FLIR K65

P/N: 72202-0303

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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
The FLIR K65 is a robust and reliable infrared camera designed to perform under extremely severe conditions. The FLIR K65 has an intuitive interface with a design that makes it easy to control even with a gloved hand. The crisp and clear image helps you to navigate through smoke and to make quick and accurate decisions.
Benefits:
• Compliance with NFPA 1801-2021. • Robust and reliable: The FLIR K65 is designed to meet tough operating conditions. It can withstand a drop from 2 m (6.5 ft.) onto a concrete floor, is water resistant to IP67, and is fully operational up to 60°C (140°F), and operational up to 150°C (302°F) for 15 minutes, and 260°C (500°F) for 5 minutes. • Clear and crisp thermal images: The maintenance-free uncooled microbolometer sensor produces clear and detail-rich images of 320 × 240 pixels which have been further improved with FSX, a digital image-processing enhancement technique. Thermal images are presented on a large, bright 4″ display, helping you to navigate and to make quick and accurate decisions. • Easy-to-use—also in a gloved firefighter's hand: An intuitive and simple user interface allows you to focus on the job. The FLIR K series can be controlled by just three large buttons on top of the unit. Ideal for a gloved firefighter's hand. • Recording.

Imaging and optical data	
IR resolution	320 × 240 pixels
Thermal sensitivity/NETD	< 30 mK @ +30°C (+86°F)
Field of view (FOV)	51° × 38°
Depth of field	0.84 m to infinity (33 in. to infinity)
Focal length	9 mm (0.35 in.)
Spatial resolution (IFOV)	2.8 mrad
F-number	1.25
Image frequency	60 Hz

FLIR K65

P/N: 72202-0303

#72202-0303; r. 77523;

Imaging and optical data	
Focus	Fixed
Zoom	2× digital zoom

Detector data	
Detector type	Focal plane array (FPA), uncooled microbolometer (VOx)
Spectral range	8–14 µm
Pitch	25 µm

Image presentation	
Display	4 in. LCD, 320 × 240 pixels, backlit
Auto range	Yes, selectable on/off using FLIR Tools
Contrast optimization	Digital image enhancement using FSX

Image presentation modes	

Image modes	• IR image
	  ◦ TI Basic NFPA fire-fighting mode
	  ◦ Black-and-white fire-fighting mode
	  ◦ Basic mode
	  ◦ Search-and-rescue mode
	  ◦ Heat detection mode
	• Thumbnail gallery

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 (±7.2°F) or ±4% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F)

Measurement analysis	
Spotmeter	1
Automatic hot detection	Heat detection mode (the hottest 20% of the of scene is colorized)
Isotherm	Yes, according to NFPA

Set-up	
Set-up commands	Local adaptation of units, date and time formats
Languages	English

Storage of images	
Image storage	Standard JPEG
Storage media	Internal flash memory
Image storage capacity	200 files in total **NOTE** The number of files is co-dependent on the number of saved video clips.
Image storage mode	IR only
File formats	Standard JPEG

Image annotations	
Report generation	Separate software (FLIR Tools)

P/N: 72202-0303

#72202-0303; r. 77523;

Video recording in camera	
Non-radiometric IR video recording	MPEG-4 to internal flash memory
Storage capacity	200 files in total, with a maximum duration of 5 minutes each. **NOTE** The total number of files is co-dependent on the number of saved images.

Video streaming	
Non-radiometric IR video streaming	Uncompressed colorized video using USB

USB	
USB	USB Mini-B

Compatibility	
Compatible with FLIR software	FLIR Tools

Data communication interfaces	
Interfaces	• Update from PC devices • Data transfer to and from PC

Power system	
Battery type	Li Ion
Battery voltage	3.6 V
Battery capacity	4.4 Ah, at +20°C to +25°C (+68°F to +77°F)
Battery operating time	Approx. 4 hours at +25°C (+77°F) ambient temperature and typical use **NOTE** This operating time is independent of camera mode.
Charging system	• Battery is charged inside the camera • 2-bay charger • Optional In-truck charger
Charging time	2 h to 85% capacity, charging status indicated by LEDs
Charging temperature	0°C to +45°C (+32°F to +113°F)
Power management	Automatic shutdown and sleep mode
Start-up time from sleep mode	< 4 s.
Start-up time	< 17 s. (IR image, no GUI)

