

# Technical Data

## FLIR E40 (incl. Wi-Fi)

**Part number:**

**49001-2001**

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**Legal disclaimer**

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**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	2× 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

**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



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## 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

Voice	60 seconds (via Bluetooth)
Text	Text from predefined list or soft keyboard on touch screen
Meterlink	Wireless connection (Bluetooth®) to: Extech Moisture Meter MO297 Extech Clamp Meter EX845
Report generation	<ul style="list-style-type: none"><li>Separate PC software with extensive report generation</li></ul>

## 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, Bluetooth, Wi-Fi, composite video
Bluetooth	Communication with headset and external sensors
Wi-Fi	Peer to peer (ad hoc) or infrastructure (network)
USB	<ul style="list-style-type: none"><li>USB-A: Connect external USB device</li><li>USB Mini-B: Data transfer to and from PC / Uncompressed colorized video</li></ul>
Video out	Composite

## Radio

Wi-Fi	Standard: 802.11 b/g Frequency range: 2412–2462 MHz Max output power: 15 dBm
Bluetooth	Frequency range: 2402–2480 MHz
Antenna	Internal

## 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



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## Environmental data

EMC	<ul style="list-style-type: none"><li>• ETSI EN 301 489-1 (radio)</li><li>• ETSI EN 301 489-17</li><li>• EN 61000-6-2 (Immunity)</li><li>• EN 61000-6-3 (Emission)</li><li>• FCC 47 CFR Part 15 B (Emission)</li><li>• ICES-003</li></ul>
Radio spectrum	<ul style="list-style-type: none"><li>• ETSI EN 300 328</li><li>• FCC Part 15.247</li><li>• RSS-210</li></ul>
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.)
Safety	EN/UL/CSA/PSE 60950-1

