

Technical Data

FLIR E40

Part number:**49001-2201****Copyright**

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October 11, 2013, 02:50 AM**Corporate Headquarters**

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Specifications subject to change without further notice.
Camera models and accessories subject to regional market considerations. License procedures may apply.

Information and equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited.

**Imaging and optical data**

IR resolution	160 × 120 pixels
Thermal sensitivity/NETD	< 0.07°C @ +30°C (+86°F) / 70 mK
Field of view (FOV) / Minimum focus distance	25° × 19° / 0.4 m (1.31 ft.)
Spatial resolution (IFOV)	2.72 mrad
Image frequency	60 Hz
Focus	Manual
Zoom	2x digital zoom, including panning
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm

Image presentation

Display	Touch screen, 3.5 in. LCD, 320 × 240 pixels
Image modes	IR image, visual image, picture in picture, thumbnail gallery
Picture in Picture	IR area on visual image

Measurement

Object temperature range	-20°C to +120°C (-4°F to +248°F) 0°C to +650°C (+32°F to +1202°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F)

Measurement analysis

Spotmeter	3
Area	3 boxes with max./min./average
Automatic hot/cold detection	Auto hot or cold spotmeter markers within area
Isotherm	Detect high/low temperature/interval
Difference temperature	Delta temperature between measurement functions or reference temperature
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
External optics/windows correction	Automatic, based on inputs of optics/window transmission and temperature
Measurement corrections	Reflected temperature, optics transmission and atmospheric transmission



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Set-up

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

Storage of images

Image storage	Standard JPEG, including measurement data, on memory card
Image storage mode	IR/visual images; simultaneous storage of IR and visual images

Image annotations

Text	Text from predefined list or soft keyboard on touch screen
Report generation	<ul style="list-style-type: none">Separate PC software with extensive report generation

Video recording in camera

Non-radiometric IR-video recording	MPEG-4 to memory card
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Video streaming

Radiometric IR-video streaming	Full dynamic to PC using USB
Non-radiometric IR-video streaming	Uncompressed colorized video using USB

Digital camera

Built-in digital camera	3.1 Mpixel (2048 × 1536 pixels), and one LED light
Built-in digital lens data	FOV 53° × 41°

Laser pointer

Laser	Activated by dedicated button
Laser alignment	Position is automatic displayed on the IR image

Data communication interfaces

Interfaces	USB-mini, USB-A, composite video
USB	<ul style="list-style-type: none">USB-A: Connect external USB deviceUSB Mini-B: Data transfer to and from PC / Uncompressed colorized video
Video out	Composite

Power system

Battery	Li Ion, 4 hours operating time
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging temperature	0°C to +45°C (+32°F to +113°F)
Power management	Automatic shutdown and sleep mode (user selectable)

Environmental data

Operating temperature range	-15°C to +50°C (+5°F to +122°F)
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
EMC	<ul style="list-style-type: none">EN 61000-6-2 (Immunity)EN 61000-6-3 (Emission)FCC 47 CFR Part 15 B (Emission)
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)



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Environmental data

Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.)
Safety	EN/UL/CSA/PSE 60950-1

Physical data

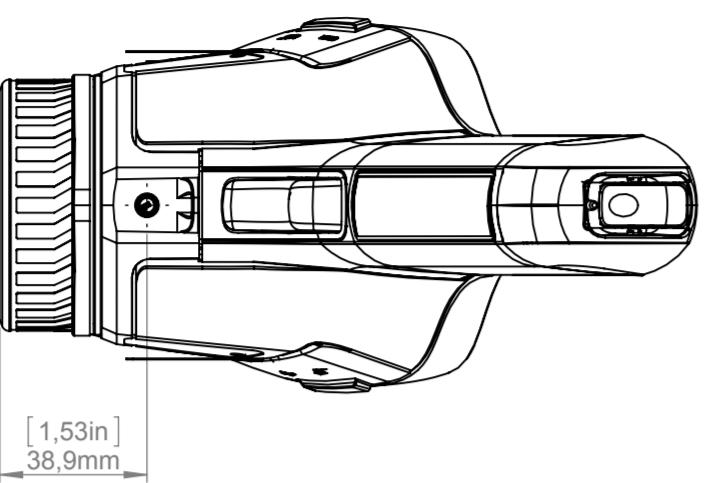
Camera weight, incl. battery	0.865 kg (1.91 lb.)
Camera size (L × W × H)	246 × 97 × 184 mm (9.7 × 3.8 × 7.2 in.)
Tripod mounting	UNC 1/4"-20 (adapter needed)

