Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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FLIR

FLIR E95 24°

P/N: 78502-0301

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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.

Imaging and optical data	
Infrared resolution	464 × 348 pixels
UltraMax (super-resolution)	In FLIR Tools
NETD	• <30 mK, 42° @ +30°C (+86°F) • <40 mK, 24° @ +30°C (+86°F) • <50 mK, 14° @ +30°C (+86°F)
Field of view	• 42° × 32° • 24° × 18° • 14° × 10°
Minimum focus distance	• 0.15 m (0.49 ft.), 42° • 0.15 m (0.49 ft.), 24° • 1.0 m (3.28 ft.), 14°
Minimum focus distance with MSX	• 0.65 m (2.13 ft.), 42° • 0.5 m (1.64 ft.), 24° • 1.0 m (3.28 ft.), 14°
Focal length	• 10 mm (0.39 in.), 42° • 17 mm (0.67 in.), 24° • 29 mm (1.41 in.), 14°
Spatial resolution (IFOV)	• 1.66 mrad/pixel, 42° • 0.90 mrad/pixel, 24° • 0.52 mrad/pixel, 14°
Additional lenses	• 14° • 42°
Lens identification	Automatic
f number	• 1.1, 42° • 1.3, 24° • 1.5, 14°
Image frequency	30 Hz
Focus	• Continuous LDM • One-shot LDM • One-shot contrast • Manual

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Imaging and optical data	
Field of view match	Yes
Digital zoom	1–4× continuous

Detector data	
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm
Detector pitch	17 µm

Image presentation	
Resolution	640 × 480 pixels (VGA)
Surface brightness (cd/m²)	400
Screen size	4 in.
Viewing angle	80°
Color depth (bits)	24
Aspect ratio	4:3
Auto-rotation	Yes
Touchscreen	Optically bonded PCAP
Display technology	IPS
Cover glass material	Dragontrail®
Programmable buttons	1
Viewfinder	No
Image adjustment	• Automatic • Automatic maximum • Automatic minimum • Manual

Image presentation modes	
Infrared image	Yes
Visual image	Yes
Thermal fusion	No
MSX	Yes
Picture in Picture	Resizable and movable
Gallery	Yes

Measurement	
Object temperature range	• −20 to +120°C (−4 to 248°F) • 0–650°C (32–1200°F) • 300–1500°C (572–2732°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 15–35°C (59–95°F) and object temperature above 0°C (32°F)

Measurement analysis	
Spotmeter	3 in live mode
Area	3 in live mode
Automatic hot/cold detection	Auto-maximum/minimum markers within area
Color alarm (isotherm)	• Above • Below • Interval • Condensation • Insulation

Measurement analysis	
Measurement presets	• No measurements • Center spot • Hot spot • Cold spot • User preset 1 • User preset 2
Difference temperature	Yes
Reference temperature	Yes
Emissivity correction	Yes: variable from 0.01 to 1.0 or selected from materials list
Measurement corrections	Yes
External optics/windows correction	Yes
Screening	0.5°C (0.9°F) accuracy @ 37°C (98.6°F) with reference

Alarm	
Moisture alarm	Yes
Insulation alarm	Yes
Measurement alarm	Audible/visual alarms above/below

Set-up	
Color palettes	• Iron • Gray • Rainbow • Arctic • Lava • Rainbow HC
Setup commands	Local adaptation of units, language, date and time formats
Languages	21

Service functions	
Camera software update	Use PC software FLIR Tools

Storage of images	
Storage media	Removable memory; SD card (8 GB)
Time lapse (periodic image storage)	10 seconds to 24 hours (infrared)
Remote control operation	• Using FLIR Tools (using USB cable) • FLIR Tools Mobile (over Wi-Fi)
Image file format	Standard JPEG, measurement data included. Infrared-only mode

Image annotations	
Voice	60 seconds built-in microphone and speaker (and via Bluetooth) on still images and video
Text	Text from predefined list or soft keyboard on touchscreen
Visual image annotation	Yes
Image sketch	Yes: on infrared images only
Sketch	From touchscreen
METERLiNK	Yes, several readings
Compass	Yes
Laser distance meter information	Yes

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Image annotations	
Area measurement information	Yes
GPS	Yes: location data automatically added to every still image and the first frame in video from built-in GPS

Video recording in camera	
Radiometric infrared-video recording	RTRR (.csq)
Non-radiometric infrared-video recording	H.264 to memory card
Visual video recording	H.264 to memory card

Video streaming	
Radiometric infrared–video streaming (compressed)	Yes: over UVC or RTSP (Wi-Fi)
Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture)	• H.264 (AVC) over RTSP (Wi-Fi) • MPEG4 over RTSP (Wi-Fi) • MJPEG over UVC and RTSP (Wi-Fi)
Visual video streaming	Yes

Digital camera	
Resolution	5 MP with LED light
Focus	Fixed
Field of view	53° × 41°
Video lamp	Built-in LED light

Laser pointer	
Laser alignment	Position is automatically displayed on the infrared image
Laser distance meter	Activated by a dedicated button
Laser	Class 2, 0.05–40 m (1.6–131 ft.) ±1% of measured distance