Environmental data	
Operating temperature range	• –20°C to +60°C (–4°F to +140°F) • +150°C (+302°F): 15 min. • +260°C (+500°F): 5 min.
Storage temperature range	–40°C to +70°C (–40°F to +158°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
Relative humidity	95% relative humidity +25°C to +40°C (+77°F to +104°F) non-condensing

FLIR K65

P/N: 72202-0303

#72202-0303; r. 77523;

Environmental data	
Directives	Certified according to NFPA 1801-2021 specification: • Vibration • Impact acceleration resistance • Corrosion • Viewing surface abrasion • 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 15 B (Emission)
Magnetic fields	EN 61 000-4-8, Test level 5 for continuous field (severe industrial environment)
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.) on concrete floor (IEC 60068-2-31)
Safety (power supply)	CE/EN/UL/CSA/PSE 60950-1

Certifications	
Compliance	NFPA1801-2021 Ex-certified according to ANSI/UL 121201-2017 and meets Class I Division 2 Groups C and D, Class II Division 2 Groups F and G, Temperature Code T4/T135°C

Physical data	
Camera weight, incl. battery	1.1 ±0.05 kg (2.4 ±0.1 lb.)
Battery weight	0.152 kg (0.3 lb.)
Camera size (L × W × H)	120 × 125 × 280 mm (4.7 × 4.9 × 11 in.)
Tripod mounting	UNC ¼"-20 (adapter needed)
Material	• PPSU • Silicon rubber • Aluminium, cast • Flame-resistant magnesium alloy

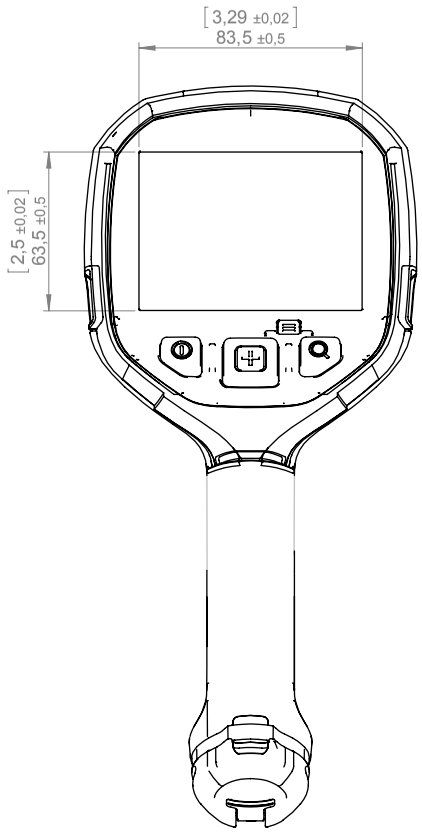
Shipping information	
List of contents	• Infrared camera • Battery (2 ea.) • Battery charger • Carabiner strap • Hard transport case • Power supply • Printed documentation • Retractable lanyard, 16 N (58 oz) • Torx screwdriver (T20) • USB cable
Packaging, weight	5.7 kg (12.6 lb.)
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)
EAN-13	4743254001992
UPC-12	845188010881
Country of origin	Estonia

