Technical Data
FLIR T420 (incl. Wi-Fi)

Part number:
62103-1101

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March 31, 2014, 08:45 PM

Corporate Headquarters

FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA
Telephone: +1-503-498-3547

Website

http://www.flir.com

Customer support

http://support.flir.com

Legal disclaimer

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

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Imaging and optical data	
IR resolution	320 × 240 pixels
Thermal sensitivity/NETD	<45 mK @ +30°C (+86°F)
Field of view (FOV) / Minimum focus distance	25° × 19° / 0.4 m (1.31 ft.)
Spatial resolution (IFOV)	1.36 mrad
Image frequency	60 Hz
Focus	Automatic (one shot) or manual
Zoom	2× and 4× digital zoom
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm

Image presentation	
Display	Touch screen, 3.5 in. LCD, 320 × 240 pixels
Auto orientation	Automatic landscape or portrait
Image modes	Thermal, Thermal MSX, Picture in Picture, Digital Camera
Multi Spectral Dynamic Imaging (MSX)	Thermal image with enhanced detail presentation
Picture in Picture	Resizable and movable 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	5
Area	5 areas (boxes or circles) with max./min./average
Automatic hot/cold detection	Auto hot or cold spotmeter markers within area
Measurement presets	No measurements, Center spot, Hot spot, Cold spot, 3 spots, Hotspot-spot, Hotspot-Temperature
Difference temperature	Delta temperature between measurement functions or reference temperature
Reference temperature	Manually set using difference temperature
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
Measurement corrections	Emissivity, reflected temperature, relative humidity, atmospheric temperature, object distance, external IR window compensation
Colors (palettes)	Iron, Rainbow, Rainbow HC, White hot, Black hot, Arctic, Lava
Color Alarm (isotherm)	Above/below/interval
Measurement function alarm	Audible/visual alarms (above/below) on any selected measurement function

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Measurement analysis	
Screening	Difference temperature alarm, audible
Set-up	
Set-up commands	Save options, Programmable button, Reset options, Set up camera, Wi-Fi, Compass, Bluetooth, Language, Time & units, Camera information
Camera software update	Use PC software FLIR Tools
Storage of images	
Image storage	Standard JPEG, including digital photo and measurement data, on memory card
Image storage mode	Simultaneous storage of thermal and digital photo in same JPEG. Optional to store digital photo as separate JPEG.
Time lapse	15 seconds to 24 hours
Image annotations	
Voice	60 seconds (via Bluetooth) stored with the image
Text	Add table. Select between predefined templates or create your own in FLIR Tools
Image description	Add short note (stored in JPEG exif tag)
Meterlink	Wireless connection (Bluetooth®) to: Flir meters with MeterLink
Report generation	• Instant Report (*.pdf file) in camera including IR and visual images • Separate PC software with extensive report generation
Compass	Camera direction automatically added to every image
Video recording in camera	
Non-radiometric IR-video recording	MPEG-4 to memory card
Visual video recording	MPEG-4 to memory card
Video streaming	
Radiometric IR-video streaming	Full dynamic to PC using USB or to mobile devices using Wi-Fi.
Non-radiometric IR-video streaming	MPEG-4 using Wi-Fi Uncompressed colorized video using USB
Visual video streaming	MPEG-4 using Wi-Fi Uncompressed colorized video using USB
Digital camera	
Built-in digital camera	3.1 Mpixel with LED light
Digital camera, FOV	Adapts to the IR lens
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 (adhoc) or infrastructure (network)
USB	• USB-A: Connect external USB device • USB Mini-B: Data transfer to and from PC / Uncompressed colorized video
Video out	Composite
Video, connector type	4-pole 3.5 mm jack

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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
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 B (Emission) • ICES-003
Radio spectrum	• ETSI EN 300 328 • FCC Part 15.247 • RSS-210
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Safety	EN/UL/CSA/PSE 60950-1

Physical data	
Camera weight, incl. battery	0.880 kg (1.94 lb.)
Camera size (L × W × H)	106 × 201 × 125 mm (4.2 × 7.9 × 4.9 in.), with built-in lens pointing forward
Tripod mounting	UNC ¼"-20 (adapter needed)

Shipping information

- Infrared camera with lens
- Battery (2 ea.)
- Battery charger
- Bluetooth headset
- Camera lens cap
- Calibration certificate
- FLIR Tools download card
- User documentation CD-ROM
- Printed documentation
- Hard transport case
- Memory card
- Neckstrap
- Power supply, incl. multi-plugs
- Sunshield
- USB cable
- Video cable

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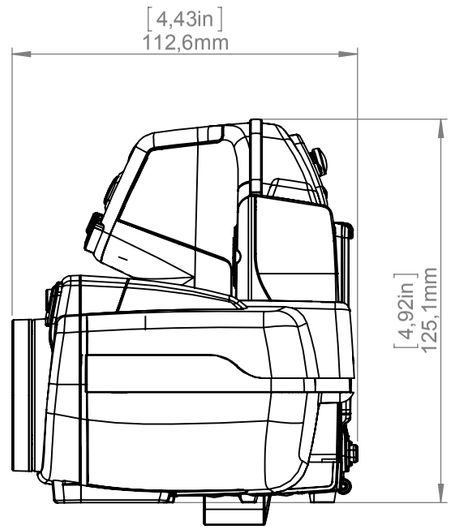
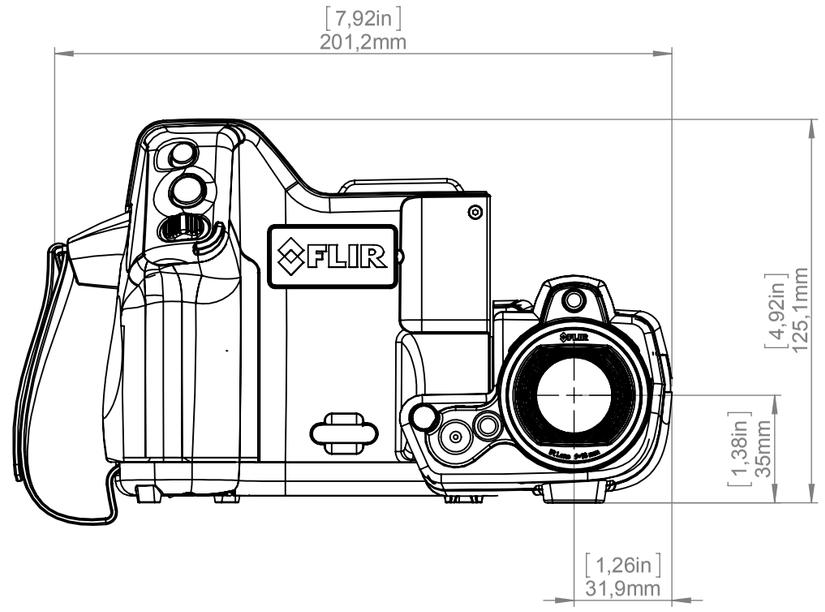
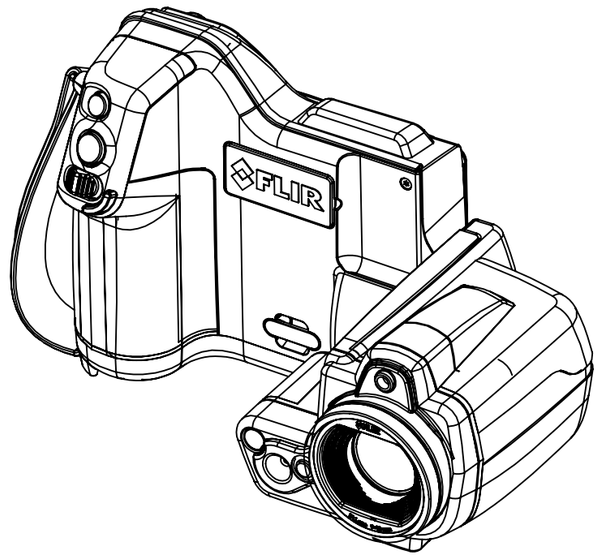
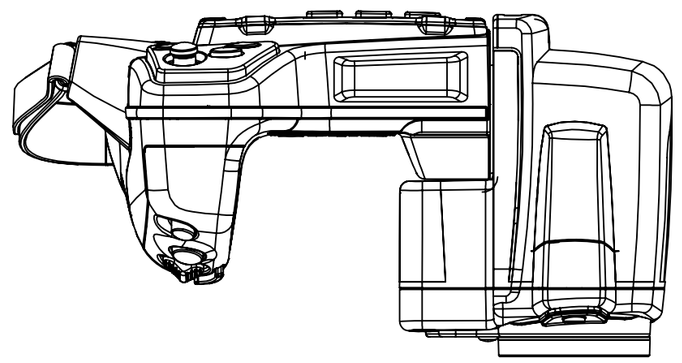
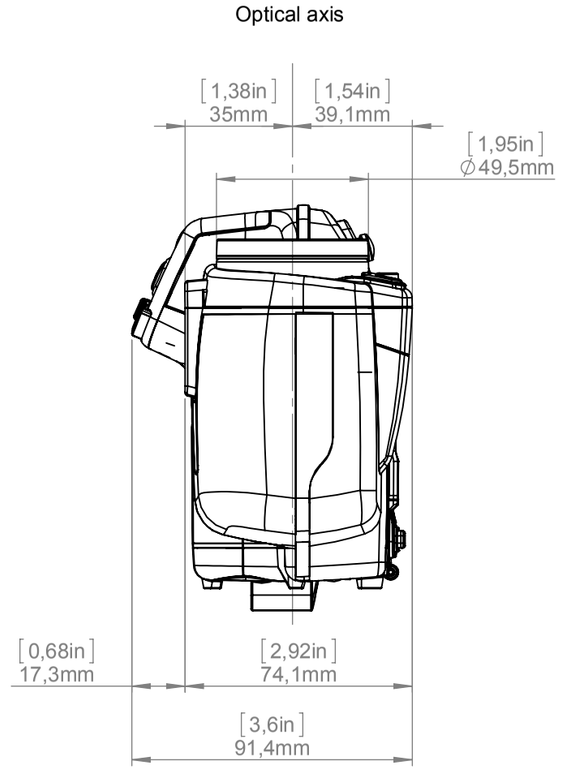
Camera with built-in IR lens f=18 mm (25°)