Shipping information

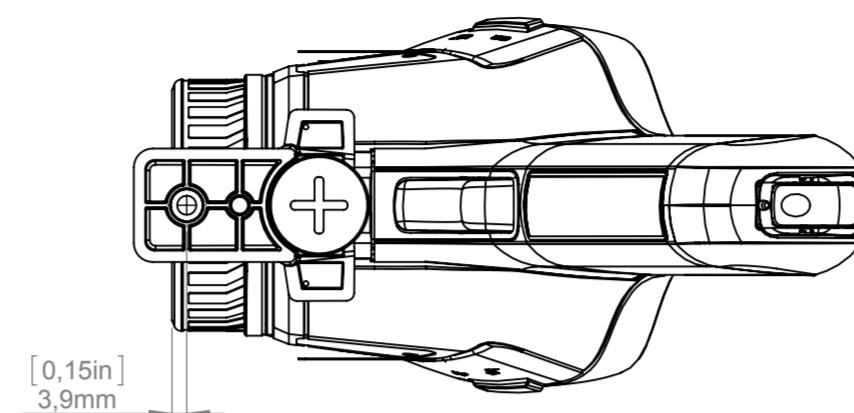
- Hard transport case
- Infrared camera with lens
- Battery
- Calibration certificate
- Camera lens cap
- Downloads brochure
- FLIR Tools software
- Handstrap
- Memory card
- Power supply, incl. multi-plugs
- Printed Getting Started Guide
- Printed Important Information Guide
- Service & training brochure
- USB cable
- User documentation CD-ROM
- Video cable
- Warranty extension card

Camera with built-in IR lens f=18 mm (25°)