Data communication interfaces	
Interfaces	USB 2.0, Bluetooth, Wi-Fi, DisplayPort
Bluetooth	Communication with headset and external sensors
Wi-Fi	Peer to peer (*ad hoc*) or infrastructure (network)
Audio	Microphone and speaker for voice annotation of images
USB	USB Type-C: data transfer/video/power
USB standard	USB 2.0 High Speed
Video out	DisplayPort
Video connector type	DisplayPort over USB Type-C

Power system	
Battery type	Rechargeable Li-ion battery
Battery voltage	3.6 V
Battery operating time	> 2.5 hours at 25°C (68°F) and typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or two-bay charger
Charging time (using two-bay charger)	2.5 hours to 90% capacity with charging status indicated by LEDs

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Power system	
Charging temperature	0°C to +45°C (+32°F to +113°F), except for the Korean market: +10°C to +45°C (+50°F to +113°F)
External power operation	AC adapter 90–260 V AC, 50/60 Hz, or 12 V from a vehicle (cable with standard plug—optional)
Power management	Automatic shut-down and sleep mode

Environmental data	
Operating temperature range	–15 to +50°C (5–122°F)
Storage temperature range	–40 to +70°C (–40 to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 hours/95% relative humidity 25–40°C (77–104°F)/two cycles
EMC	• ETSI EN 301 489-1 (radio) • ETSI EN 301 489-17 • EN 61000-6-2 (immunity) • EN 61000-6-3 (emission) • FCC 47 CFR Part 15 Class B (emission)
Radio spectrum	• ETSI EN 300 328 • FCC Part 15.249 • RSS-247
Encapsulation	IP 54 (IEC 60529)
Shock	25g (IEC 60068-2-27)
Vibration	2g (IEC 60068-2-6)
Drop	Designed for 2 m (6.6 ft.)
Safety	EN/UL/CSA/PSE 60950-1

Physical data	
Weight (including battery)	1 kg (2.2 lb.)
Size (L × W × H)	278.4 × 116.1 × 113.1 mm (11.0 × 4.6 × 4.4 in.)
Battery weight	140 g (4.9 oz.)
Battery size (L × W × H)	150 × 46 × 55 mm (5.9 × 1.8 × 2.2 in.)
Tripod mounting	UNC ¼″-20
Housing material	PCABS with TPE, magnesium
Color	Black

Warranty and service	
Warranty	http://www.flir.com/warranty/

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P/N: 78502-0301
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#78502-0301; r. /43309;

Shipping information	
Packaging, type	Cardboard box

Packaging, contents	• Accessory Box I:
	  ◦ Power supply for battery charger
	  ◦ Power supply, 15 W/3 A
	  ◦ Printed documentation
	  ◦ SD card (8 GB)
	  ◦ USB 2.0 A to USB Type-C cable, 1.0 m
	  ◦ USB Type-C to HDMI adapter, standard specification UH311
	  ◦ USB Type-C to USB Type-C cable (USB 2.0 standard), 1.0 m
	• Accessory box II:
	  ◦ Accessory box III:
	    – Front protection fastener
	    – Hand strap bracket, left
	    – Hand strap bracket, right
	    – Lens cap strap
	    – Screws
	    – Torx T10 wrench
	  ◦ Front protection
	  ◦ Hand strap
	  ◦ Lanyard strap, battery charger
	  ◦ Lanyard strap, camera
	  ◦ Lens cleaning cloth
	  ◦ Wrist strap
	• Battery (2 ea)
	• Battery charger
	• Hard transport case
	• Infrared camera with lens
	• Lens cap, front
	• Lens cap, front and rear (only for extra lenses)

Packaging, weight	
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)
EAN-13	4743254002692
UPC-12	845188013929
Country of origin	Estonia

Supplies & accessories:

- T199425ACC; Battery charger
- T911705ACC; USB Type-C to USB Type-C cable (USB 2.0 standard), 1.0 m
- T911632ACC; USB Type-C to HDMI adapter, standard specification UH311
- T911631ACC; USB 2.0 A to USB Type-C cable, 0.9 m
- T911630ACC; Power supply for camera, 15 W/3 A
- T199346ACC; Hard transport case
- T911633ACC; Power supply for battery charger
- T199330ACC; Battery
- T199557ACC; Accessory Box II
- T198583; FLIR Tools+ (download card incl. license key)