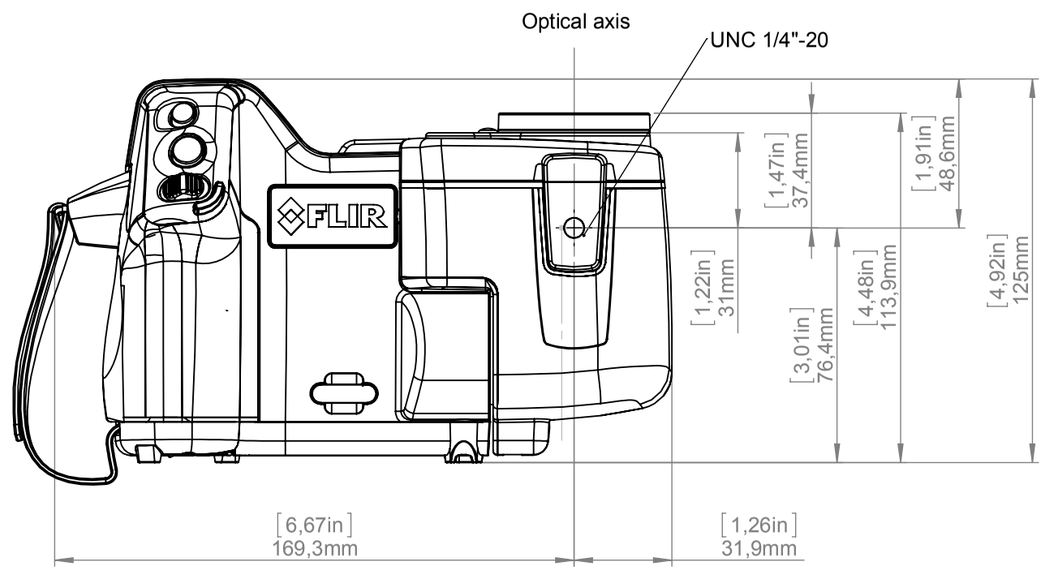


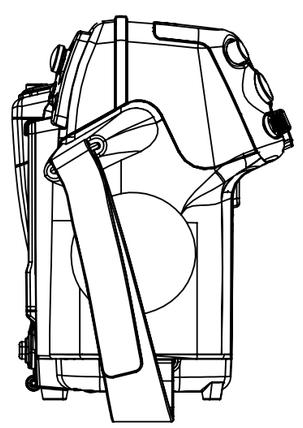


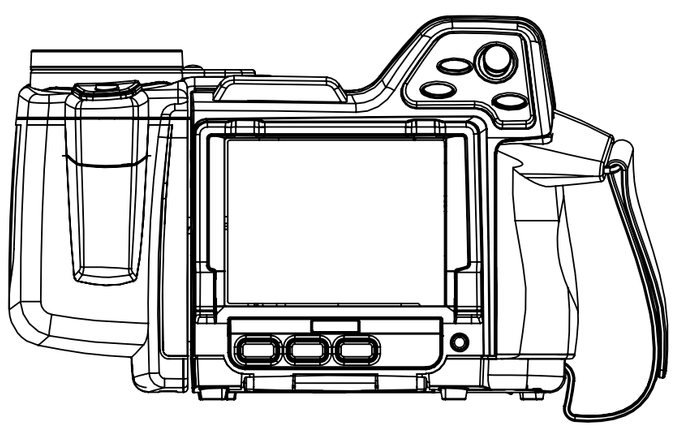


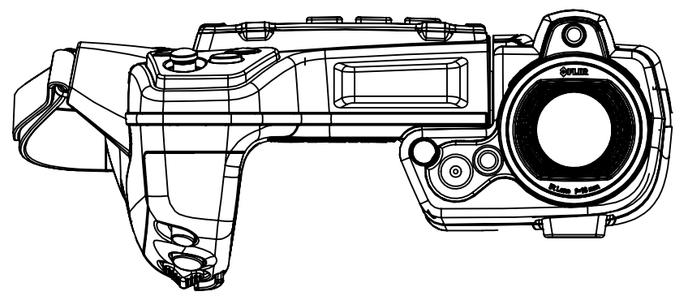












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2012-06-07	JOTA	R&D Thermography