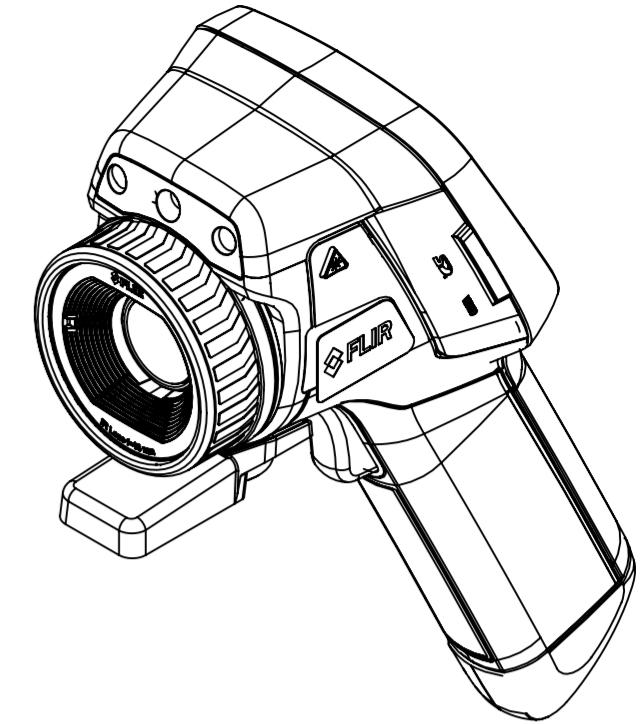
A



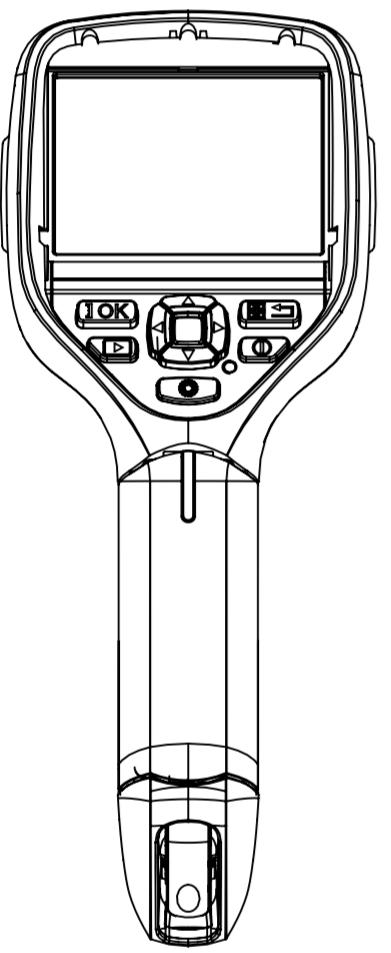
[1,53in]
38,9mm



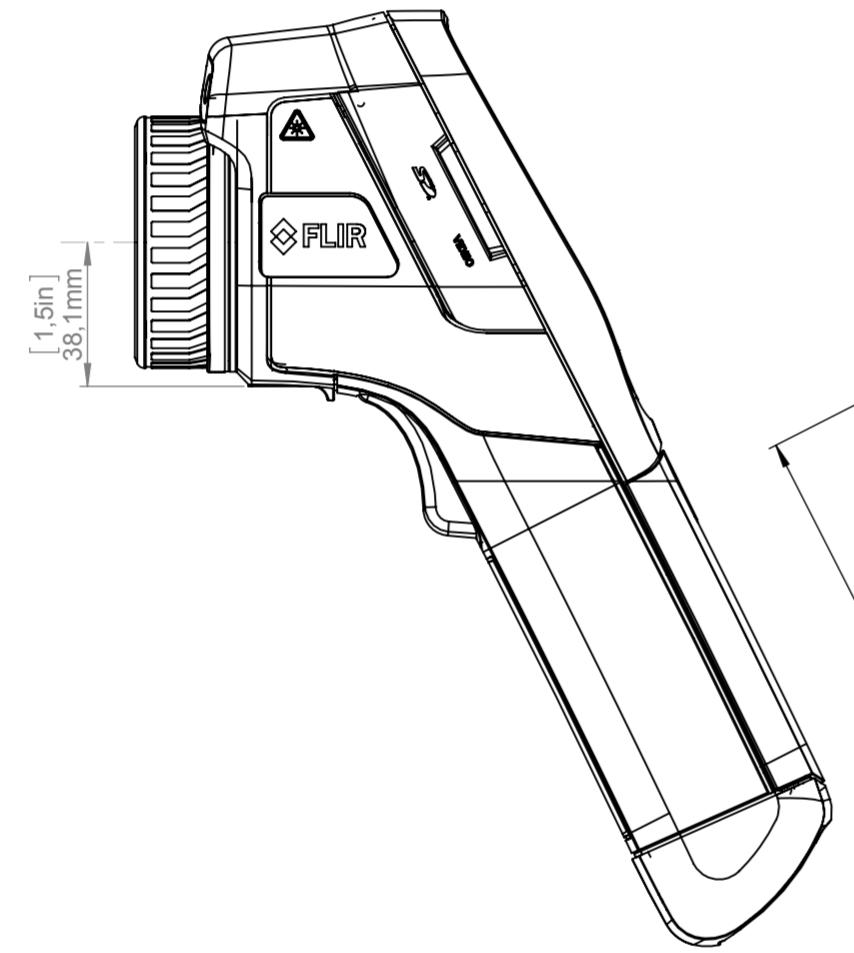
[0,15in]
3,9mm



B



[1,5in]
38,1mm



Optical axis

[2,41in]
61,1mm