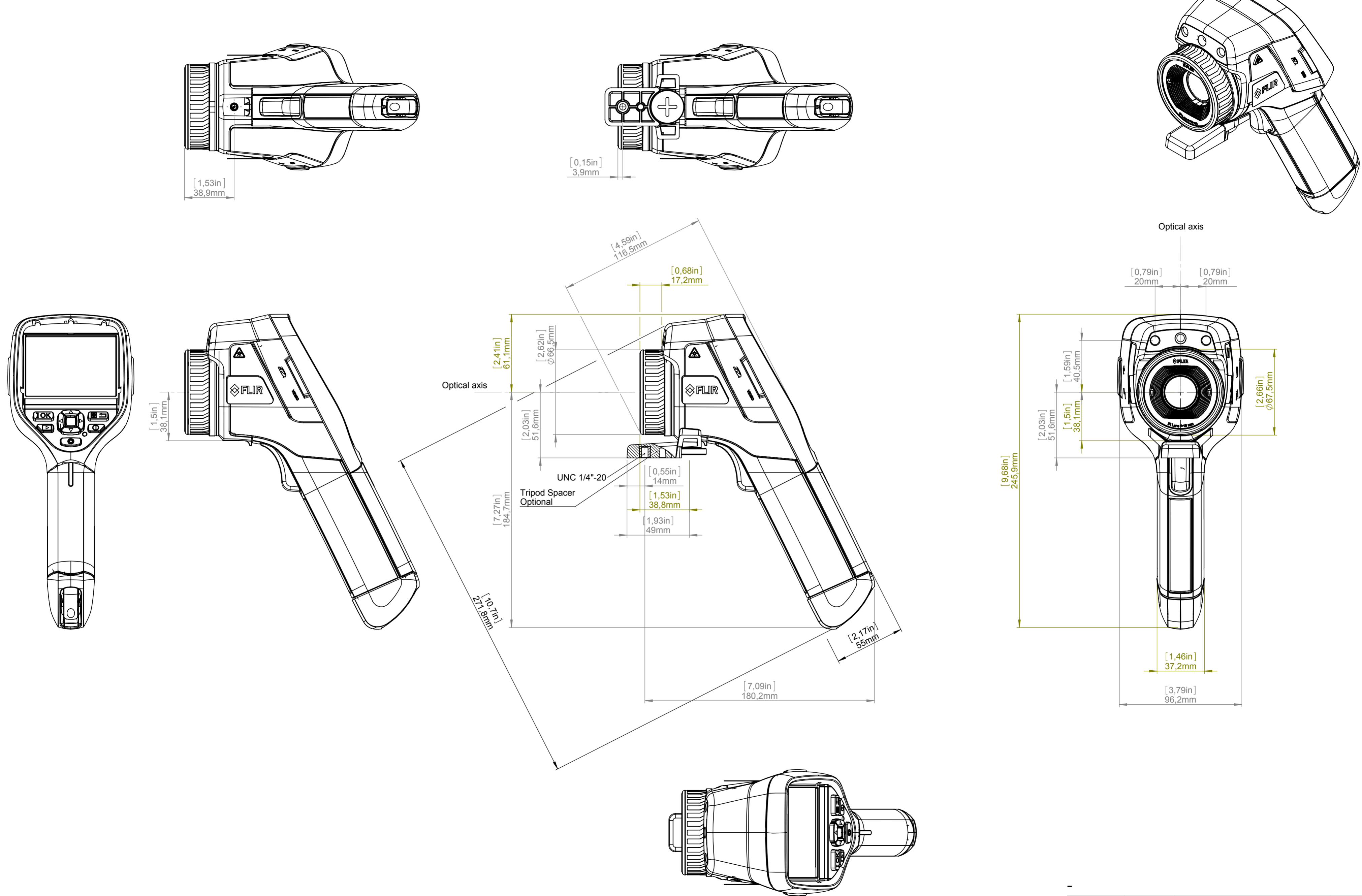
## Physical data

Camera weight, incl. battery	0.865 kg (1.91 lb.)
Camera size (L x W x H)	246 x 97 x 184 mm (9.7 x 3.8 x 7.2 in.)
Tripod mounting	UNC ¼"-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