Denomination

Basic Dimensions FLIR T4xx

Size	Sheet
A3	1(7)
Scale 1:2	
Drawing No. T127604	Size A

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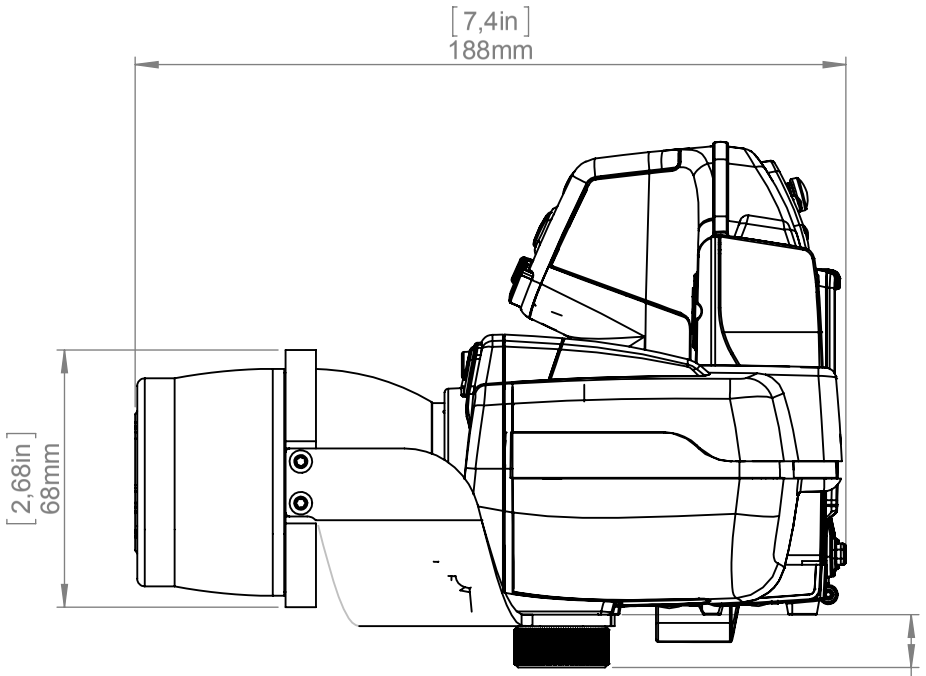
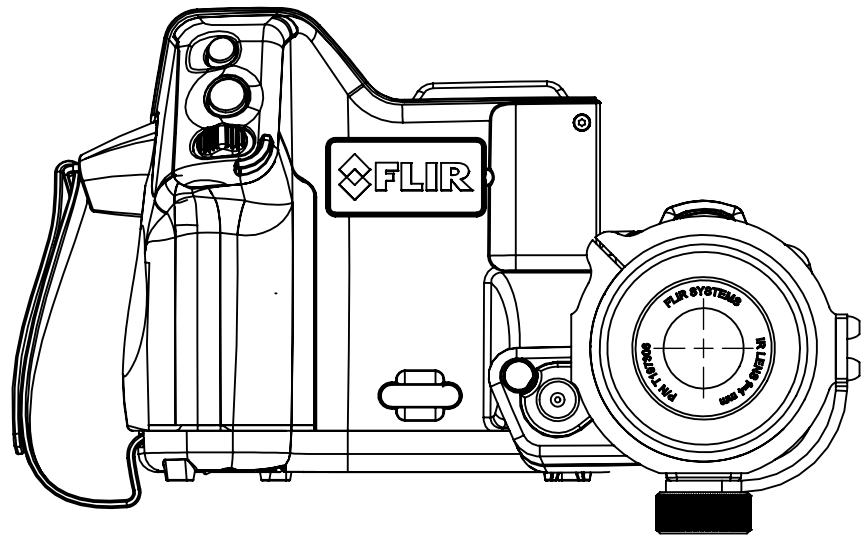
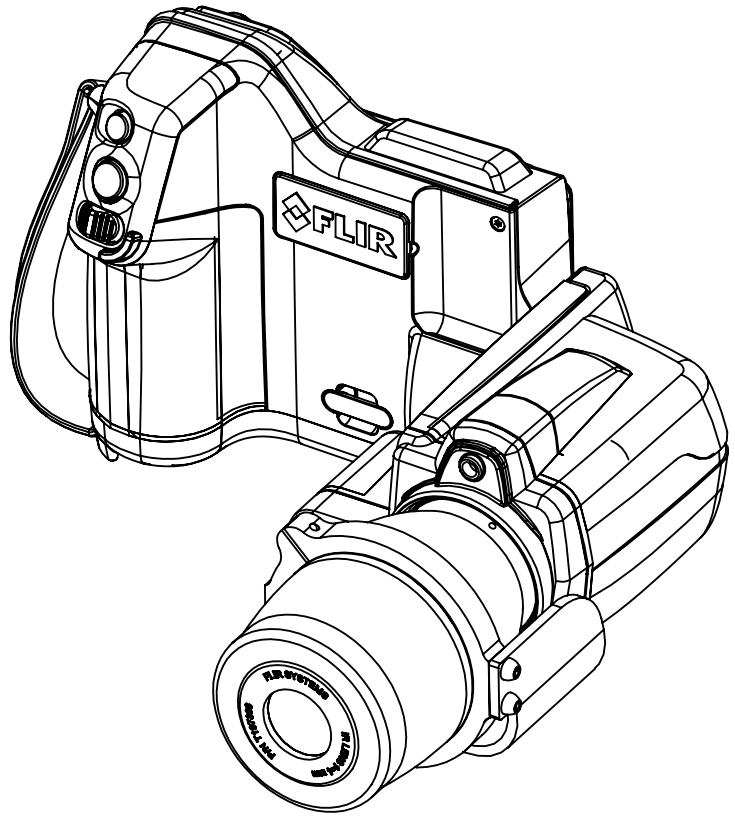
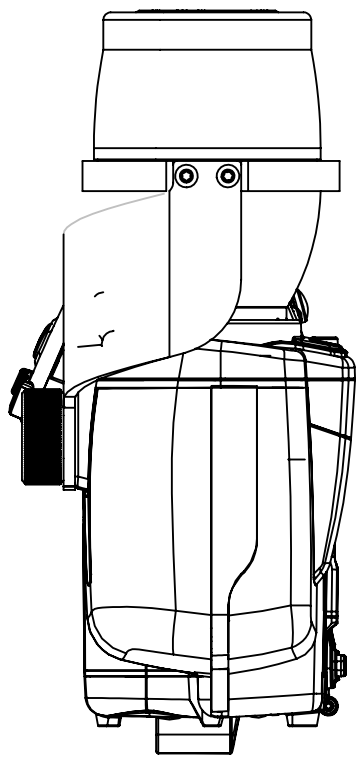
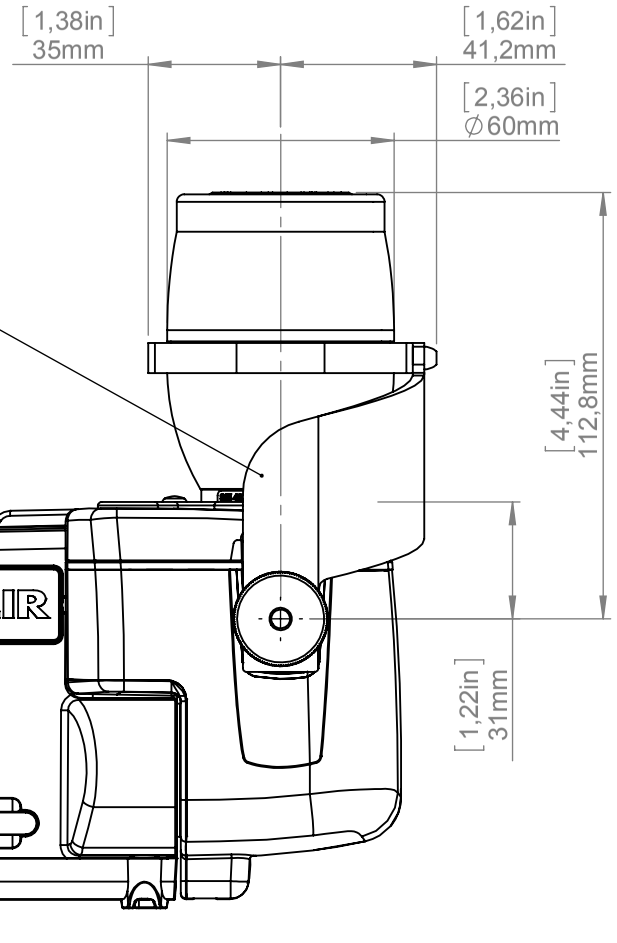
Camera with Lens IR f=4 mm (90°) incl support