[2,62in]
66,5mm

[0,68in]
17,2mm

UNC 1/4"-20

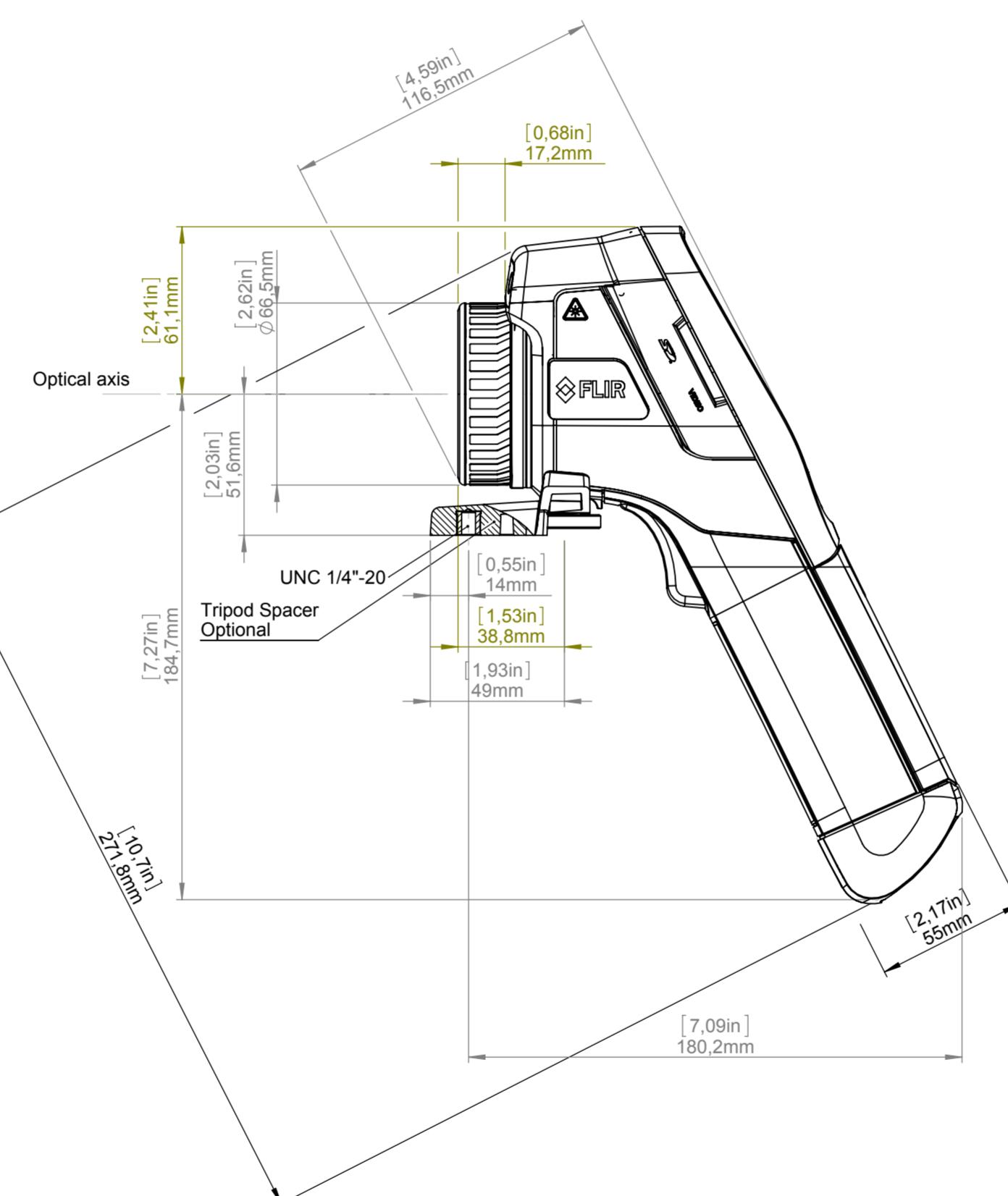
Tripod Spacer
Optional

[7,27in]
184,7mm

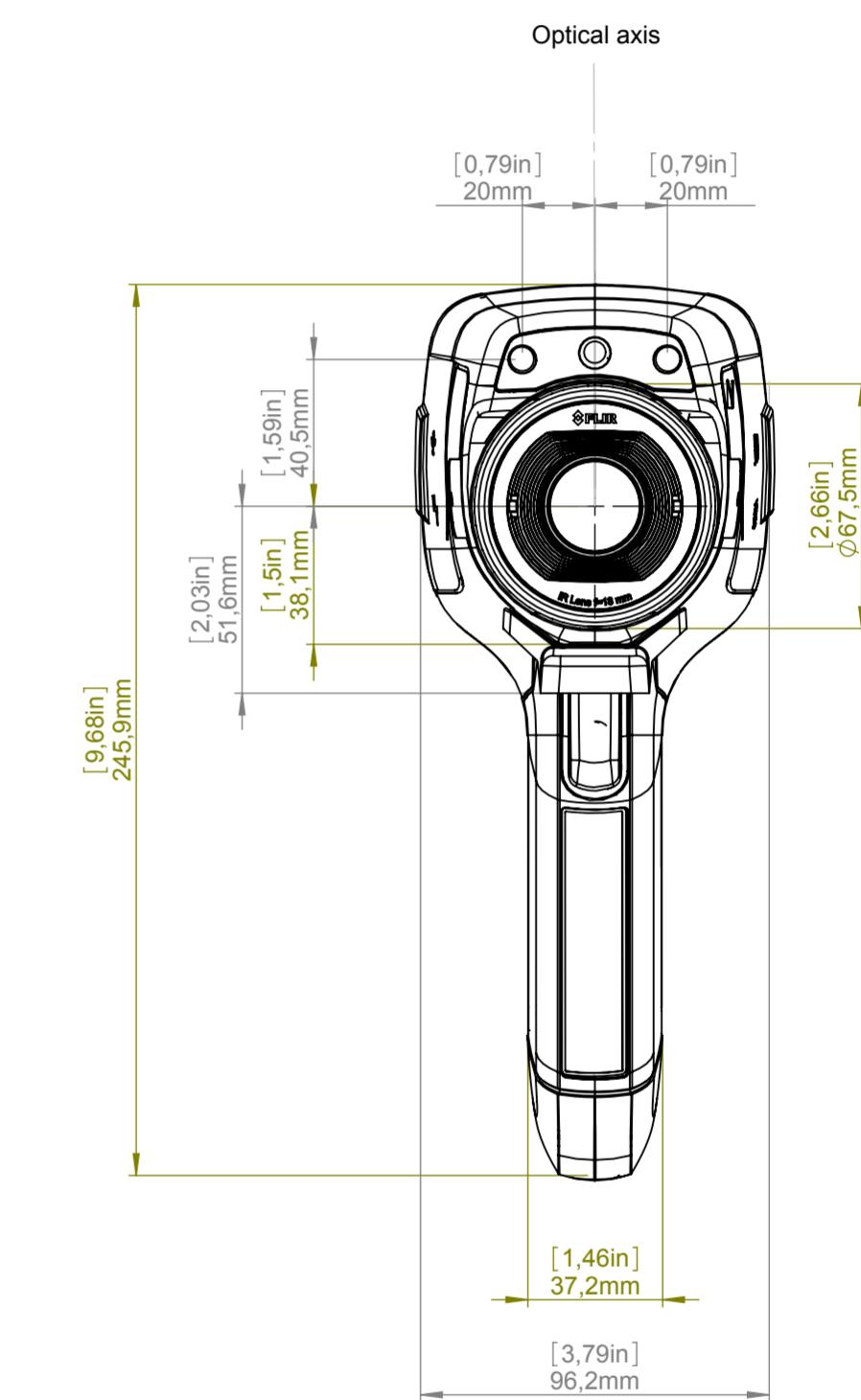
[1,01in]
25,7mm

[2,19in]
55mm

