

P/N: 72203-0511

Copyright

© 2021, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

Document identity

Publ. No.: 72203-0511

Commit: 72960

Language:

Modified: 2021-01-11

Formatted: 2021-01-11

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:	
<ul style="list-style-type: none"> • 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

Detector data	
Detector type	Focal plane array (FPA), uncooled microbolometer
Spectral range	7.5–13 μm
Pitch	25 μm

P/N: 72203-0511

© 2021, FLIR Systems, Inc.

#72203-0511; r. 72960;

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	T1 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 style="border: 1px solid black; padding: 5px; margin-top: 5px;">  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)
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 style="border: 1px solid black; padding: 5px; margin-top: 5px;">  NOTE The total number of files is co-dependent on the number of saved images. </div>
Video streaming	
Non-radiometric IR video streaming	Uncompressed colorized video using USB
USB	
USB	USB Mini-B
Compatibility	
Compatible with FLIR software	FLIR Tools

P/N: 72203-0511

© 2021, FLIR Systems, Inc.

#72203-0511; r. 72960;

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
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



FLIR K53

P/N: 72203-0511

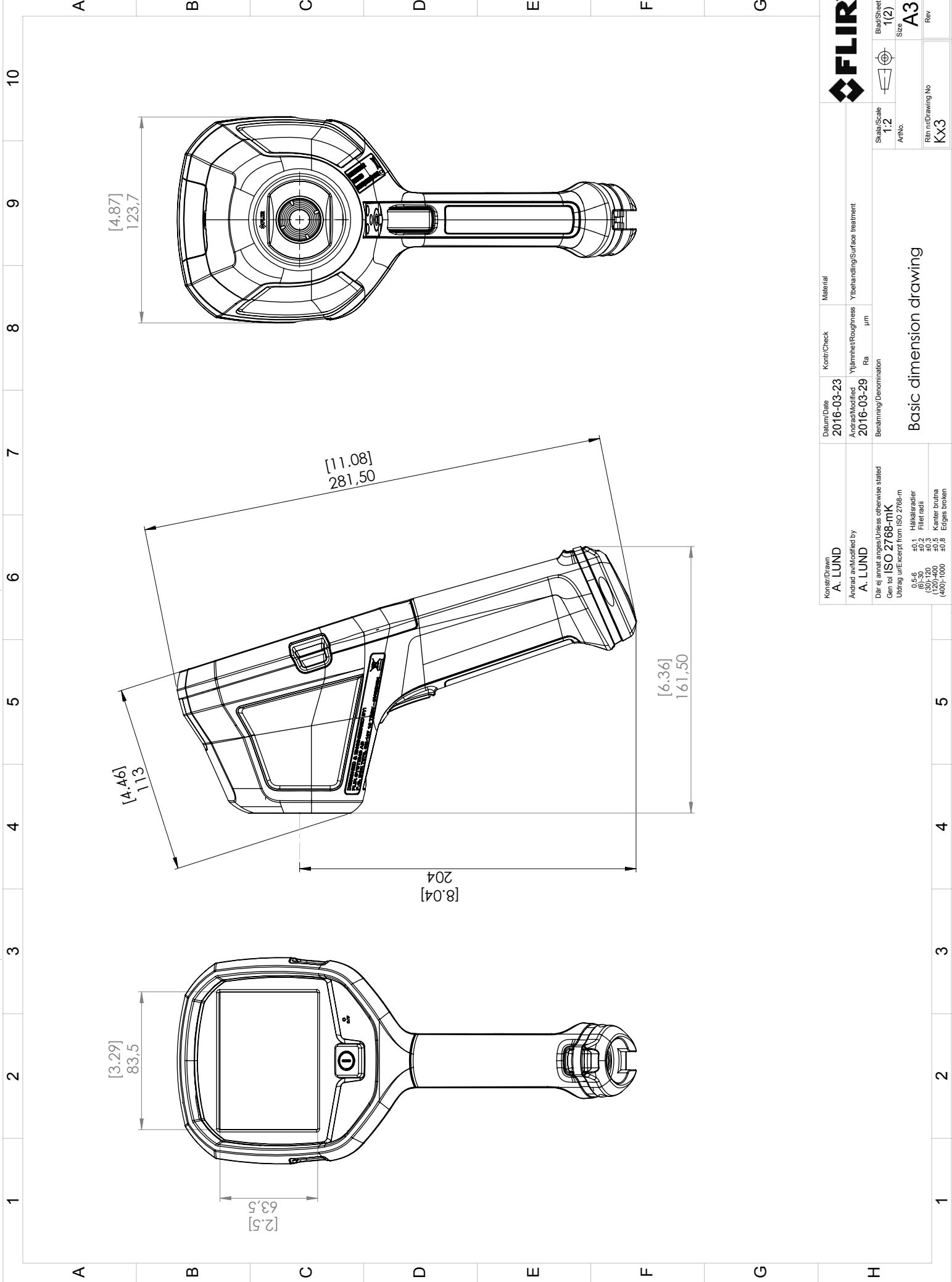
© 2021, FLIR Systems, Inc.