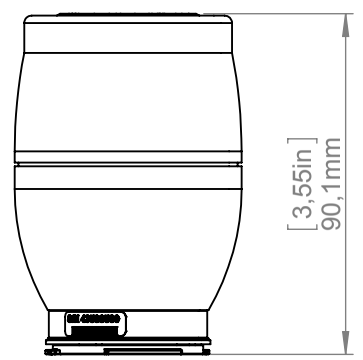












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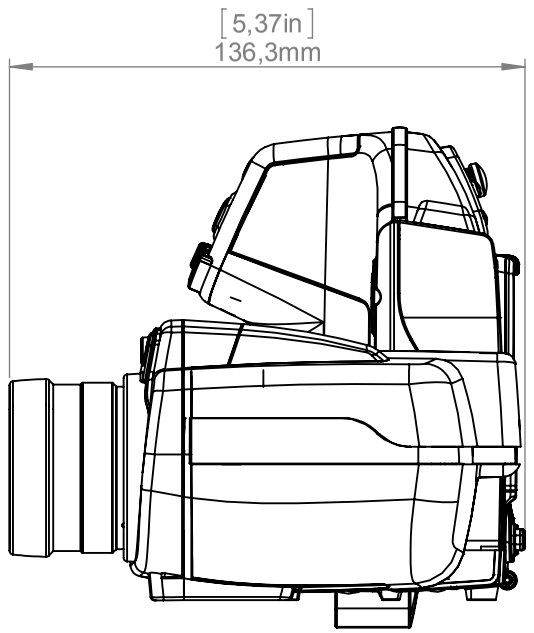
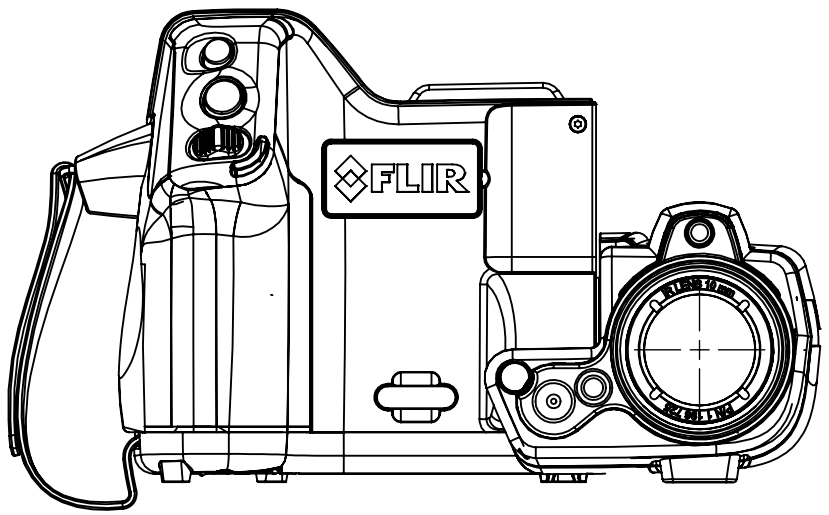
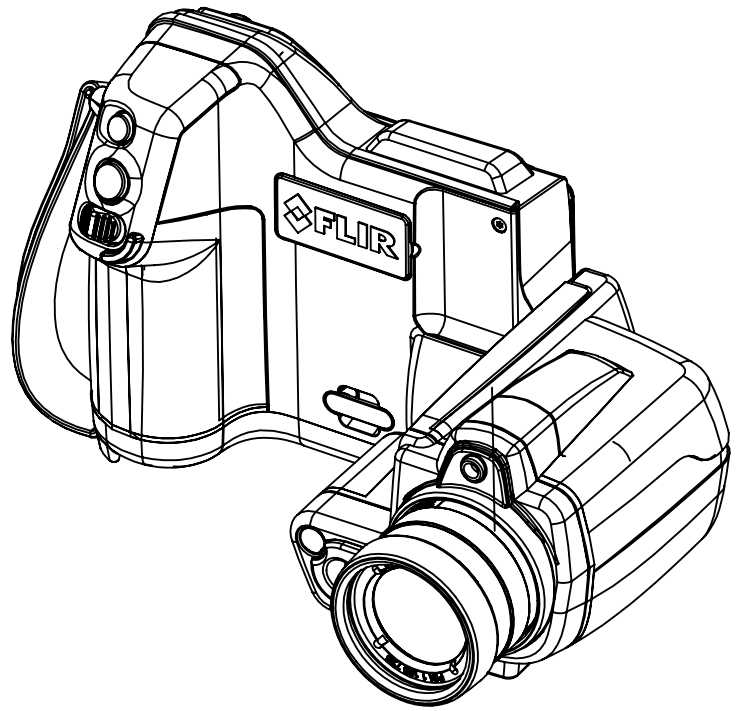
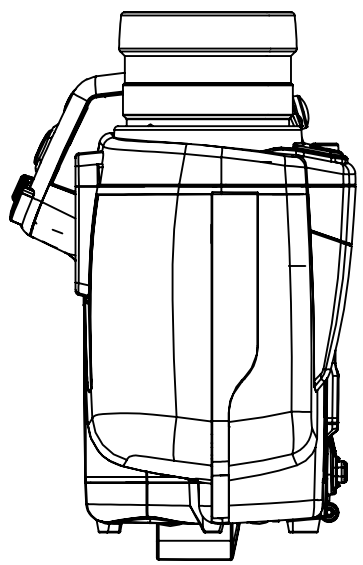
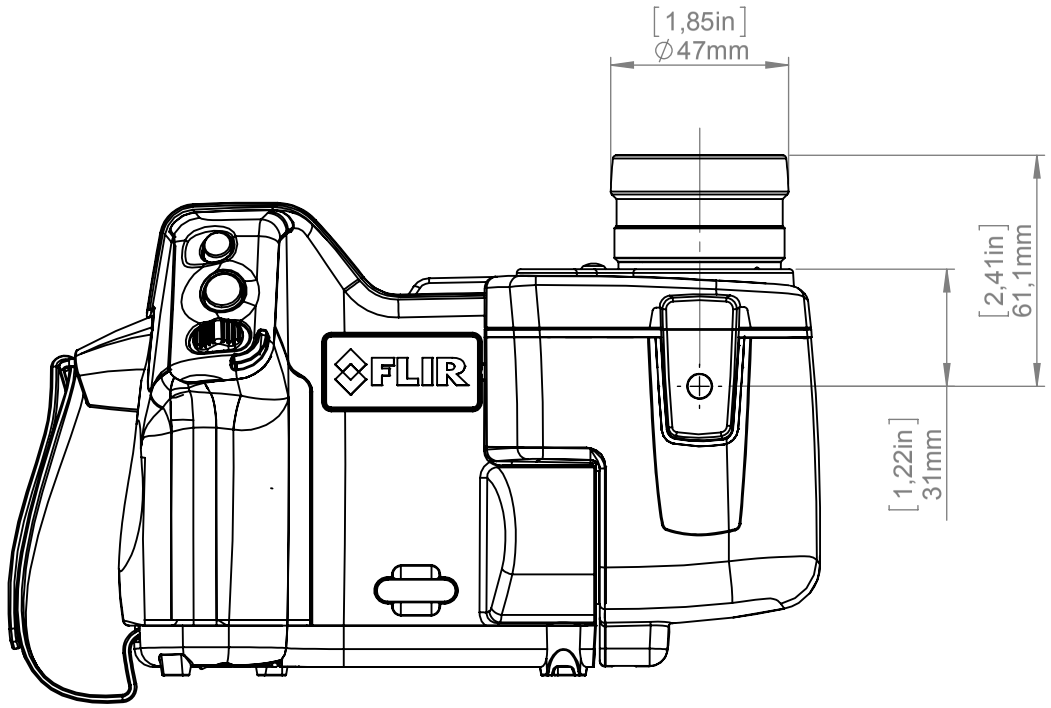
Camera with Lens IR f=10 mm (45°)

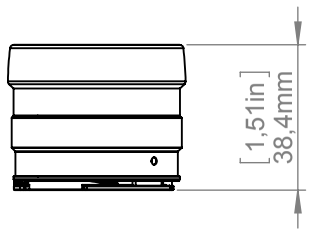












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2012-06-07	JOTA	R&D Thermography	FLIR

Denomination	Size	
Basic Dimensions FLIR T4xx	A3	
	Scale 1:2	Sheet 3(7)
	Drawing No. T127604	Size A