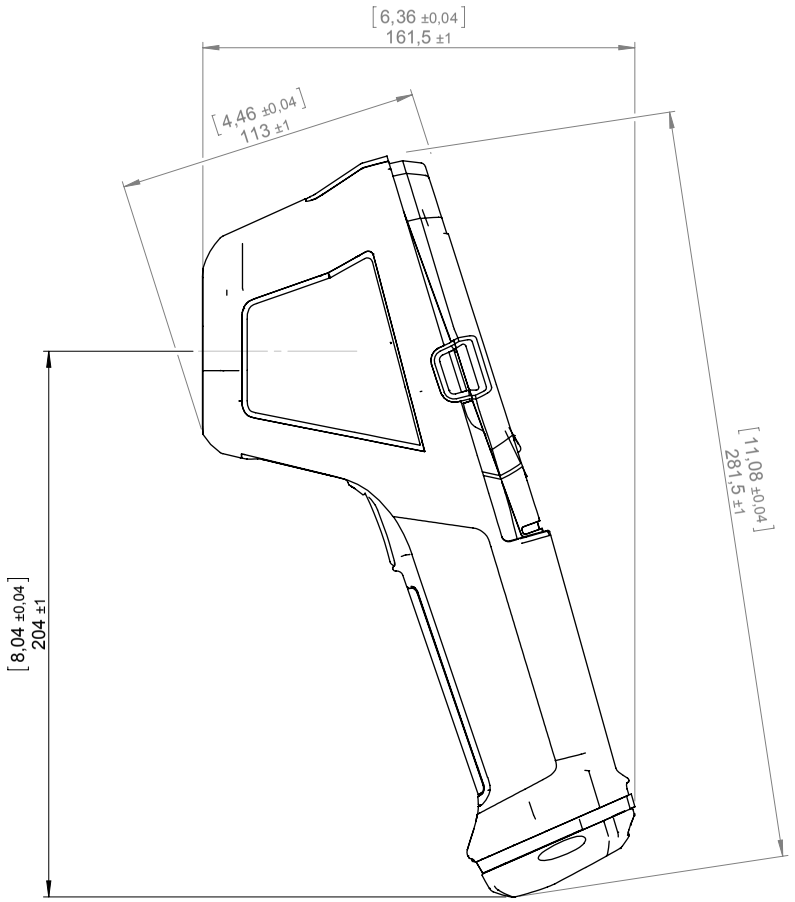
P/N: 72202-0303

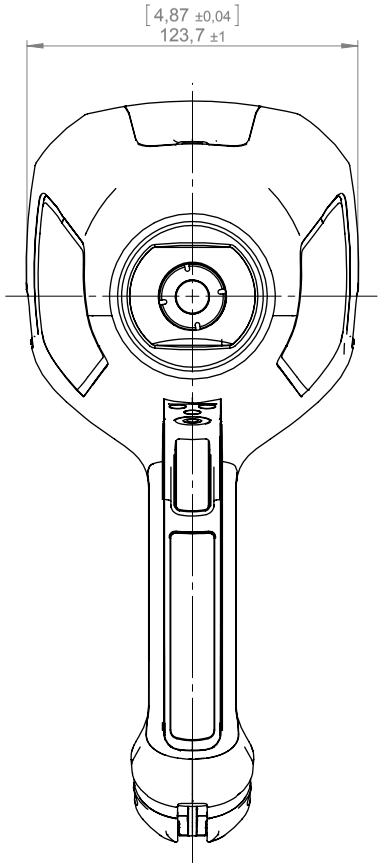
#72202-0303; r. 77523;

Supplies & accessories:

- 1910423; USB cable Std A <-> Mini-B
- T198509; Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.
- T198125; Battery charger, incl. power supply with multi plugs (Exx, Kxx)
- T127724ACC; Neck strap
- T198416ACC; Lanyard strap
- T198457ACC; Tripod Adapter, Kxx
- T198441ACC; Transport case Kxx
- T911309ACC; Screwdriver TX20
- T198322ACC; In-truck charger
- T199398; FLIR K65 accessory kit
- T199368ACC; Battery Li-ion 3.6 V, 4.4 Ah, 16 Wh
- T129915ACC; Carabiner strap
- T130980ACC; Retractable lanyard, 16 N (58 oz)
- INST-GM-0125; General Maintenance Package for A35, A65, Exx, Kxx







Konstr/Drawn: P. MARCUS	Datum/Date: 2013-01-23	Kontr/Check:	Material: -
Ändrad av/Modified by: P. MARCUS	Ändrad/Modified: 2013-01-23	Ytjämnhet/Roughness: Ra µm	Ytbehandling/Surface treatment

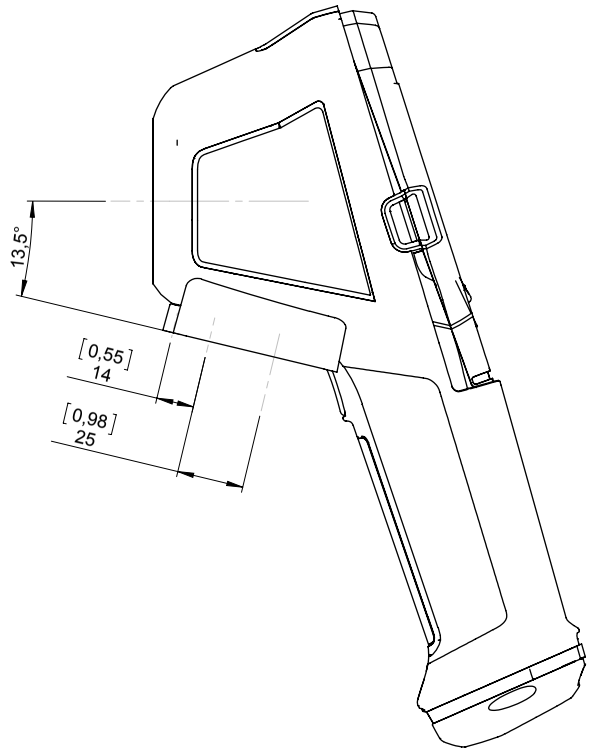
Där ej annat anges/Unless otherwise stated
Gen tol ISO 2768-mK
Utdrag ur/Excerpt from ISO 2768-m