#72203-0511; r. 72960;

Shipping information	
List of contents	<ul style="list-style-type: none">• Infrared camera• Battery (2 ea.)• Battery charger• Carabiner strap• Hard transport case• Power supply• Printed documentation• Retractable lanyard, 16 N (58 oz)• 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.
- 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
- T198322ACC; In-truck charger
- 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



FLIR

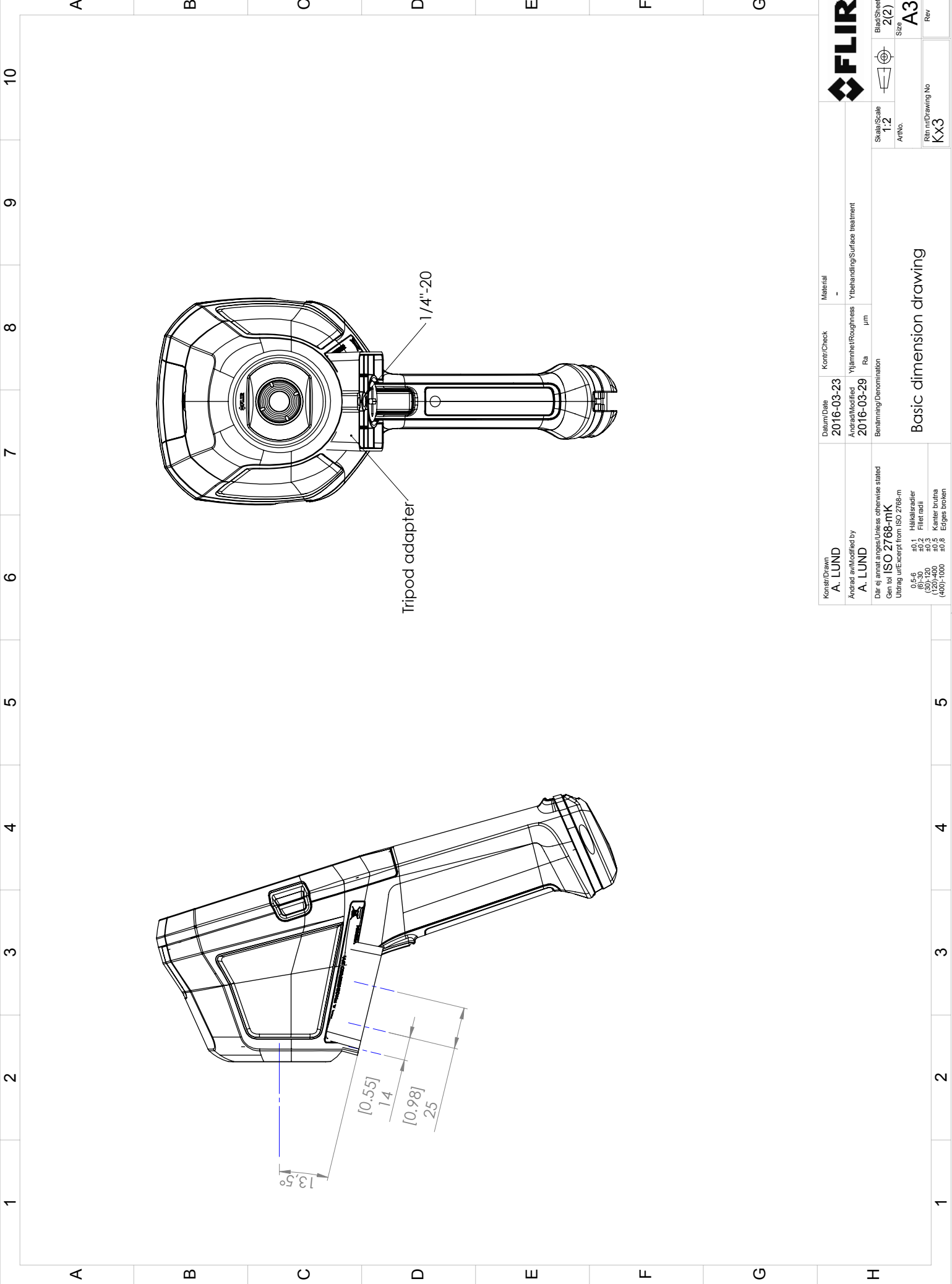
BlackSheet
Size
A3

Scale
1:2

Rev
KX3

Konstr/Drawn A. LUND	Datum/Date 2016-03-23	Kontri/Check	Material
Ändrad av/Modified by A. LUND	Ändrad/Modified 2016-03-29	Ytjämnhet/Roughness Ra	Ytbehandling/Surface treatment
Benämning/Denomination			
Där ej annat anges, Likaså, uteslutningsvis ställt Gen tol ISO 2768-mK Utdrag ur: except from ISO 2768-m 0-5-6 ±0.1 Höjlsradier (6)-30 ±0.2 Fillet radii (120)-400 ±0.5 Kanter brutna (400)-1000 ±0.8 Edges broken			