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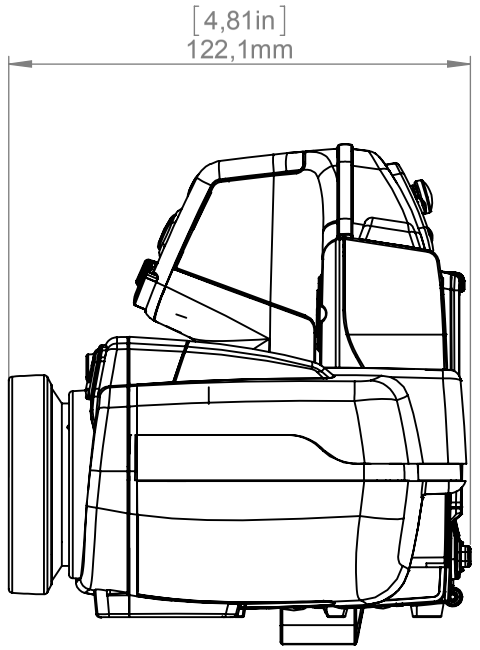
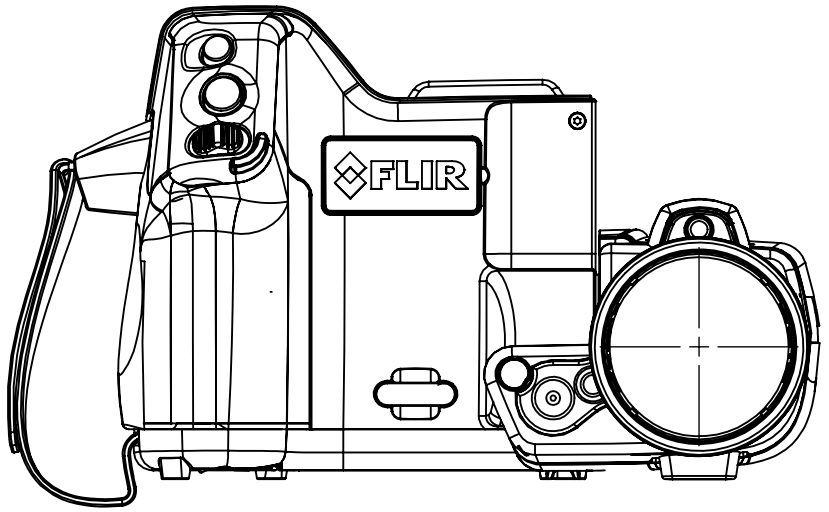
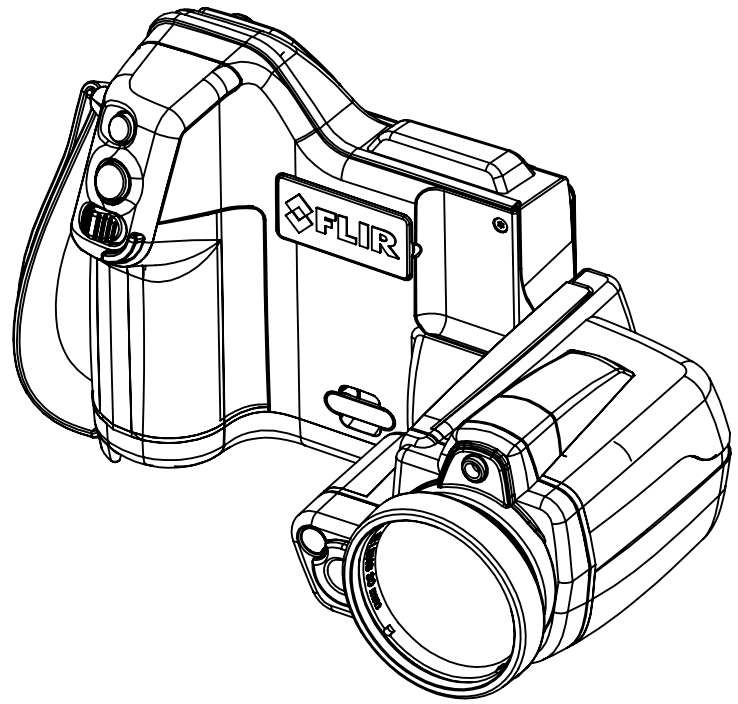
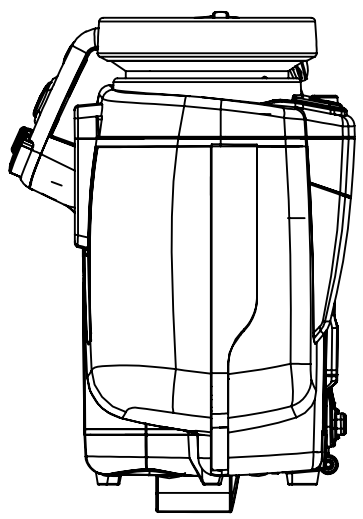
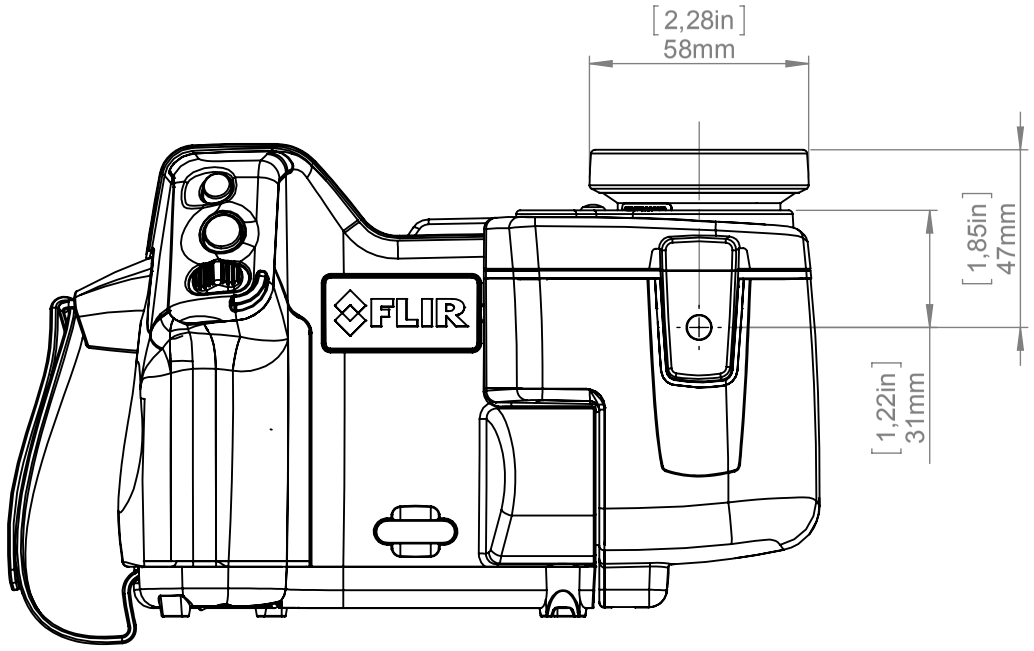
Camera with Lens IR f=30 mm (15°)

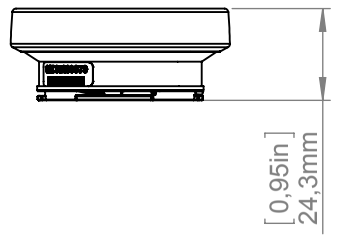












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2012-06-07	JOTA	R&D Thermography	FLIR