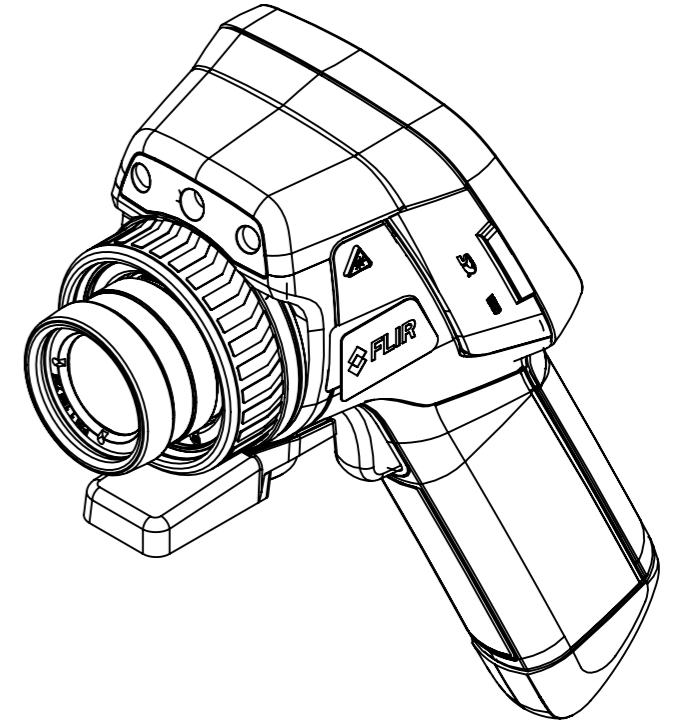
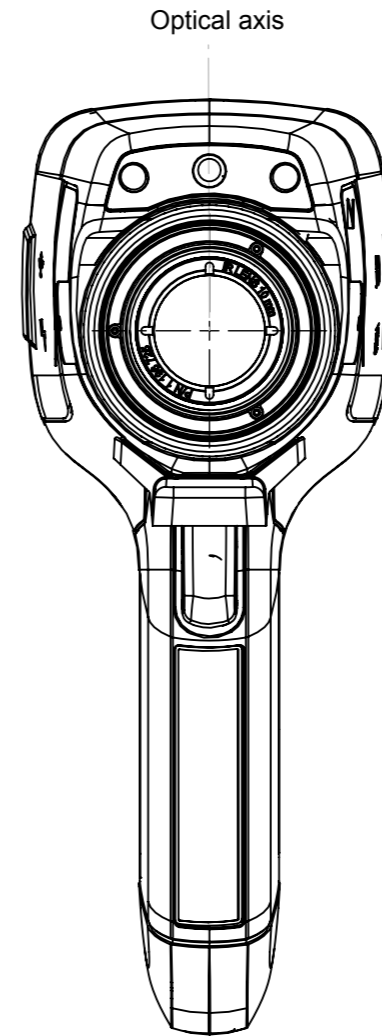
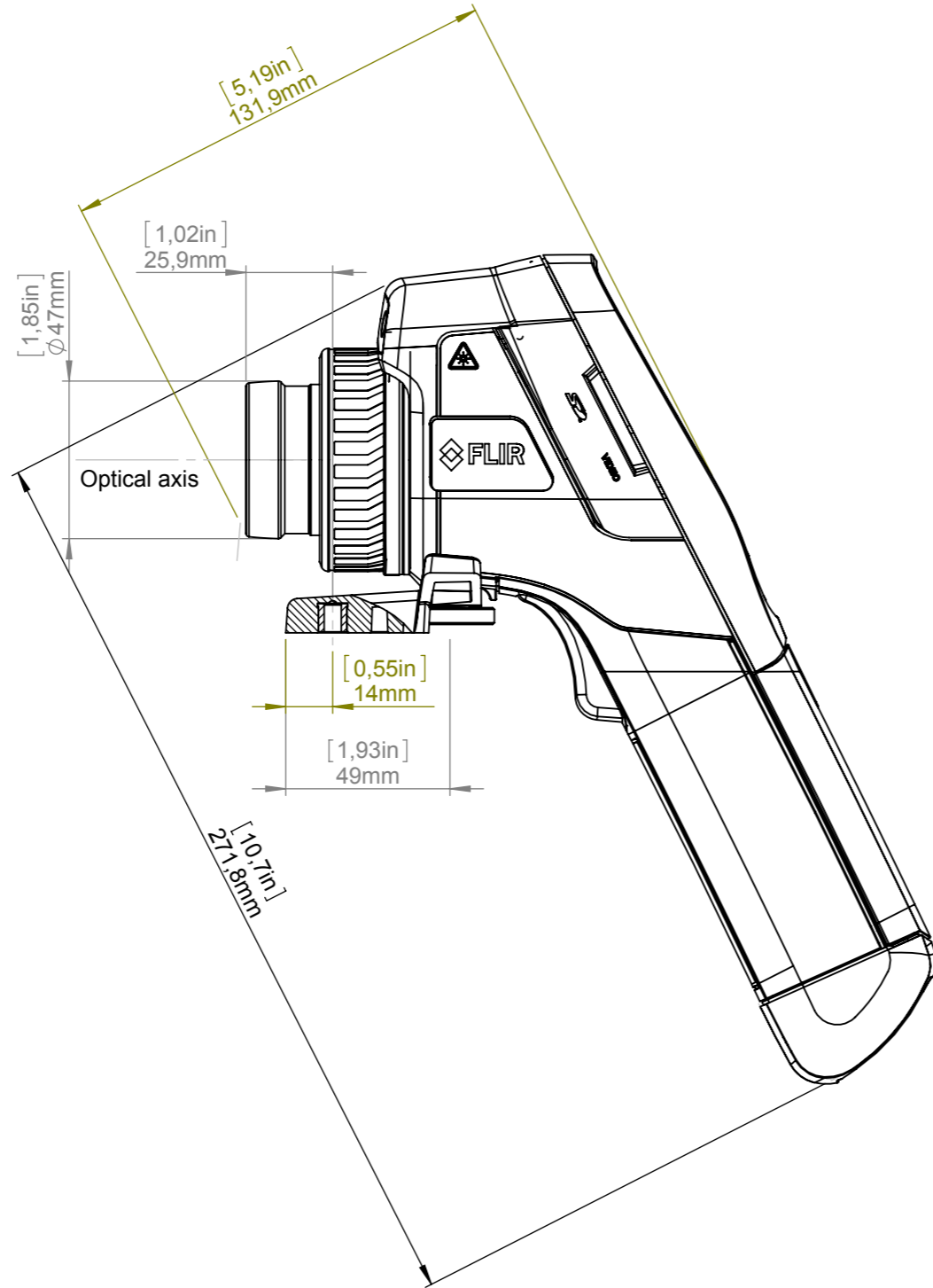
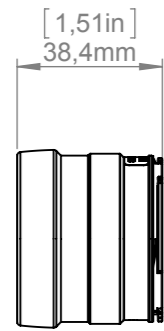
# Camera with built-in IR lens f=18 mm (25°)



