

P/N: 72202-0303

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Document identity

Publ. No.: 72202-0303

Commit: 87195

Language:

Modified: 2022-09-21

Formatted: 2022-10-11

Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

Disclaimer

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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.)

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Imaging and optical data	
Spatial resolution (IFOV)	2.8 mrad
F-number	1.25
Image frequency	60 Hz
Focus	Fixed
Zoom	2x 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 K-series camera configurator
Contrast optimization	Digital image enhancement using FSX
Image presentation modes	
Image modes	- IR image - TI Basic NFPA mode - Black and white firefighting mode - TI Basic PLUS NFPA 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

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Storage of images	
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
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
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.

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Power system	
Start-up time	< 17 s. (IR image, no GUI)
Battery documents	For documents like MSDS and UN38.3 test reports/summaries, see: https://support.flir.com/resources/msds
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
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
Declaration of conformity	See: https://support.flir.com/resources/DoC
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.)

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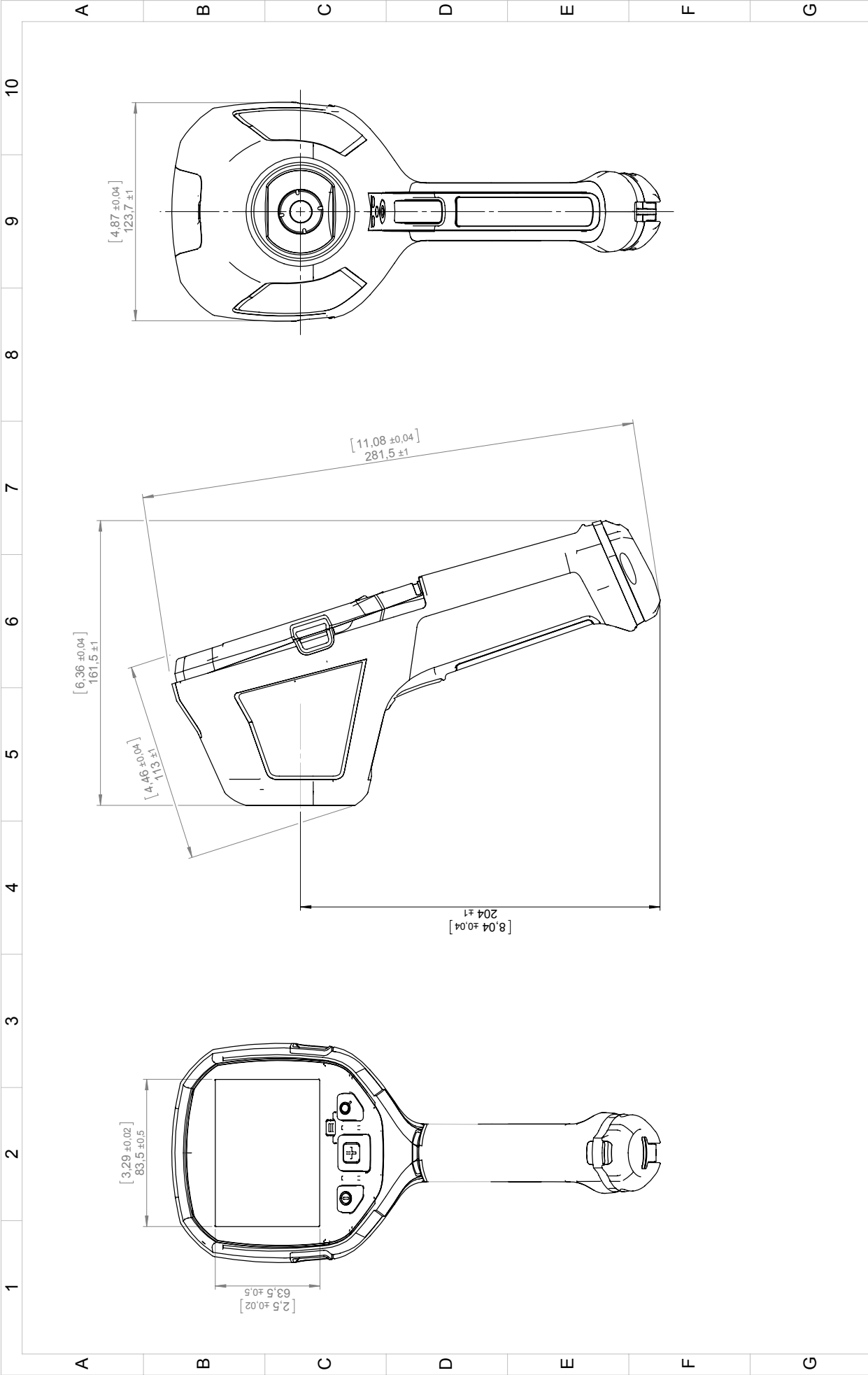
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Physical data	
Tripod mounting	UNC ¼"-20 (adapter needed)
Material	• PPSU • Silicon rubber • Aluminium, cast • Flame-resistant magnesium alloy
Shipping information	
List of contents	• Infrared camera • Battery (2 ea.) • Battery charger • Carabiner 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