Denomination

Basic Dimensions FLIR T4xx

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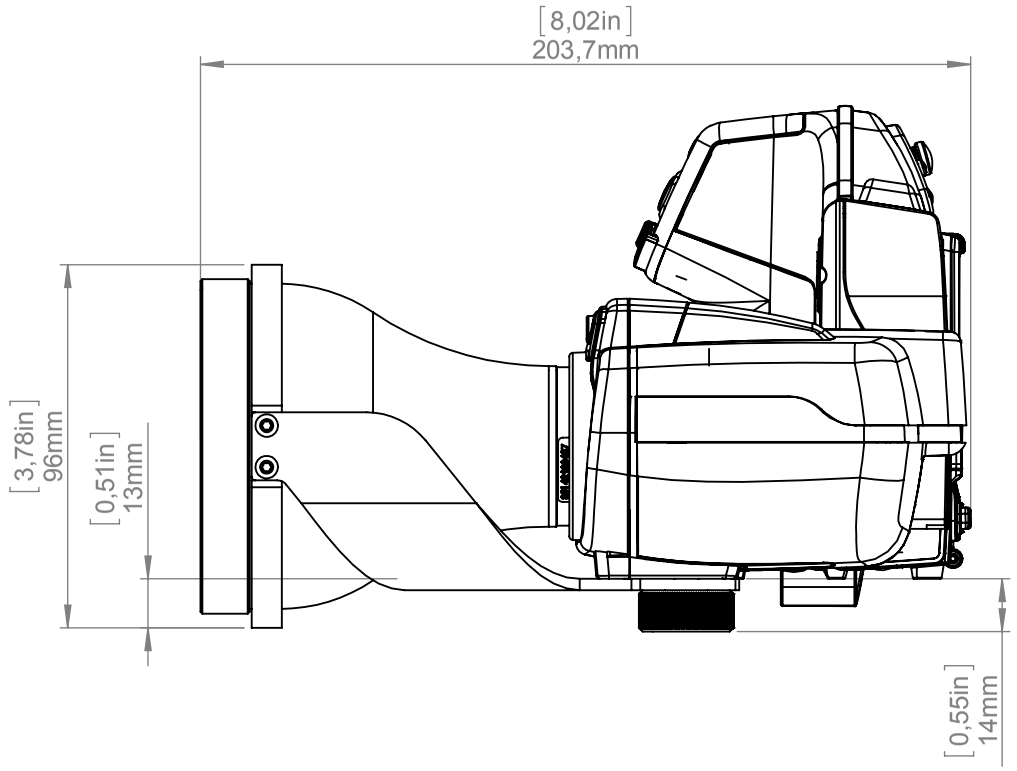
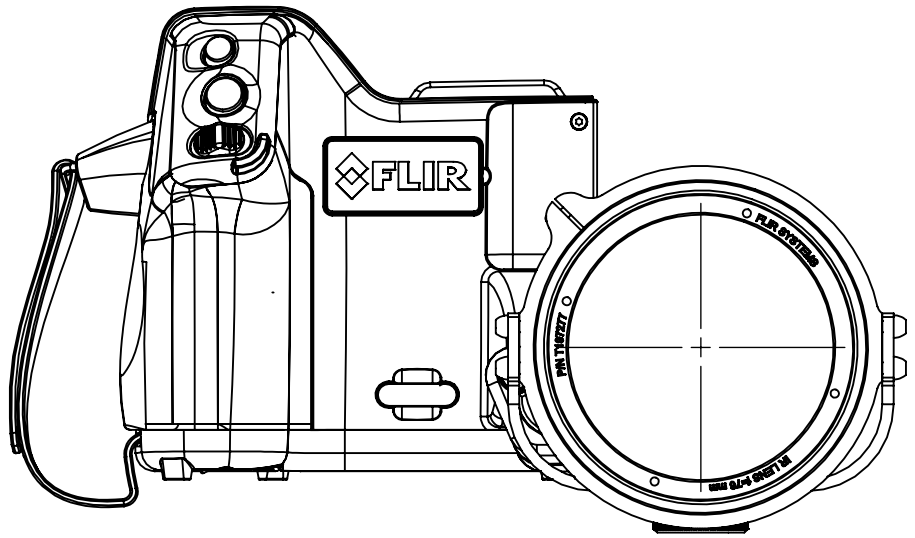
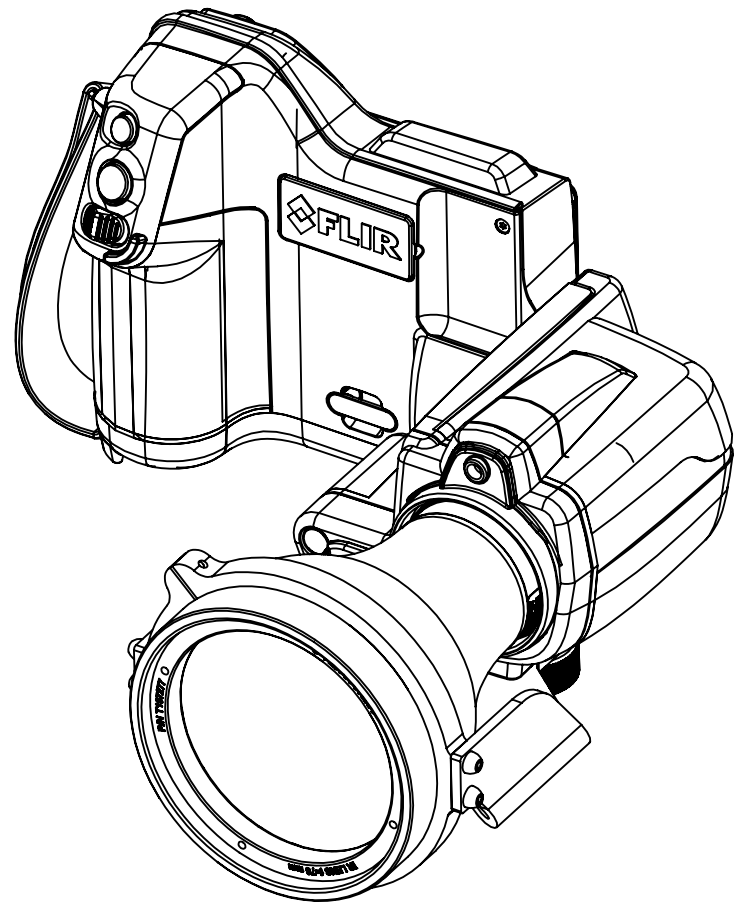
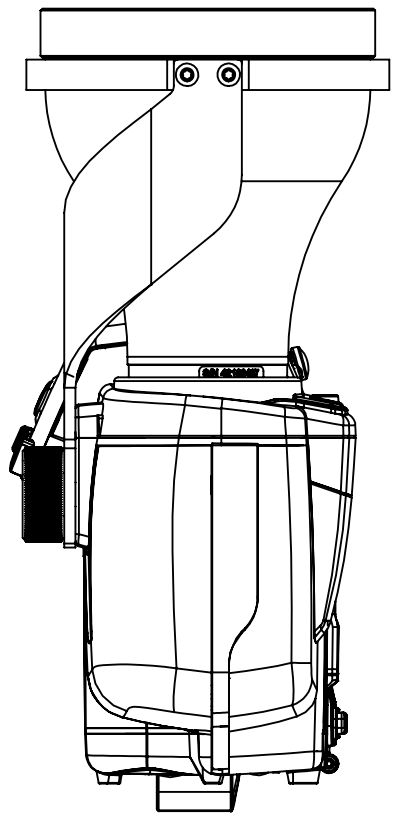
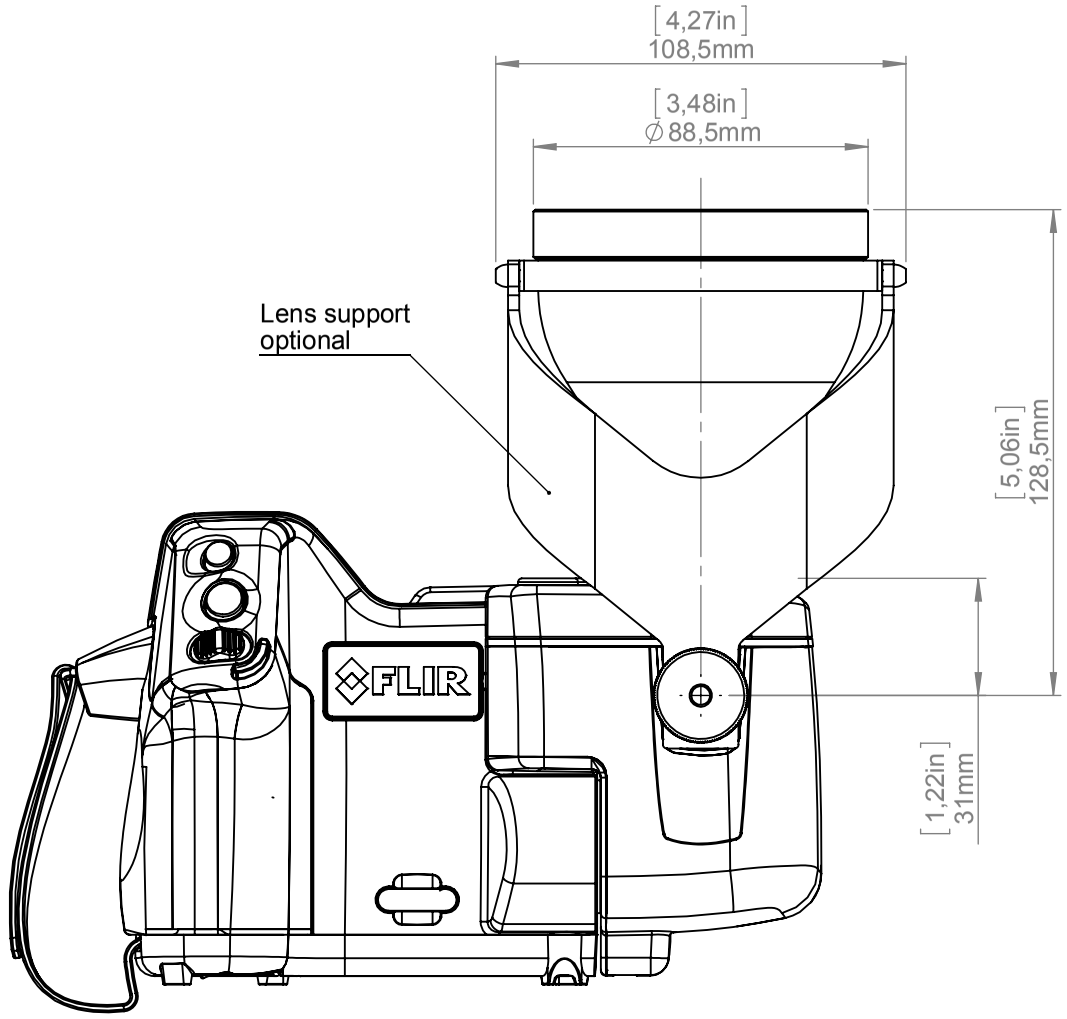
Camera with Lens IR f=76 mm (6°) incl support