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Denomination			
Basic dimensions FLIR Exx			Size A3 Scale 1:2 Sheet 1(4)
Drawing No. T126960			Size A

# Camera with Lens IR f=10 mm (45°)

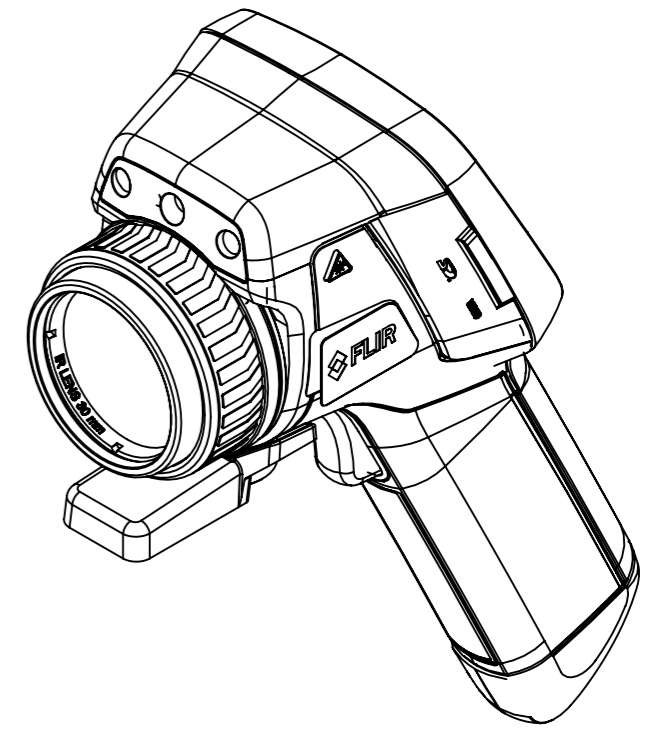
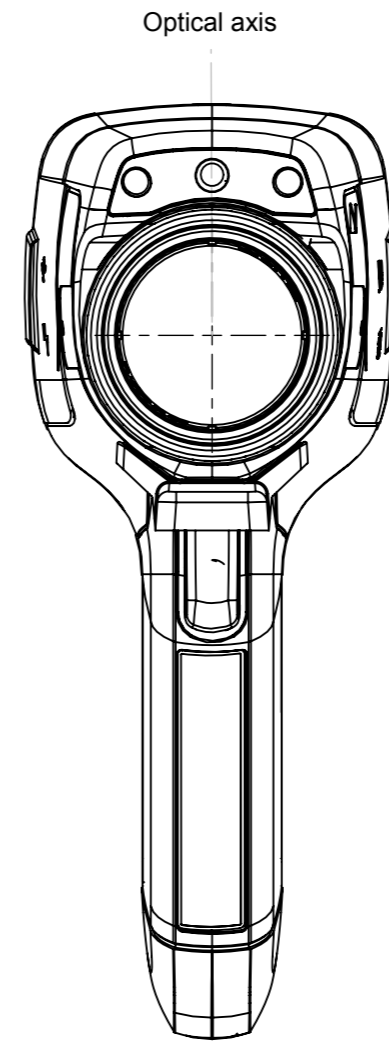
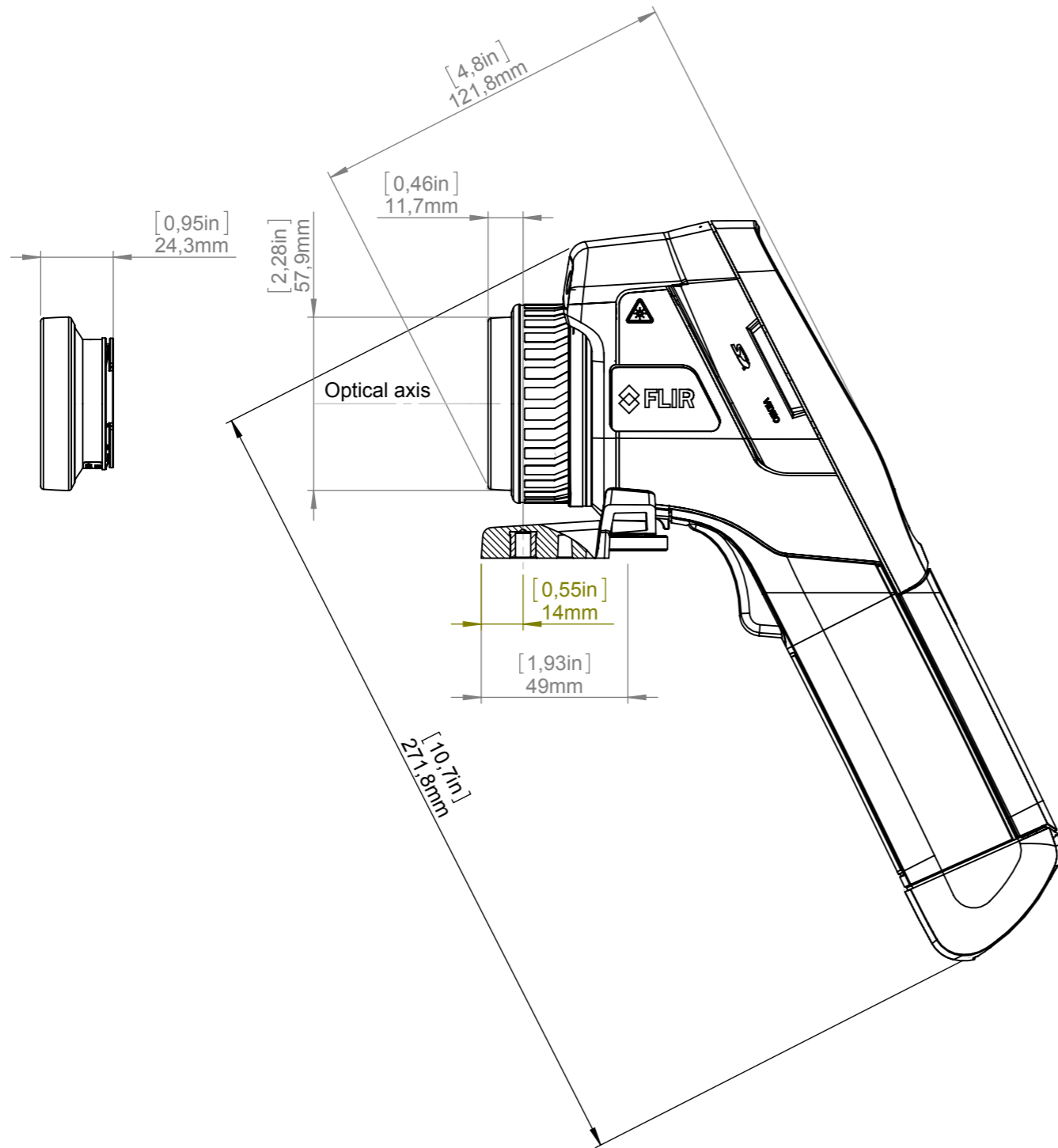