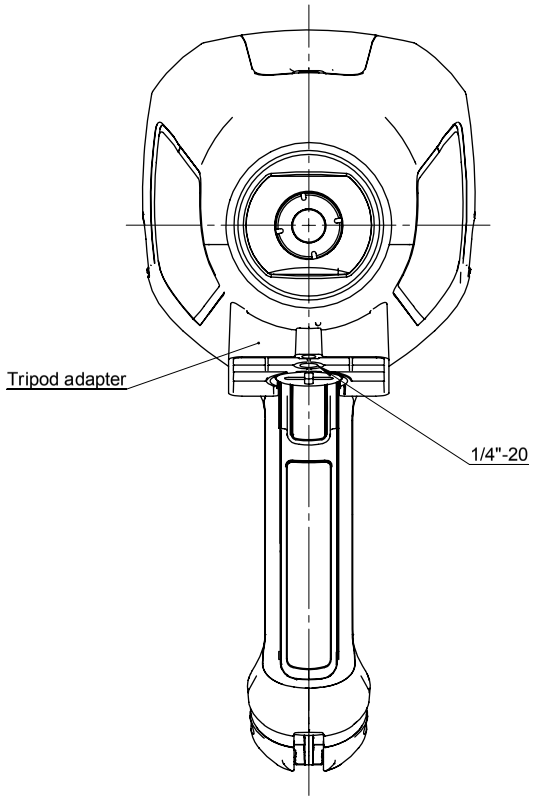
0,5-6	±0,1	Hålkälsradier
(6)-30	±0,2	Fillet radii
(30)-120	±0,3	
(120)-400	±0,5	Kanter brutna
(400)-1000	±0,8	Edges broken

Benämning/Denomination

Basic dimension drawing

Skala/Scale: 1:2	Blad/Sheet: 1(2)
ArtNo.	Size: A3
Ritn nr/Drawing No: T127798	Rev





Konstr/Drawn: P. MARCUS	Datum/Date: 2013-01-23	Kontr/Check:	Material: -
Ändrad av/Modified by: P. MARCUS	Ändrad/Modified: 2013-01-23	Ytjämnhet/Roughness: Ra µm	Ytbehandling/Surface treatment

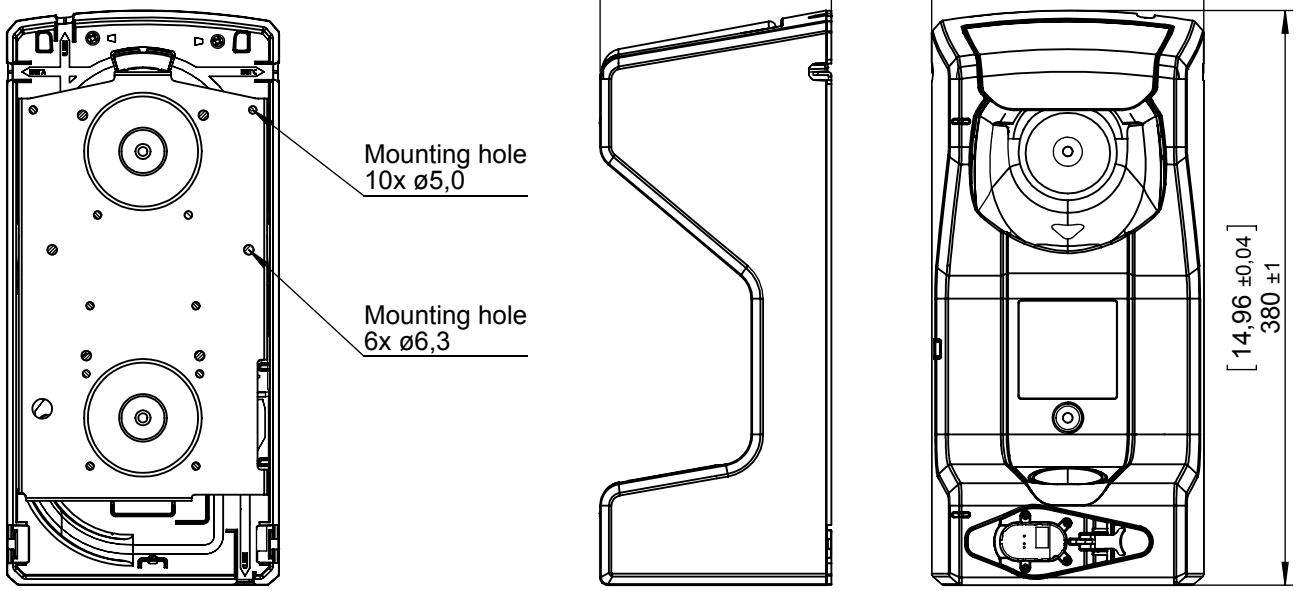
Där ej annat anges/Unless otherwise stated
Gen tol ISO 2768-mK
Utdrag ur/Excerpt from ISO 2768-m