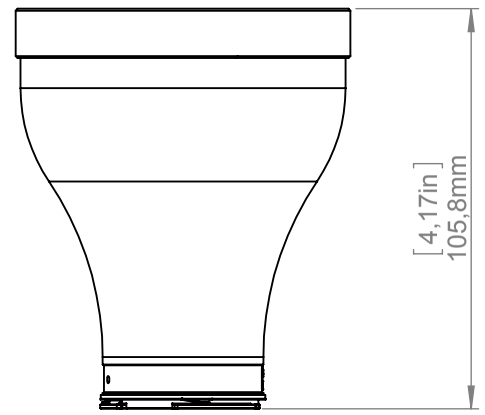












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2012-06-07	JOTA	R&D Thermography

Denomination

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Drawing No. T127604	Size A

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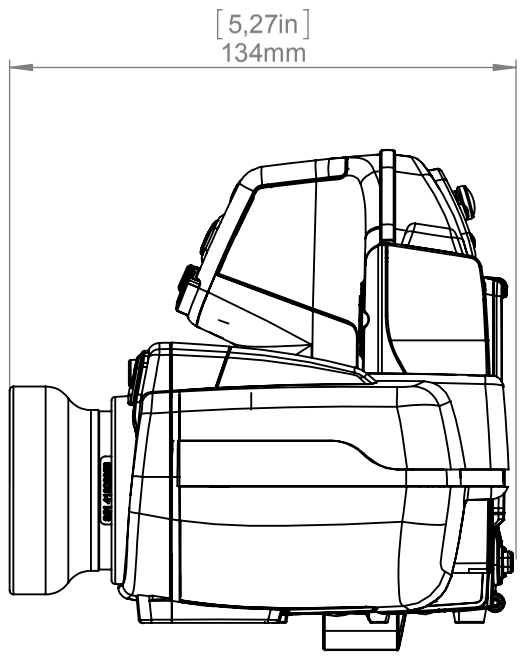
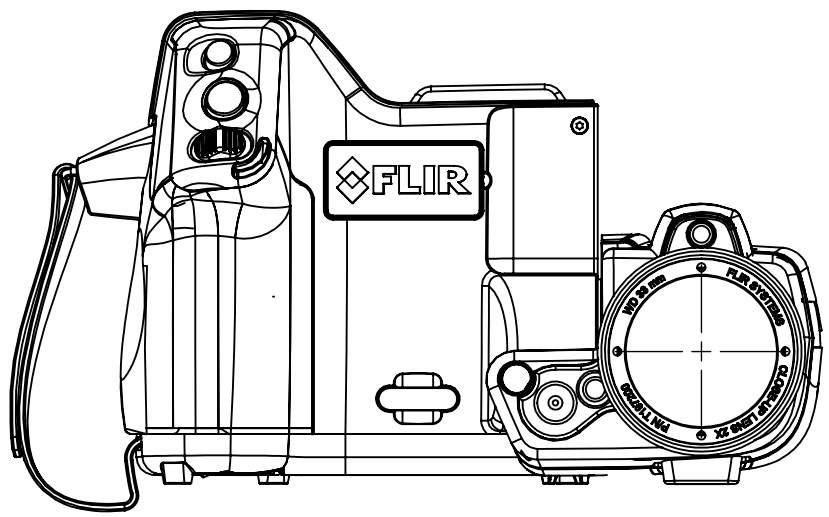
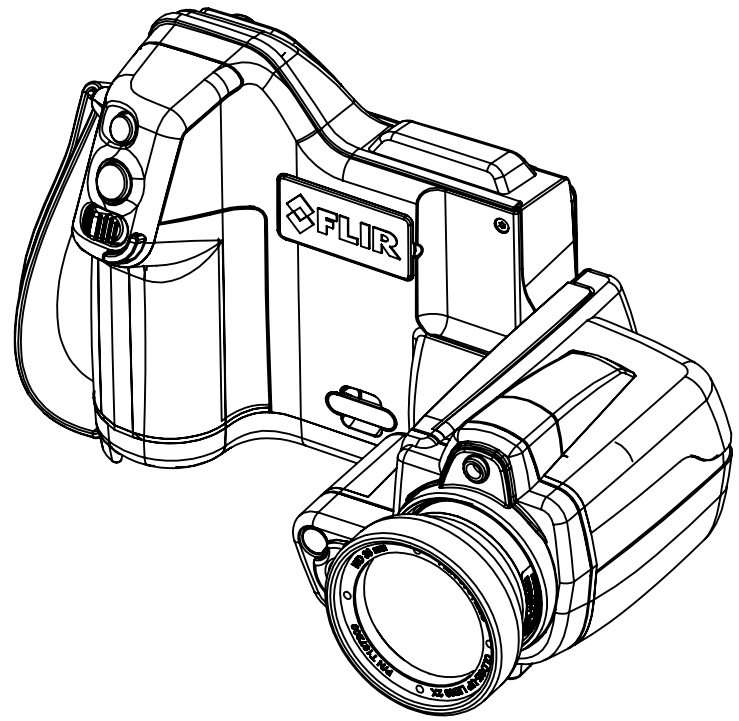
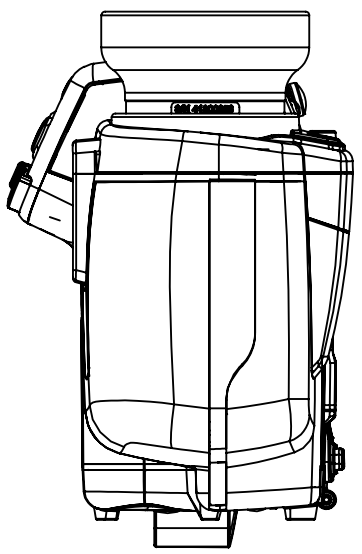
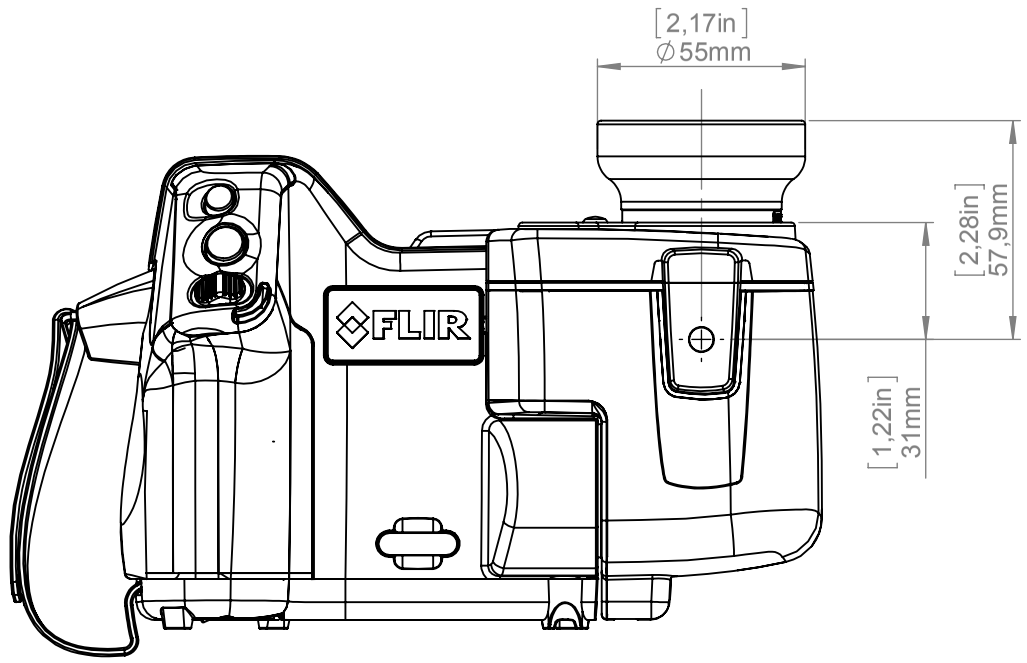
Camera with Close-up lens 2X (50 µm)