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For additional dimensions see page 1

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Drawing No. <b>T126960</b>			Sheet 2(4) Size <b>A</b>

# Camera with Lens IR f=30 mm (15°)

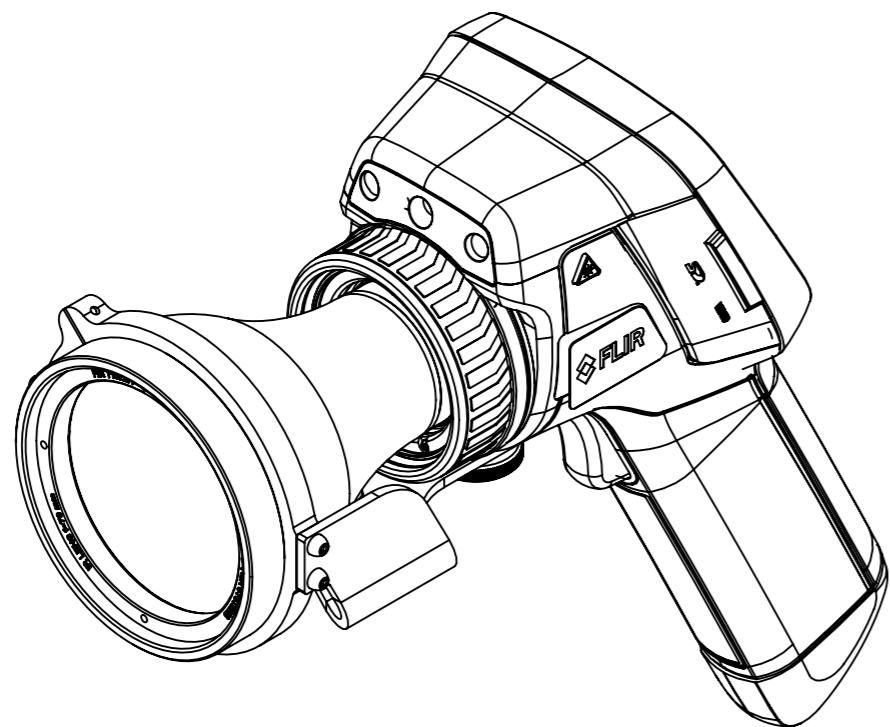
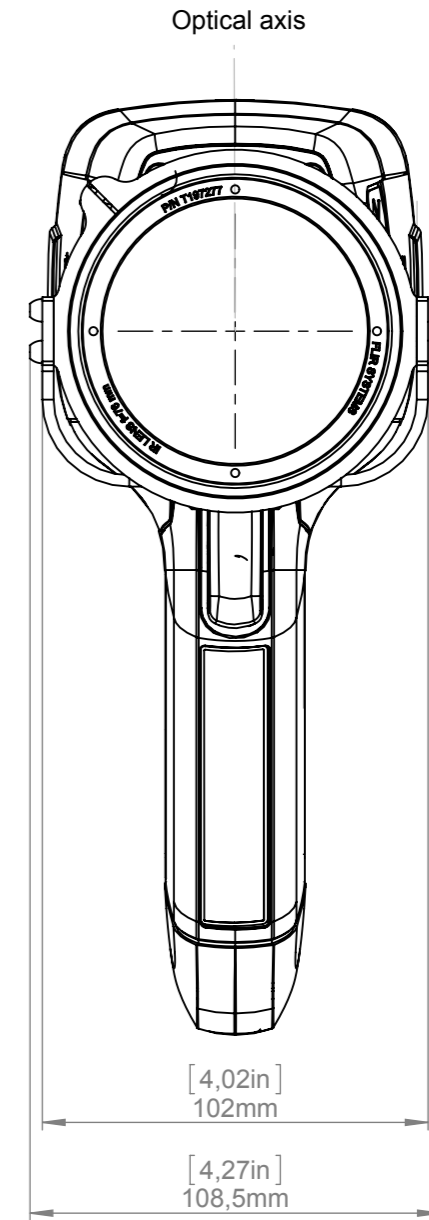
