Printed documentation • Wrist strap lanyard • USB-C to USB-A cable • Pouch
Packaging, weight	0.96 kg (2.12 lb.)
Packaging, size	283 × 148 × 103 mm (11.1 × 5.83 × 4.06 in.)
EAN-13	7332558023815
UPC-12	845188019563
Country of origin	Taiwan

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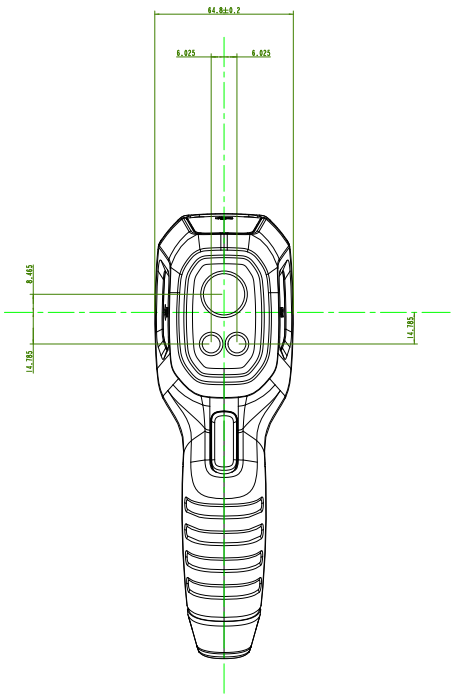
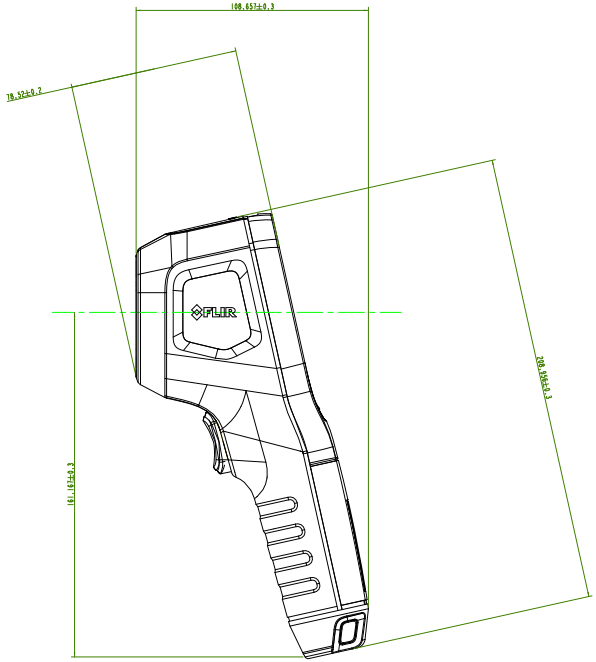
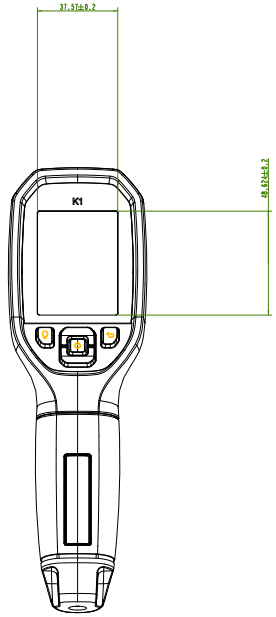
Supplies & accessories:

- T130976ACC; Retractable lanyard, 7 N (24 oz)







MODEL	K1		NAME	Device			
DRN	Derek Lee	2019-AUG-05	MATERIAL	—			
DSN	Derek Lee	2019-AUG-05	FINISH	—			
CKD	Derek Lee	2019-AUG-05	SCALE	1:1	DIM IN	mm	
APPD	YL Lin	2019-AUG-05	SHEET	1 OF 2	CAVITIES	—	

Oisda Corporation

TOLERANCE UNLESS OTHERWISE SPECIFIED (±)						
CLASS	A	B	C	D	E	F	G
< 8mm	0.05	0.1	0.1	0.2	0.4	0.4	0.2
8 ~ 25mm	0.08	0.15	0.15	0.3	0.5	0.5	0.5
25 ~ 80mm	0.12	0.2	0.25	0.4	0.5	0.8	1.0
80 ~ 250mm	0.20	0.3	0.4	0.6	0.8	1.2	1.0
250 ~ 800mm	0.3	0.5	0.8	1.0	1.5	2.0	2.0
> 800mm	1.0	1.0	1.5	1.5	2.0	4.0	4.0
ANGLE	0.5						

FILE NAME —

PART NO.