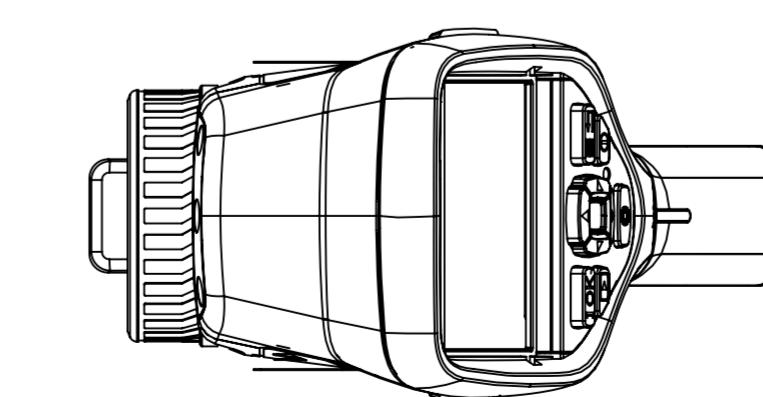
[7,09in]
180,2mm



C



D



E

G

H

Modified 2012-04-18	Check CAHA	Drawn by R&D Thermography
Denomination		
Basic dimensions FLIR Exx		
Size A3 Scale 1:2 Drawing No. T126960 Sheet 1(4) Size A		