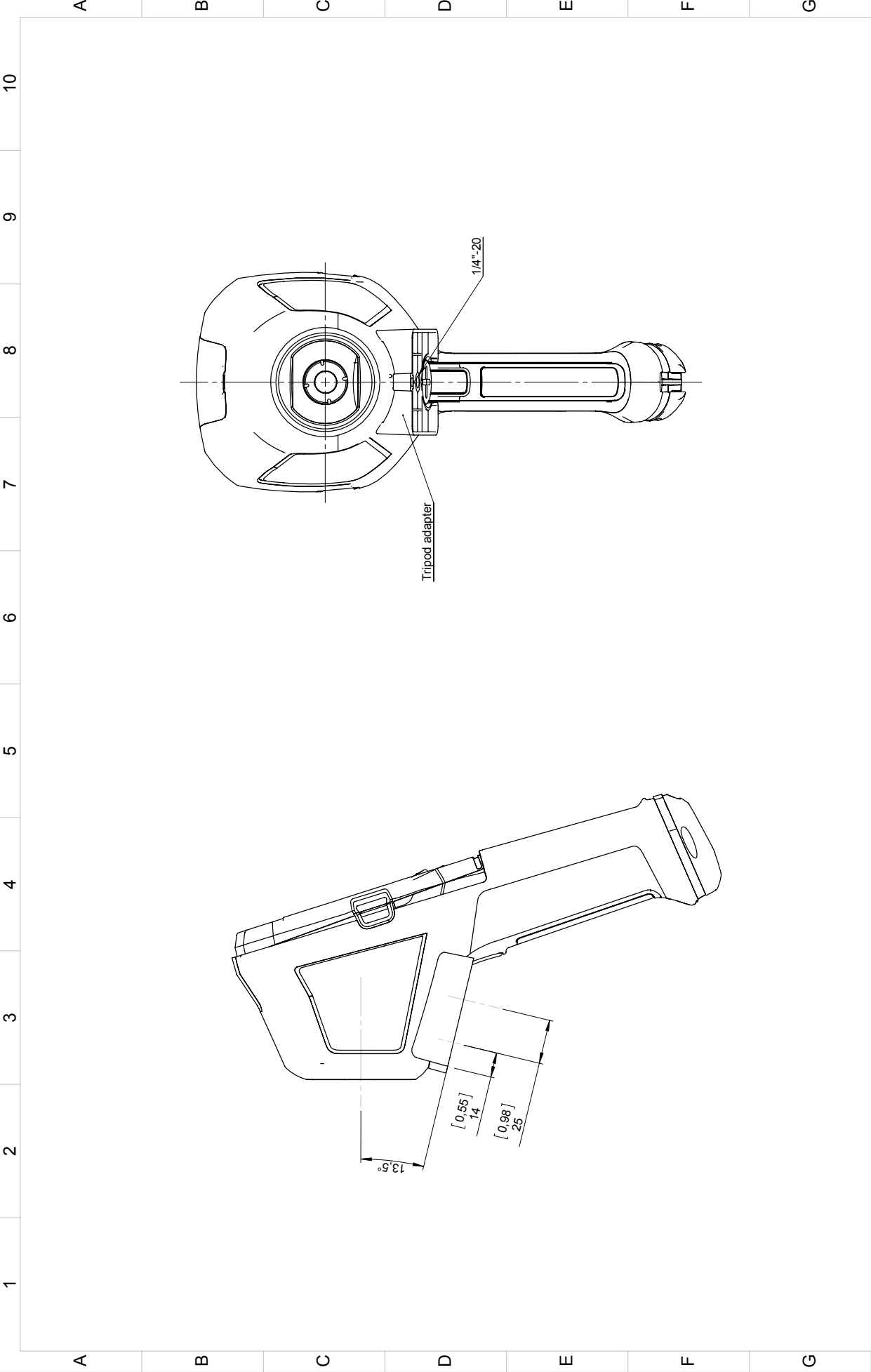
Supplies & accessories:

- 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)

