

P/N: 72203-0511

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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 K53 is a robust and reliable infrared camera designed to perform under extremely severe conditions. The FLIR K53 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:

- Robust and reliable: The FLIR K53 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 +85°C (+185°F), or +260°C (+500°F) for 5 min.
- 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 K53 can be controlled by just one large button 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
Focus	Fixed

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Detector data	
Detector type	Focal plane array (FPA), uncooled microbolometer
Spectral range	7.5–13 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	TI Basic fire-fighting mode
Measurement	
Object temperature range	<ul style="list-style-type: none"> –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
Isotherm	Yes
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 <div>  NOTE The total number of files is co-dependent on the number of saved video clips. </div>
Image storage mode	IR only
File formats	Standard JPEG
Image annotations	
Report generation	Separate software (FLIR Tools)

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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.
	<div>  NOTE </div> <p>The total number of files is co-dependent on the number of saved images.</p>
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	<ul style="list-style-type: none"> 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
Charging system	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> -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
Relative humidity	95% relative humidity +25°C to +40°C (+77°F to +104°F) non-condensing

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Environmental data	
Directives	Designed to meet NFPA 1801:2013 specification: <ul style="list-style-type: none"> Vibration Impact acceleration resistance Corrosion Viewing surface abrasion Heat resistance Heat and flame Product label durability
EMC	<ul style="list-style-type: none"> 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
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	<ul style="list-style-type: none"> PPSU Silicon rubber Aluminium, cast Flame-resistant magnesium alloy
Shipping information	
List of contents	<ul style="list-style-type: none"> Infrared camera Battery (2 ea.) Battery charger Hard transport case Lanyard strap Neck strap Power supply Printed documentation Retractable lanyard 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	7332558011522
UPC-12	845188012472
Country of origin	Estonia

Supplies & accessories:

- 1910423; USB cable Std A <-> Mini-B
- T198509; Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.



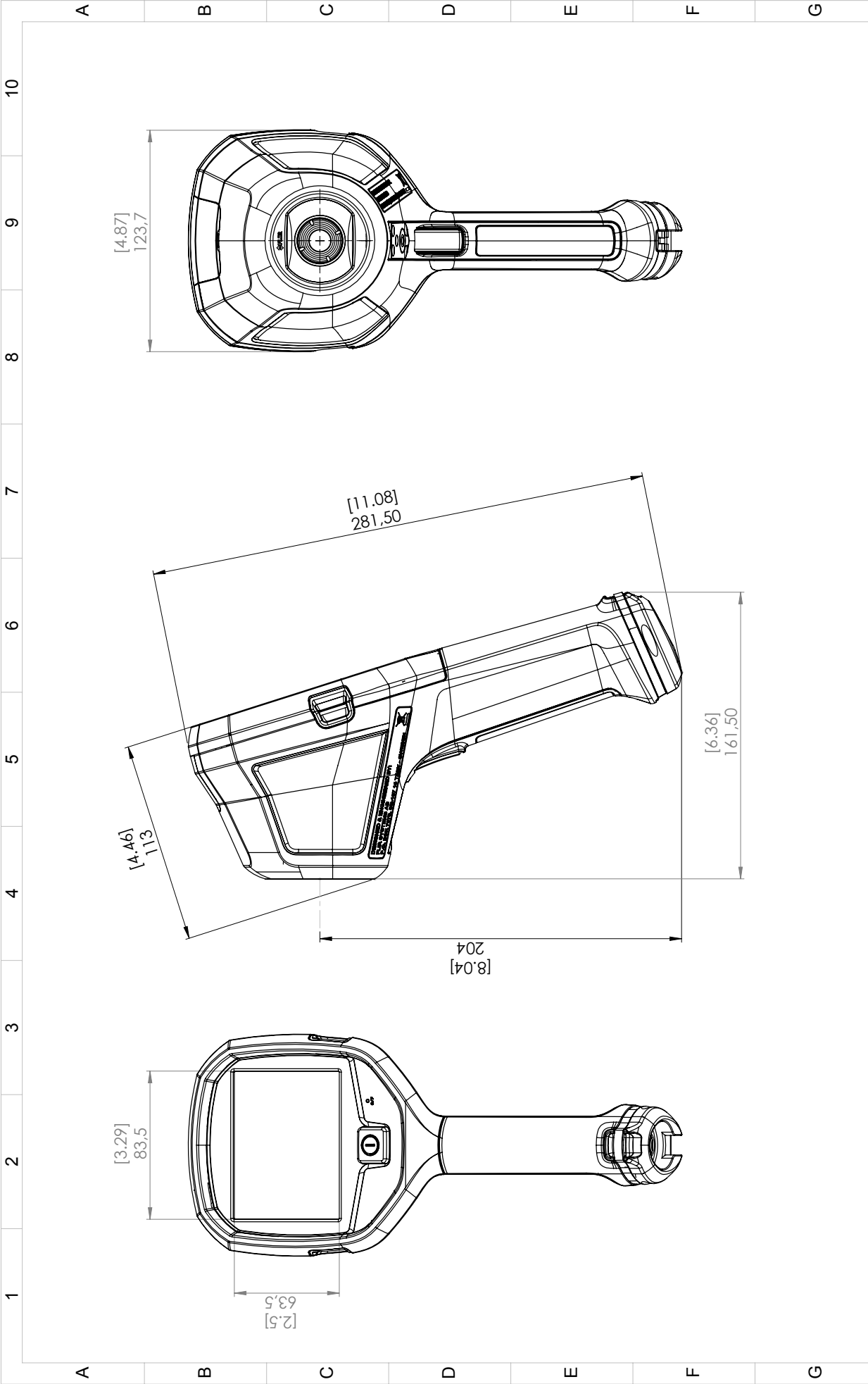
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- T198125; Battery charger, incl. power supply with multi plugs (Exx, Kxx)
- T198310ACC; Li-Ion Battery pack 3.6 V 16 Wh
- T127724ACC; Neck strap
- T127722ACC; Retractable lanyard
- T198416ACC; Lanyard strap
- T198457ACC; Tripod Adapter, Kxx
- T198441ACC; Transport case Kxx
- T198322ACC; In-truck charger
- T199368ACC; Battery Li-ion 3.6 V, 4.4 Ah, 16 Wh