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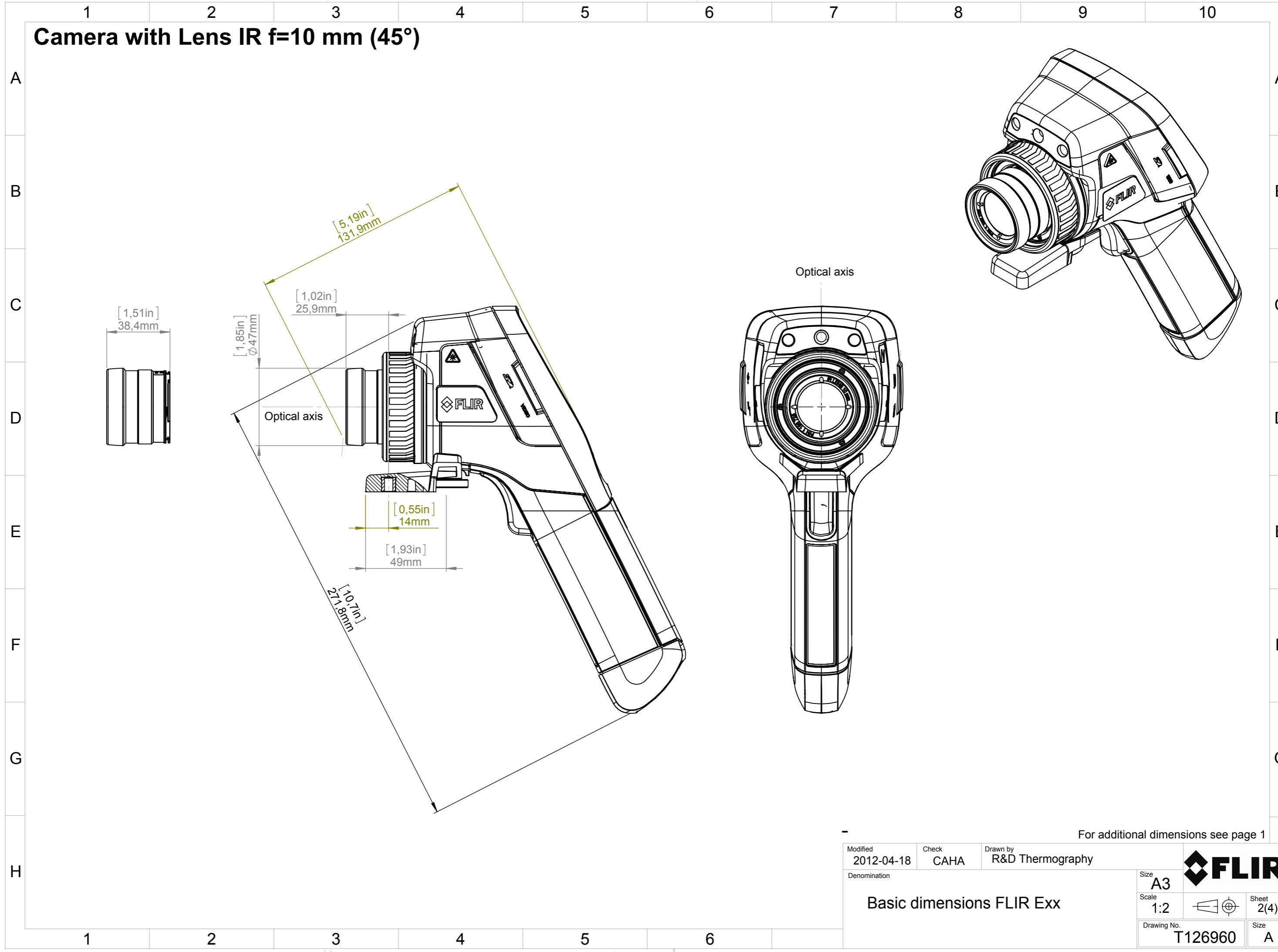
1:2

Sheet 1(4)