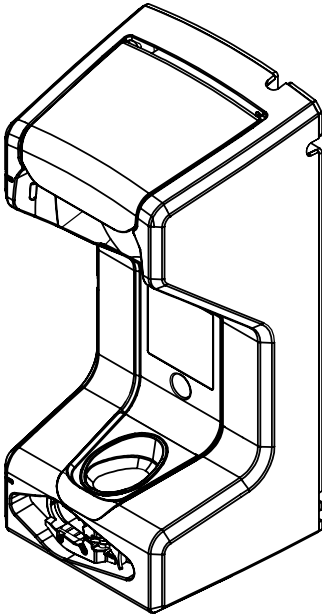
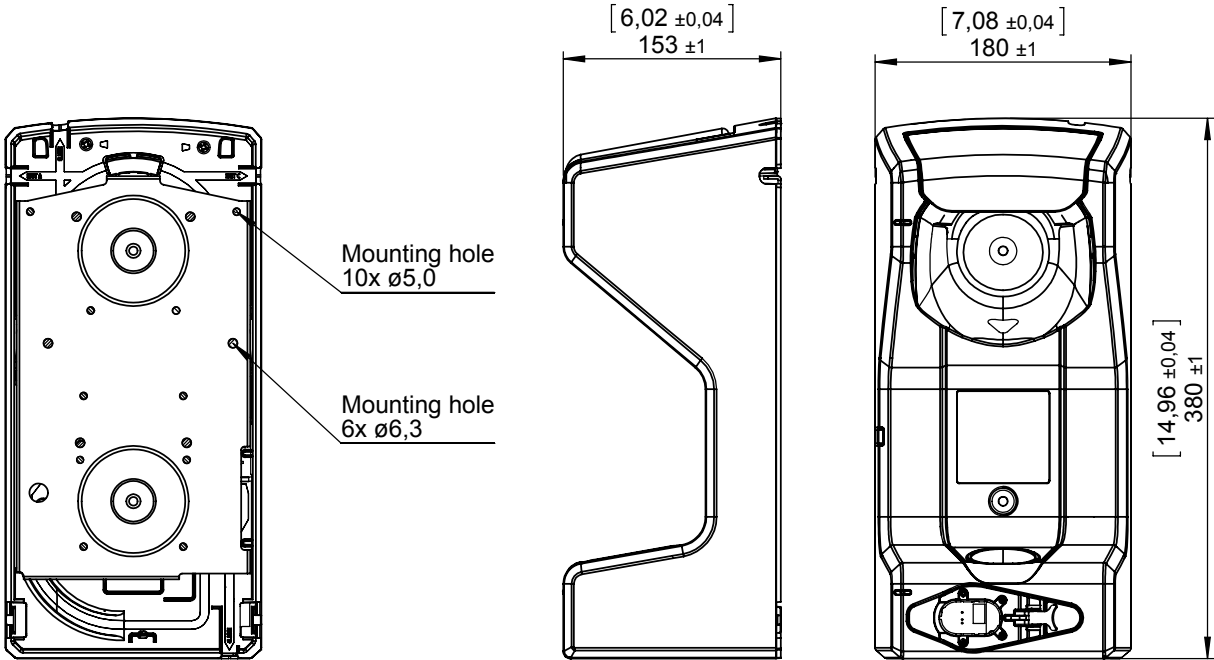


Konst/Drawn P. MARCUS		Datum/Date 2013-01-23		Kontroll/Check -		Material -		FLIR®	
Ändrad av/Modified by P. MARCUS		Ändrad/Modified 2013-01-23		Ytjämnhet/Roughness Ra		Ytbehandling/Surface treatment		Sheet/Sheet 1(2)	
Där ej annat anges/Unless otherwise stated		Benämning/Denomination		Skala/Scale 1:2		ArtNo.		Size A3	
Genl ISO 2768-mK		Utmått ut/Excerpt from ISO 2768-m		Hållisarader ±0.1		Hållisarader ±0.1		Ritm nr/Drawing No T127798	
0.5-6		80-120		30-120		120-400		Rev	
±0.2		±0.5		±0.5		Kantlinjerna ±0.8			
(120)-400		(400)-1000		Kantlinjerna ±0.8		Edges broken			

Basic dimension drawing



Konstr/Drawn P. MARCUS		Datum/Date 2013-01-23	Kontroll/Check -	Material -
Ändrad av/Modified by P. MARCUS		Ändrad/Modified 2013-01-23	Ytjämnhet/Roughness Ra	Ytbehandling/Surface treatment
Där ej annat anges/Unless otherwise stated Gen tor ISO 2768-mK Utmätar ut/Except from ISO 2768-m		Benämning/Denomination Basic dimension drawing		
0,55 ±0,1 (30)-120 Hållfärdig Färdig Kontroll ±0,5 (120)-400 Kontroll ±0,5 (400)-1600 Edges broken		Skala/Scale 1:2		
		Blad/Sheet 2(2)		
		Size A3		
		Ritning No T127798		
		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
0-5-6 $\pm 0,1$ Hålkälsradier (6)-30 $\pm 0,2$ Fillet radii (30)-120 $\pm 0,3$ (120)-400 $\pm 0,5$ Kanter brutna (400)-1000 $\pm 0,8$ Edges broken				Blad/Sheet 1(1)
			Ritn nr/Drawing No T127865	Size A4
				Rev A