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[2,29in]
58,18mm

[3,27in]
82,96mm

[10,96in]
278,39mm

[6,46in]
164,2mm

[4,57in]
116,08mm

[7,64in]
193,99mm

[1,9in]
48,3mm

[0,91in]
23,23mm

[0,4in]
10,25mm

[1,92in]
48,81mm

[4,45in]
113,07mm

[0,42in]
10,55mm

[0,4in]
10,25mm

[0,87in]
22mm

[1,95in]
49,5mm

[10,71in]
271,96mm
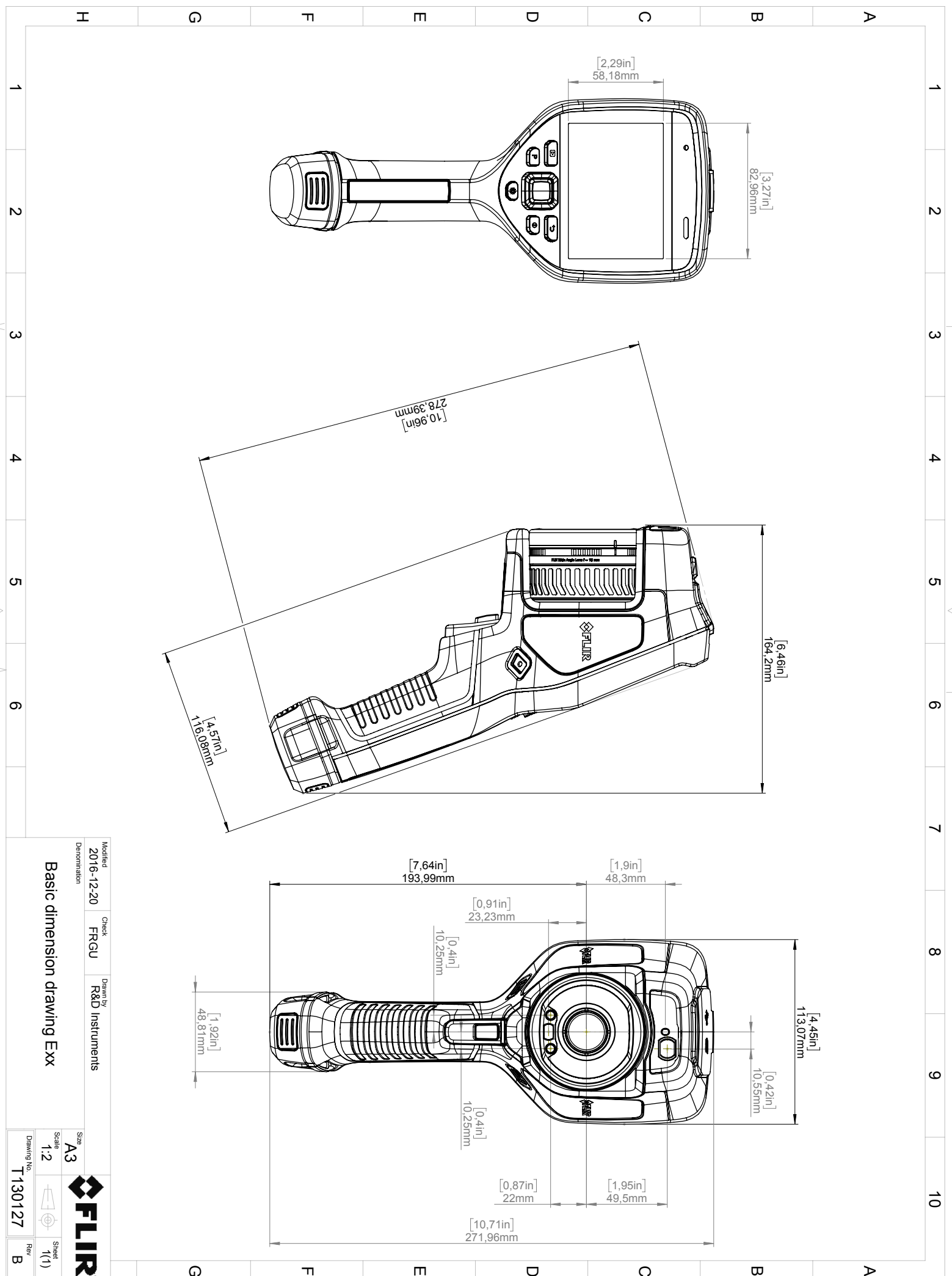
Modified
2016-12-20

Denomination
Basic dimension drawing Exx

Check
FRGU

Drawn by
R&D Instruments

Size
A3

Scale
1:2

Drawing No.
T130127

Sheet
1(1)

Rev
B

FLIR

FLIR Wide Angle Lens f = 10 mm

FLIR | The World's Sixth Sense™

February 24, 2017   Täby, Sweden   AQ320222

CE Declaration of Conformity – EU Declaration of Conformity

Product: FLIR E75 / E85 / 95 -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 E75 / E85 / 95 -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	1999/5/EC	Radio and Telecommunications Terminal Equipment

Standards:

Emission:	EN 61000-6-3/A1:2011	Electromagnetic Compability Generic standards – Emission
Immunity:	EN 61000-6-2:2005	Electromagnetic Compability
	Draft EN 301489-1:2016 v2.1.0	Generic standards – Immunity
	EN 301489-17:2012 v2.2.1	
Laser:	EN 60825-1	Safety of laser products
Radio:	ETSI EN 300 328	Harmonized EN covering essential requirements of the R&TTE Directive
Safety (Battery charger):		Information technology equipment

IEC 60950-1:2005+A1 EN 60950-
1:2006+A11:2009+A1:2010+A2:2013+AC:2011+A12:2011

FLIR Systems AB
Quality Assurance

Lea Dabiri
Quality Manager