Size A

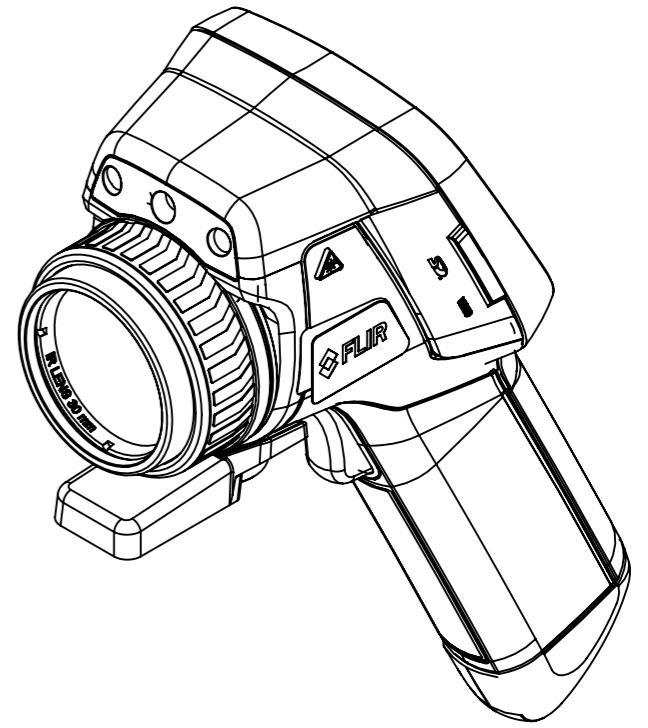
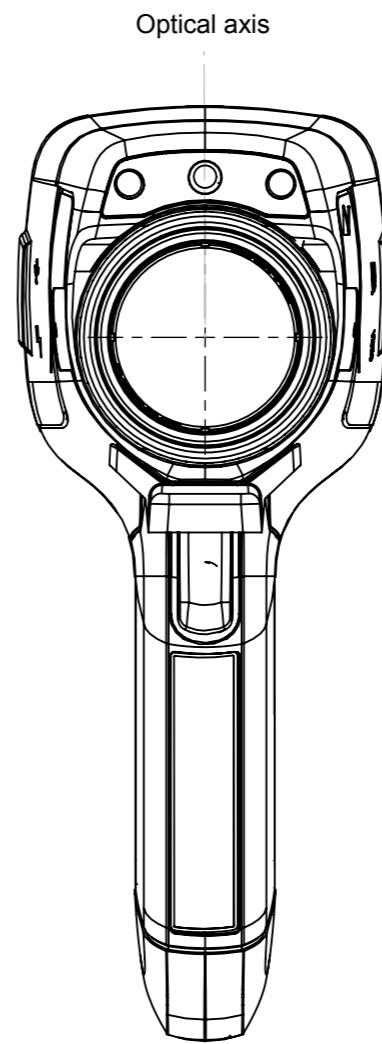
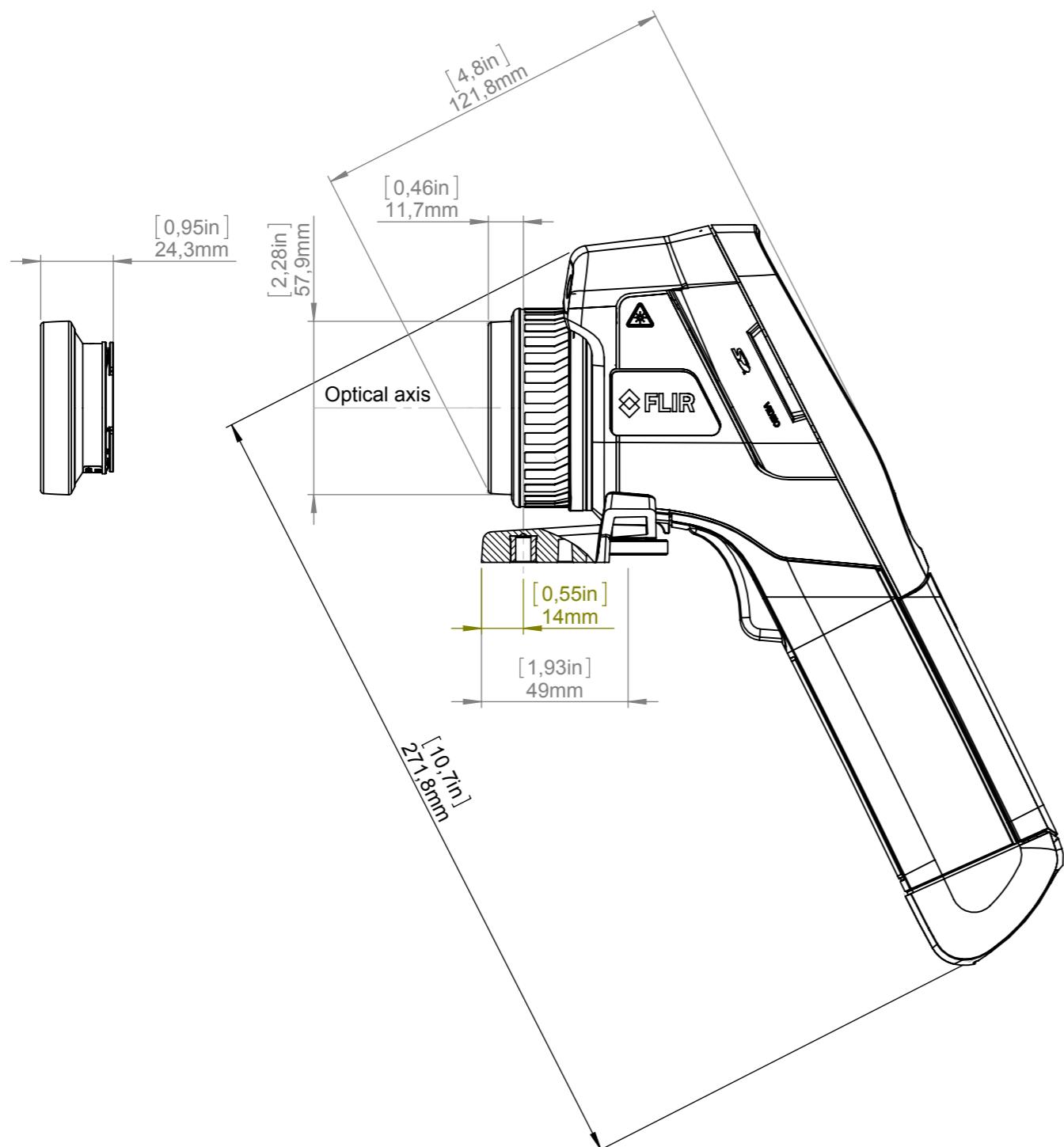
Camera with Lens IR f=10 mm (45°)

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Camera with Lens IR f=30 mm (15°)