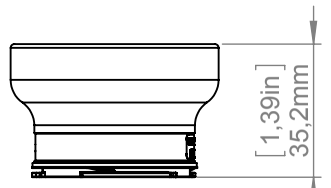












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Modified	Check	Drawn by	
2012-06-07	JOTA	R&D Thermography	FLIR

Denomination	Size	Sheet
Basic Dimensions FLIR T4xx	A3	6(7)
	Scale 1:2	
	Drawing No. T127604	Size A

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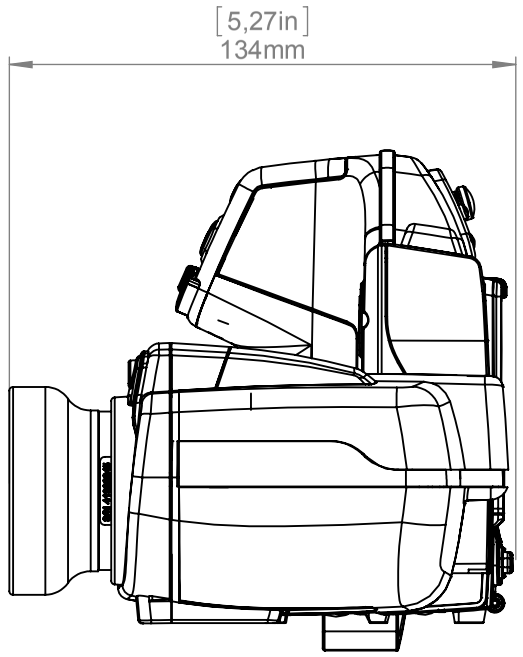
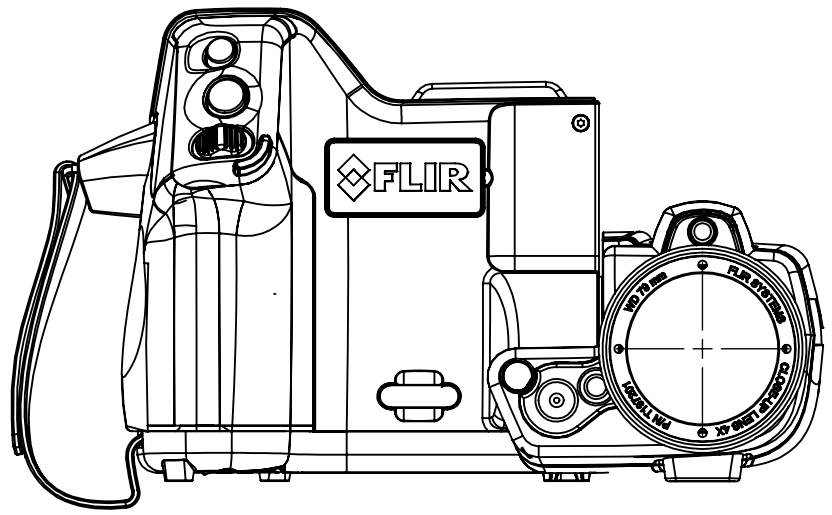
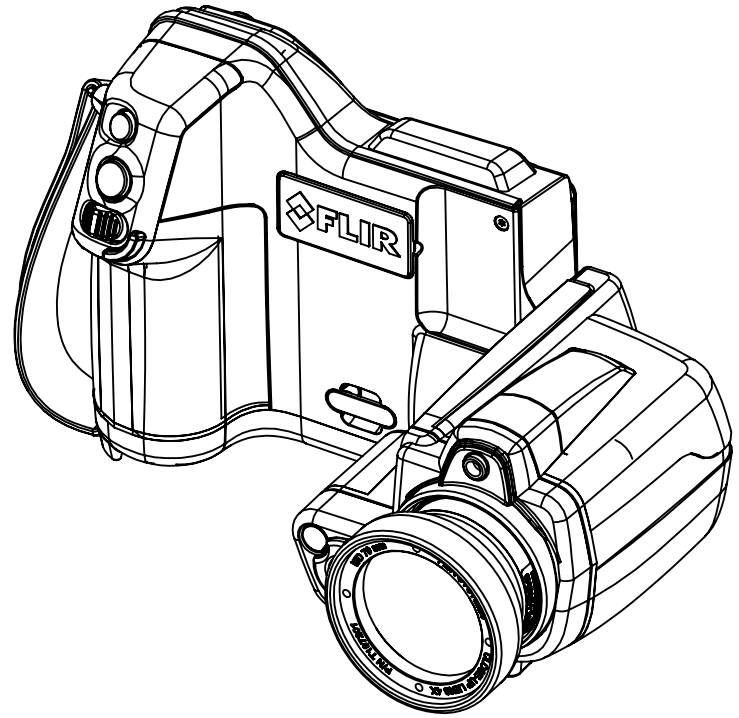
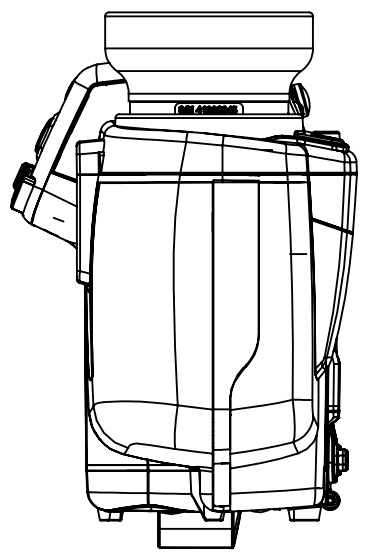
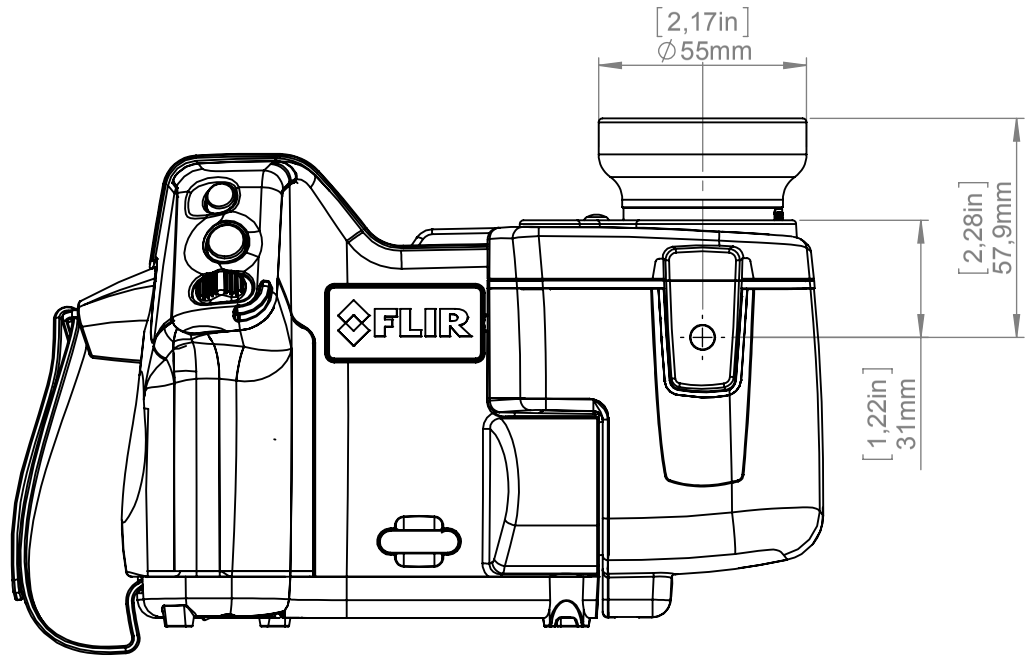
Camera with Close-up lens 4X (100 µm)

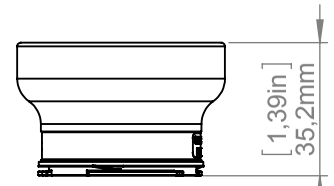












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Modified	Check	Drawn by	
2012-06-07	JOTA	R&D Thermography	FLIR

Denomination	Size	Sheet
Basic Dimensions FLIR T4xx	A3	7(7)
	Scale 1:2	
	Drawing No. T127604	Size A

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