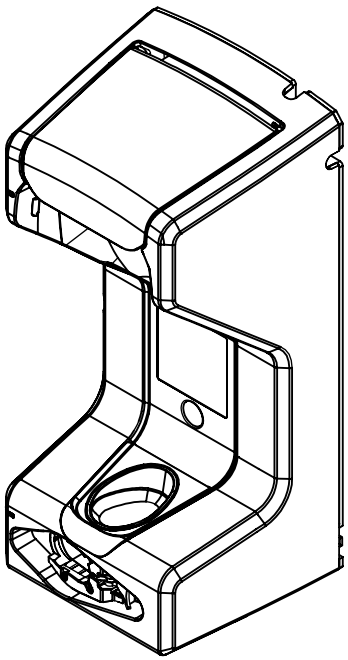
0,5-6	±0,1	Hålkälsradier
(6)-30	±0,2	Fillet radii
(30)-120	±0,3	
(120)-400	±0,5	Kanter brutna
(400)-1000	±0,8	Edges broken

Benämning/Denomination

Basic dimension drawing

Skala/Scale 1:2	Blad/Sheet 2(2)
ArtNo.	Size A3
Ritn nr/Drawing No T127798	Rev





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Konstr/Drawn	Datum/Date	Kontr/Check	Material
P. MARCUS	2013-04-08	MABR	
Ändrad av/Modified by	**Ändrad/Modified**	**Ytjämnhet/Roughness**	**Ytbehandling/Surface treatment**
P. MARCUS	2013-04-08	Ra µm	

Där ej annat anges/Unless otherwise stated
Gen tol ISO 2768-mK
Utdrag ur/Excerpt from ISO 2768-m

0,5-6	±0,1	Hålkälsradier
(6)-30	±0,2	Fillet radii
(30)-120	±0,3	
(120)-400	±0,5	Kanter brutna
(400)-1000	±0,8	Edges broken

Benämning/Denomination

Basic dimensions
In-truck charger

Skala/Scale	Blad/Sheet
1:5	1(1)
Art.No.	Size
	A4
Ritn nr/Drawing No	Rev
T127865	A

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December 08, 2017 Täby, Sweden AQ320212

CE Declaration of Conformity – EU Declaration of Conformity

Product: FLIR KXX series

Name and address of the manufacturer:
FLIR Systems AB
PO Box 7376
SE-187 15 Täby, Sweden

This declaration of conformity is issued under the sole responsibility of the manufacturer.
The object of the declaration: FLIR KXX series
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Directives:

Directive	2014/30/EU	Electromagnetic Compability
Directive	2014/35/EU	Low Voltage Directive (Power Supply)
Directive	2012/19/EU	Waste electrical and electric equipment
Directive	2011/65/EU	RoHS and 2015/830/EU (Phtalates)

Standards:

Emission	EN 61000-6-3:2007+A1:2011	Electromagnetic Compability Generic standards – Emission
Immunity	EN 61000-6-2:2005	Electromagnetic Compability Generic standards – Immunity
Safety (Power Supply)	IEC 60950-1:2005+A1	Information technology equipment - Safety
RoHS	EN 50581:2012	Technical documentation

FLIR Systems AB
Quality Assurance

Lea Dabiri
Quality Manager