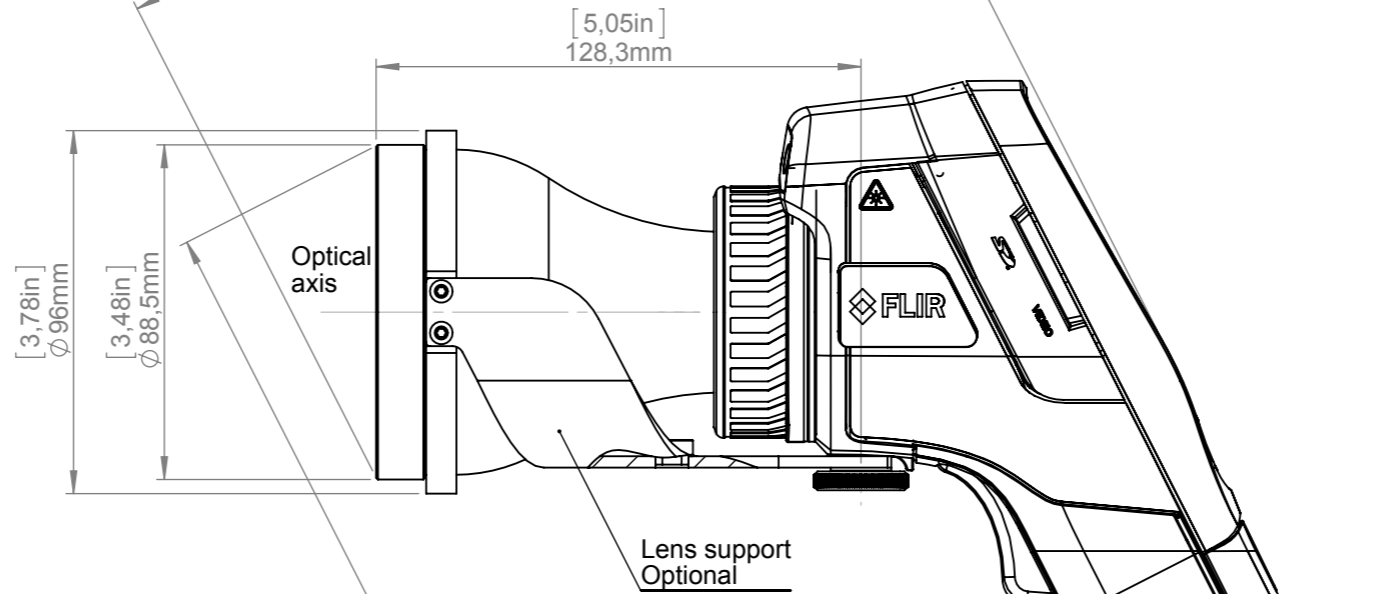
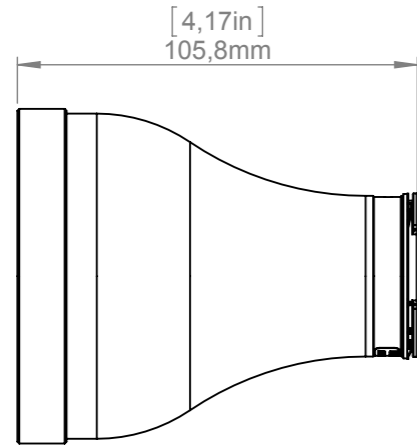


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# Camera with Lens IR f=76 mm (6°) incl support



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Basic dimensions FLIR Exx			Sheet 4(4) Size <b>A</b>