

### P/N: 79302-0101

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#### **Document identity**

Publ. No.: 79302-0101 Commit: 74938 Language: Modified: 2021-03-24

Formatted: 2021-07-09

#### 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	320 × 240 pixels
UltraMax (super-resolution)1	Yes
NETD	<40 mK @ 30°C (86°F)
Field of view	24° × 18°
Minimum focus distance	<ul> <li>0.15 m (0.49 ft)</li> <li>Macro mode 103 μm as option</li> </ul>
Minimum focus distance with MSX	0.5 m (1.64 ft)
Focal length	17 mm (0.67 in)
Spatial resolution (IFOV)	1.31 mrad/pixel
Available extra lenses	<ul> <li>42° (AutoCal)</li> <li>14° (AutoCal)</li> <li>6° (service calibration required)</li> </ul>
Lens identification	Automatic
fnumber	1.3
Image frequency	30 Hz
Focus	<ul> <li>Continuous LDM</li> <li>One-shot LDM</li> <li>One-shot contrast</li> <li>Manual</li> </ul>
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

<sup>1.</sup> Not supported when using macro.



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I	
Image presentation	
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	2
Viewfinder	No
Image adjustment	Automatic     Automatic maximum     Automatic minimum     Manual
Image presentation modes	
Infrared image	Yes
Visual image	Yes
MSX	Yes
Picture in picture	Resizable and movable
Gallery	Yes
Measurement	
Camera temperature range	<ul> <li>-20 to 120°C (-4 to 248°F)</li> <li>0 to 650°C (32 to 1202°F)</li> <li>Optional 300 to 1200°C (572 to 2192°F)</li> </ul>
Object temperature range and accuracy (for ambient temp. 15 to 35°C (59 to 95°F)	• Range –20 to 120°C (–4 to 248°F):
	<ul> <li>-20 to 100°C (-4 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):</li> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> </ul>
Inspection mode	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):         <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°</li> </ul>
Inspection mode FLIR Inspection route	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):         <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°</li> </ul>
•	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):         <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> </ul>
FLIR Inspection route	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F): <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> </ul>
FLIR Inspection route  Measurement analysis	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):         <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> <li>Enabled in the camera</li> </ul>
FLIR Inspection route  Measurement analysis  Spotmeter	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):         <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> <li>Enabled in the camera</li> <li>3 in live mode</li> </ul>
FLIR Inspection route  Measurement analysis  Spotmeter  Area	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F):         <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> <li>Enabled in the camera</li> <li>3 in live mode</li> <li>3 in live mode</li> <li>Automatic maximum/minimum markers within</li> </ul>
FLIR Inspection route  Measurement analysis  Spotmeter  Area  Automatic hot/cold detection	<ul> <li>100 to 120°C (212 to 248°F): ±2%</li> <li>Range 0 to 650°C (32 to 1202°F): <ul> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 650°C (212 to 1202°F): ±2%</li> </ul> </li> <li>Optional Range 300 to 1200°C (572 to 2192°F): ±2%</li> </ul> Enabled in the camera <ul> <li>3 in live mode</li> <li>Automatic maximum/minimum markers within area</li> <li>No measurements</li> <li>Center spot</li> <li>Hot spot</li> <li>Cold spot</li> <li>User preset 1</li> </ul>



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Video otrooming	
Video streaming	0 100
Radiometric infrared-video streaming (compressed)	Over UVC
Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture)	H.264 (AVC) over RTSP (Wi-Fi)
in, MGA, Visual, Ficture in Ficture)	<ul><li>MPEG4 over RTSP (Wi-Fi)</li><li>MJPEG over UVC and RTSP (Wi-Fi)</li></ul>
Visual video streaming	Yes
Digital camera	
Resolution	5 MP with LED light
	, , , , , , , , , , , , , , , , , , ,
Focus Field of view	Fixed 53° × 41°
Video lamp	
video iamp	Built-in LED light
Laser pointer	
Laser alignment	Position is automatically displayed on the infrared image
Laser distance meter	Activated by dedicated button
Laser	Class 2, 0.05–40 m (0.16–131 ft) ±1% of measured distance
Data communication interfaces	
Interfaces	USB 2.0, Bluetooth, Wi-Fi, DisplayPort
METERLiNK/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
Radio	
Operating frequency	Bluetooth + EDR/LE: 2402-2480 MHz
	WLAN 2.4 GHz: 2412–2462 MHz
	WLAN 5 GHz: 5150–5350 MHz (DFS: only slave mode)
	Note that frequency band 5150–5350 MHz is for indoor use only, see national regulations.
RF output (EIRP)	Bluetooth + EDR/LE: < 10 dBm
	WLAN: < 17 dBm
Antenna	Integrated PIFA antenna (gain: maximum 1.4 dBi)
Power system	
Battery type	Rechargeable Li-ion battery
Battery voltage	3.6 V
Battery operating time	> 4 hours at 25°C (77°F) with typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or two-bay charger
Charging time (using two-bay charger)	3.5 h to 90% capacity, on-screen indicator
	1