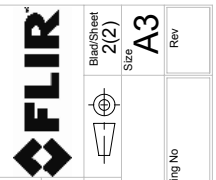
Basic dimension drawing

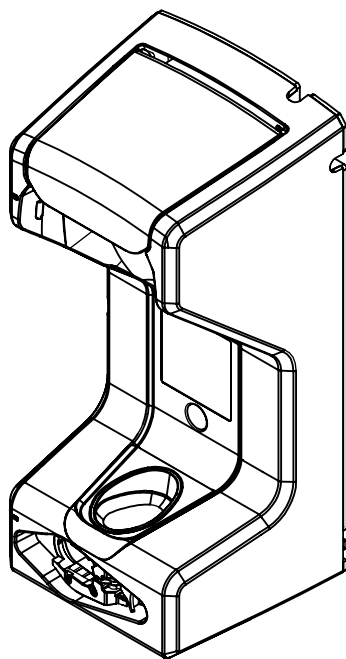
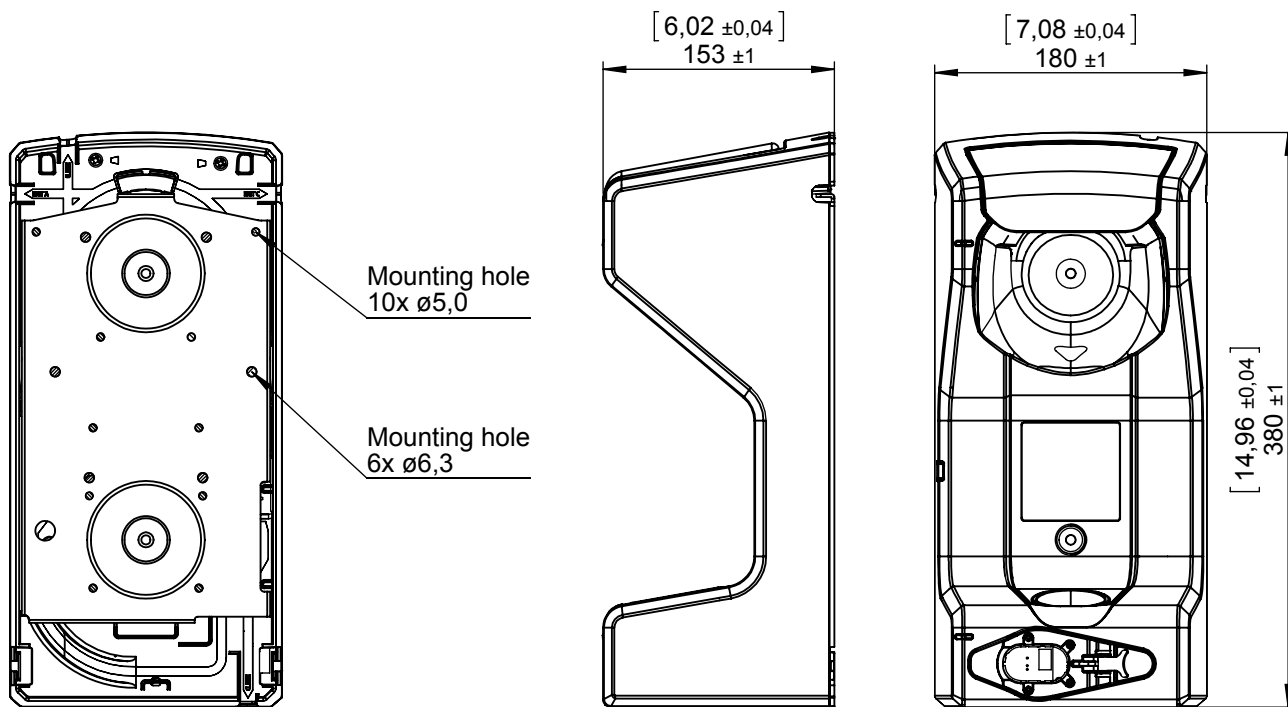


This document must not be communicated or copied completely or in part, without our permission. FLIR SYSTEMS AB

Den här handling får ej delges annan, kopieras i sin helhet eller delar utan vårt medgivande. Övertävlade härrav beivras med stöd av gällande lag. FLIR SYSTEMS AB

Konstr/Drawn A. LUND		Datum/Date 2016-03-23	Kontr/Check -	Material -
Ändrad av/Modified by A. LUND		Ändrad/Modified 2016-03-29	Ytjämnhet/Roughness Ra	Ytbehandling/Surface treatment µm
Där ej annat anges/Unless otherwise stated Utdrag ur/Excerpt from ISO 2768-m		Scale/Scale 1:2		
0.5-6 60-30 (120)-400 (400)-1000		Höjlsradier Fillets radii Kantler brutna Edges broken		
		Blad/Sheet 2(2) SFS		
		A3 Rev		
		Rin nr/Drawing No KX3		
Basic dimension drawing				





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 $\pm 0,1$ 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			Art.No.	Size A4
			Ritn nr/Drawing No T127865	Rev A



The World's Sixth Sense™

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 Compatibility
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 Compatibility Generic standards – Emission
Immunity	EN 61000-6-2:2005	Electromagnetic Compatibility 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