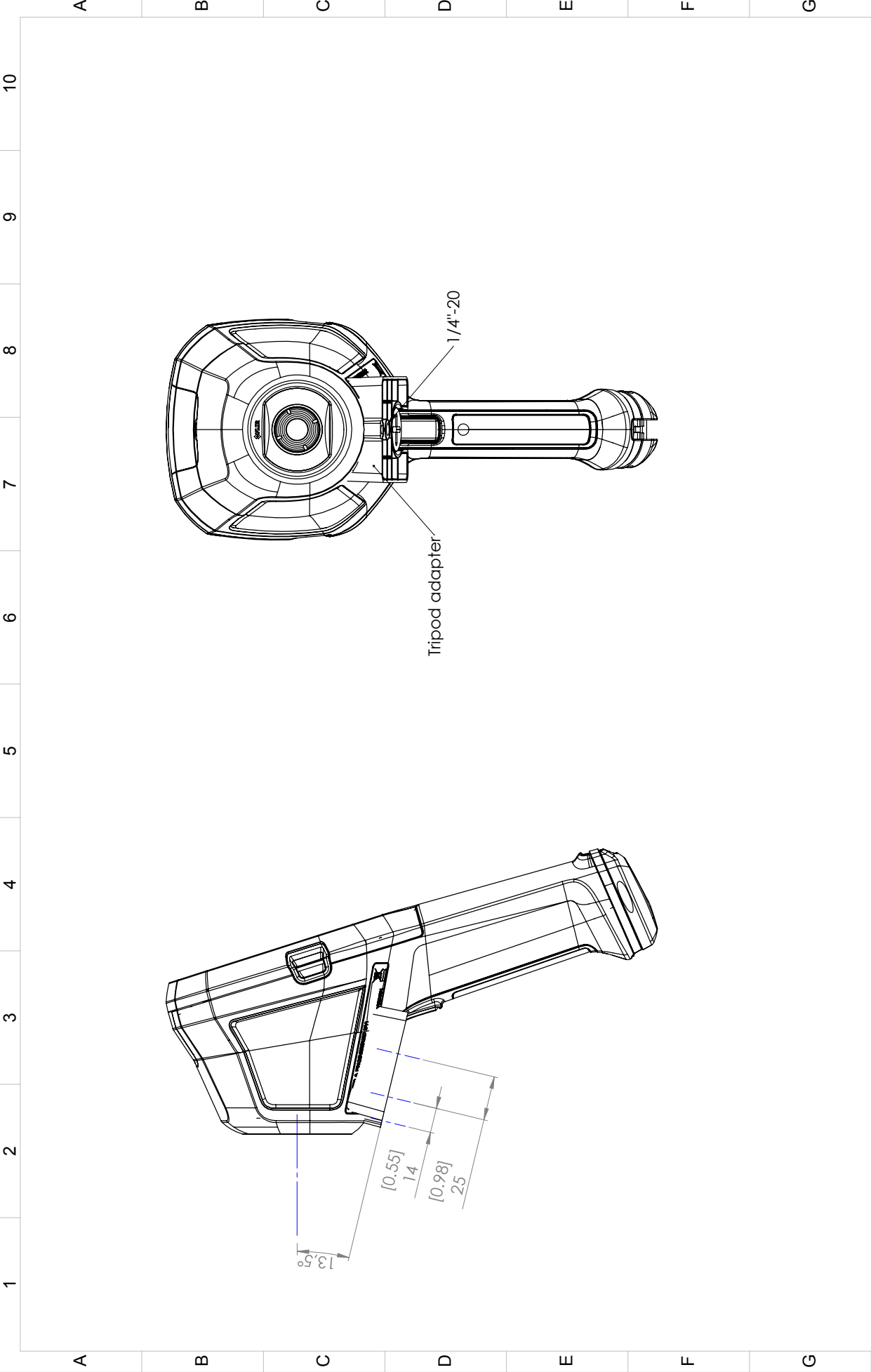


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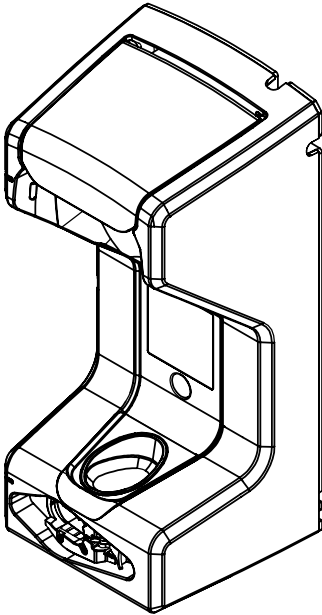
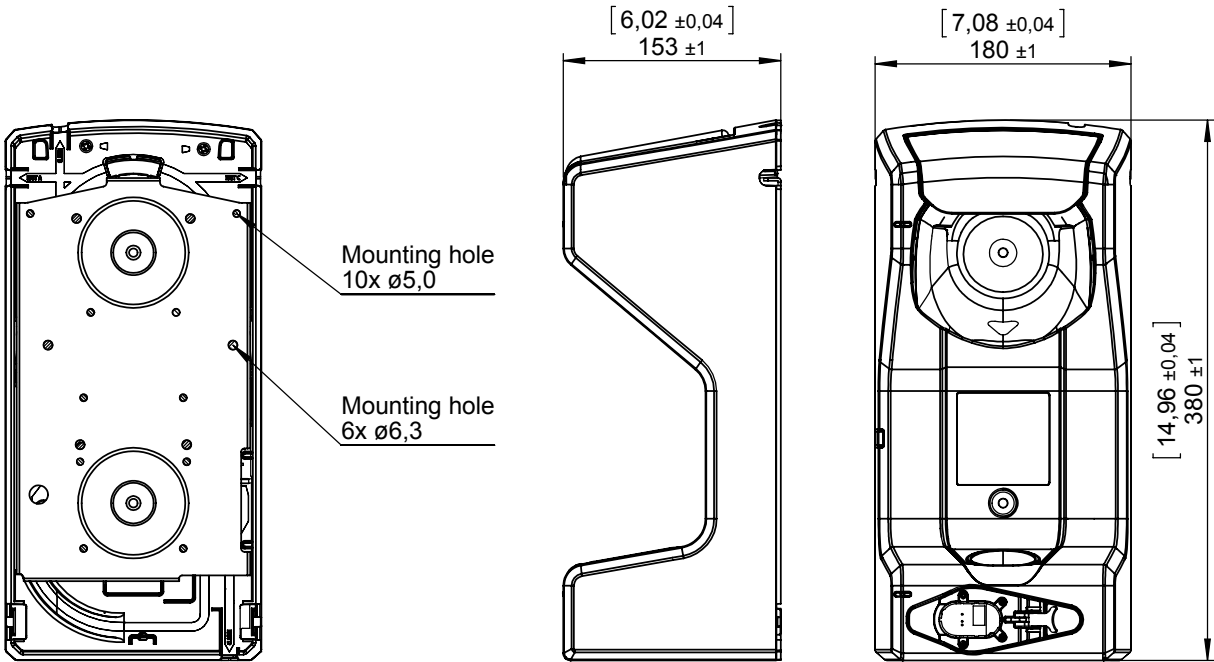
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
Konstruktör/ A. LUND		Datum/Date 2016-03-23	Kontroll/Check	Material		FLIR™	
Ändrad av/Modified by A. LUND		Ändrad/Modified 2016-03-29	Ytfinish/Roughness Ra µm		Ytbehandling/Surface treatment		Blank Sheet Size A3
Där ej annat anges/Unless otherwise stated Gått till ISO 2768-mK Utmått ut/Excerpt from ISO 2768-m		Benämning/Denomination		Sheet Scale 1:2		Blank Sheet Size A3	
0.5-6 80-120 120-400 400-1000				ArtNo.		Rev	
±0.1 ±0.2 ±0.5 ±0.8				Rin nr/Drawing No		Kx3	
Hållisradier Fillet radii Kantströmma Edges broken							