A
B
C
D
E
F
G
H



For additional dimensions see page 1

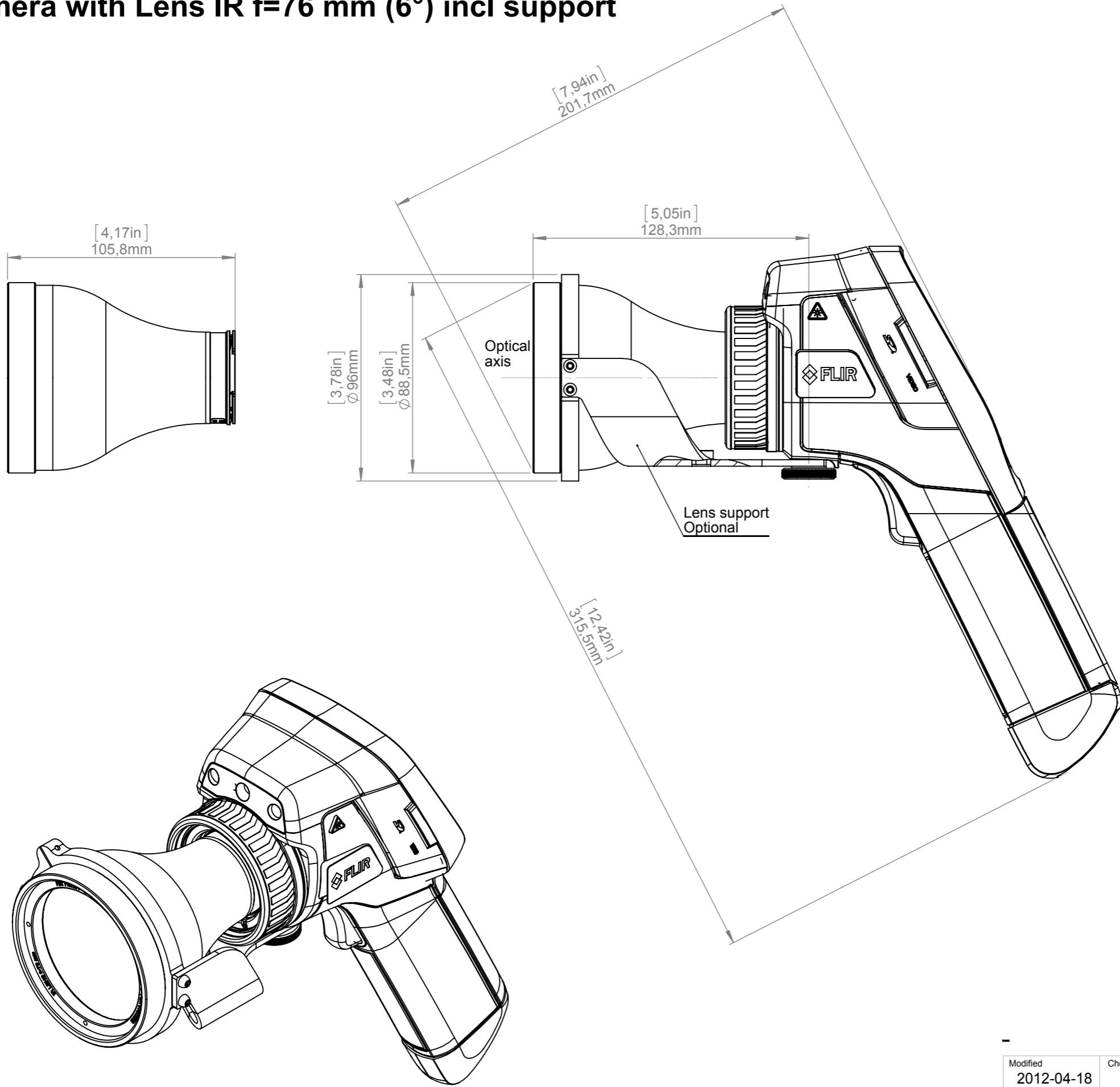
Modified 2012-04-18	Check CAHA	Drawn by R&D Thermography
Denomination		
Size A3	Scale 1:2	Sheet 3(4)
Drawing No. T126960	Size A	

FLIR

1 2 3 4 5 6

A
B
C
D
E
F
G
H

Camera with Lens IR f=76 mm (6°) incl support



Modified 2012-04-18	Check CAHA	Drawn by R&D Thermography
Denomination		
Basic dimensions FLIR Exx		
Size A3		
Scale 1:2		
Sheet 4(4)		
Drawing No. T126960		
Size A		

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