Basic dimension drawing



Konstruktör A. LUND		Datum/Date 2016-03-23	Kontroll/Check -	Material -
Ändrad av/Modified by A. LUND		Ändrad/Modified 2016-03-29	Ytjämnhet/Roughness Ra	Ytbehandling/Surface treatment µm
Ditt ej annat angavs/Unless otherwise stated Gen. tol. ISO 2768-mK Ultragraf ut. Exempt from ISO 2768-m		Benämning/Denomination Basic dimension drawing		
0.55 ±0.1 (30)-120 ±0.3 (120)-400 ±0.5 (400)-1600 ±0.6		Skala/Scale 1:2		
Hållfasthets Fillet cast		Blad/Sheet 2(2)		
Kantbehandling Edges broken		Aritet Kx3		
		Ritning/Sheet No Rev		



Konstr/Drawn P. MARCUS	Datum/Date 2013-04-08	Kontr/Check MABR	Material			
Ändrad av/Modified by P. MARCUS	Ändrad/Modified 2013-04-08	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	Benämning/Denomination Basic dimensions In-truck charger			Skala/Scale 1:5		Blad/Sheet 1(1)
0-5-6 ±0,1 Hålkälsradier				Art.No.		Size A4
(6)-30 ±0,2 Fillet radii						
(30)-120 ±0,3						
(120)-400 ±0,5 Kanter brutna						
(400)-1000 ±0,8 Edges broken				Ritn nr/Drawing No T127865	Rev A	



May 13, 2013

AQ320028

CE Declaration of Conformity

This is to certify that the System listed below have been designed and manufactured to meet the requirements, as applicable, of the following EU-Directives and corresponding harmonising standards. The systems consequently meet the requirements for the CE-mark.

Directives:

Directive 2004/108/EC;	Electromagnetic Compatibility
Directive 2006/95/EC;	"Low voltage Directive" (Power Supply)
Directive 2002/96/EC	Waste electrical and electronic equipment; WEEE (As applicable)

Standards:

Emission:	EN 61000-6-3; Electromagnetic Compatibility Generic standards - Emission
Immunity:	EN 61000-6-2; Electromagnetic Compatibility; Generic standards - Immunity
Safety (Power Supply):	EN 60950; (or other) Safety of information technology equipment

System: **FLIR KXX series**

FLIR Systems AB
Quality Assurance

Björn Svensson
Director