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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
	<u> </u>
Environmental data	15 to 5000 (5 10005)
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)/2 cycles
EMC	<ul> <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, class B (emission)</li> </ul>
Radio spectrum	<ul> <li>ETSI EN 300 328</li> <li>ETSI EN 301 893</li> <li>FCC 47 CFR part 15 C</li> <li>FCC 47 CFR part 15 E</li> </ul>
Encapsulation	IP 54 (IEC 60529)
Shock	25g (IEC 60068-2-27)
Vibration	2g (IEC 60068-2-6)
Safety	Camera:  IEC/EN 60950-1, IEC/EN 62368-1  Power supply:  IEC/EN 62368-1  CSA/UL/KC/SAA/PSE 60950-1
Physical data	
Weight (including battery)	1.3 kg (2.9 lb)
Size (L × W × H)	<ul> <li>Lens vertical: 140 × 201.3 × 84.1 mm (5.5 × 7.9 × 3.3 in)</li> <li>Lens horisontal: 140 × 201.3 × 167.3 mm (5.5 × 7.9 × 6.6 in)</li> </ul>
Battery weight	195 g (6.89 oz)
Battery size $(L \times W \times H)$	59 × 66 × 94 mm (2.3 × 2.6 × 3.7 in)
Tripod mounting	UNC 1/4"-20
Housing material	PCABS with TPE, magnesium
Color	Black
Warranty and service	
Warranty	http://www.flir.com/warranty/



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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     USB Type-C to HDMI and PD adapter     USB Type-C to USB Type-C cable (USB 2.0 standard)      Accessory box II:     Lens cap strap     Lens cleaning cloth     Neck strap      Battery (2 ea)     Battery charger     Hard transport case     Infrared camera with lens     Lens cap, front     Lens cap, front     Lens cap, front and rear (only for extra lenses)     License card: FLIR Thermal Studio Pro (3 month subscription)     FURD TIME TO THE TRANSPORT OF THE TRANSPO
Packaging, weight	5.8 kg (12.8 lb)
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in)
EAN-13	7332558012925
UPC-12	845188014612
Country of origin	Sweden

#### Supplies and accessories:

- T300238; Macro lens 2.0x with case
- T300095; IR lens, f=70 mm (6°) with case
- T131171ACC; Remote operation button
- T199300ACC; Battery
- T199347ACC; Hard transport case for FLIR T8xx, T5xx, and GF7x series
- T199601; Hand strap and neck strap
- T199610; Battery charger
- T199616; Option, High temperature, +300 to +1200°C
- T300030; Option, No radio
- T911997; Tripod
- T911998; HDMI 2-port video splitter
- T300369; Mounting kit (FLIR T5xx, T8xx, Exx)
- T850105; FLIR Inspection Route Camera Option
- T850111; Option, Dual streaming
- T199609; Option, Macro mode 50/71/101  $\mu m$  for  $24^\circ$
- T130337ACC; Calibration target
- T911630ACC; Power supply for camera, 15 W/3 A
- T911631ACC; USB 2.0 A to USB Type-C cable, 0.9 m
- T911633ACC; Power supply for battery charger
- T911705ACC; USB Type-C to USB Type-C cable (USB 2.0 standard), 1.0 m
- T911706ACC; Car adapter 12 V
- · T911845ACC; USB Type-C to HDMI and PD adapter
- T911846ACC; USB 2.0 A to USB Type-C with Power supply
- T300437ACC; Lens case
- T199589; IR lens, f=17 mm (24°) with case
- T199588; IR lens, f=29 mm (14°) with case

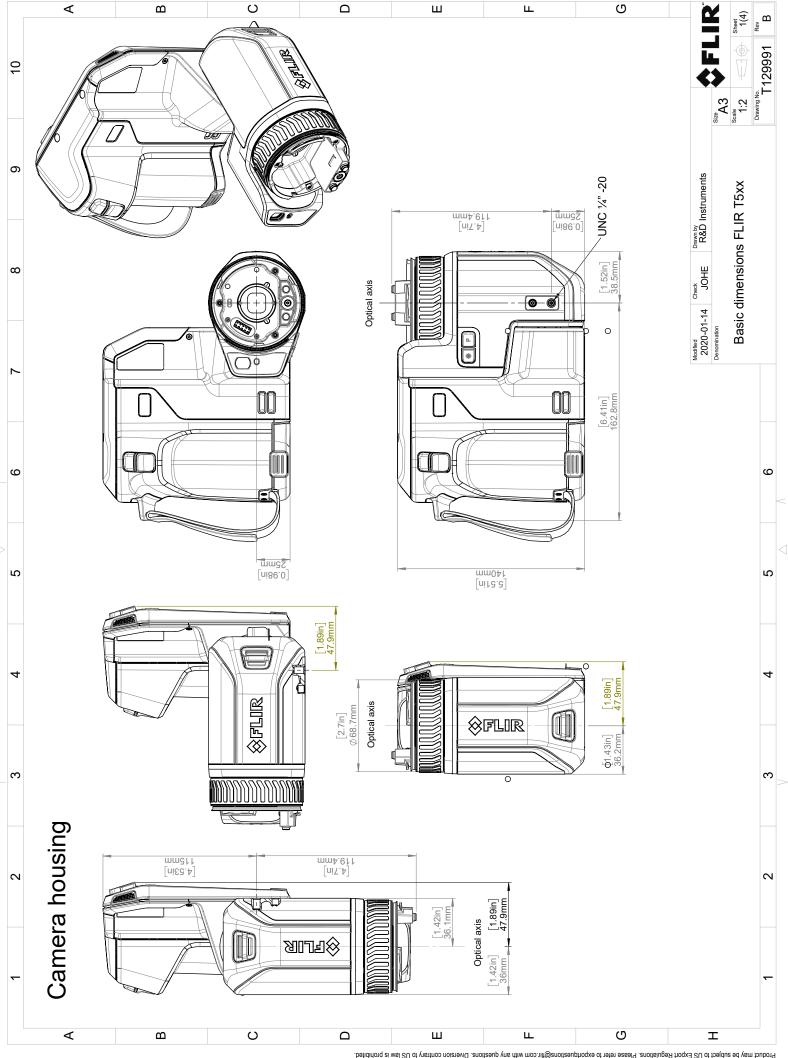
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### **FLIR T530 24°**

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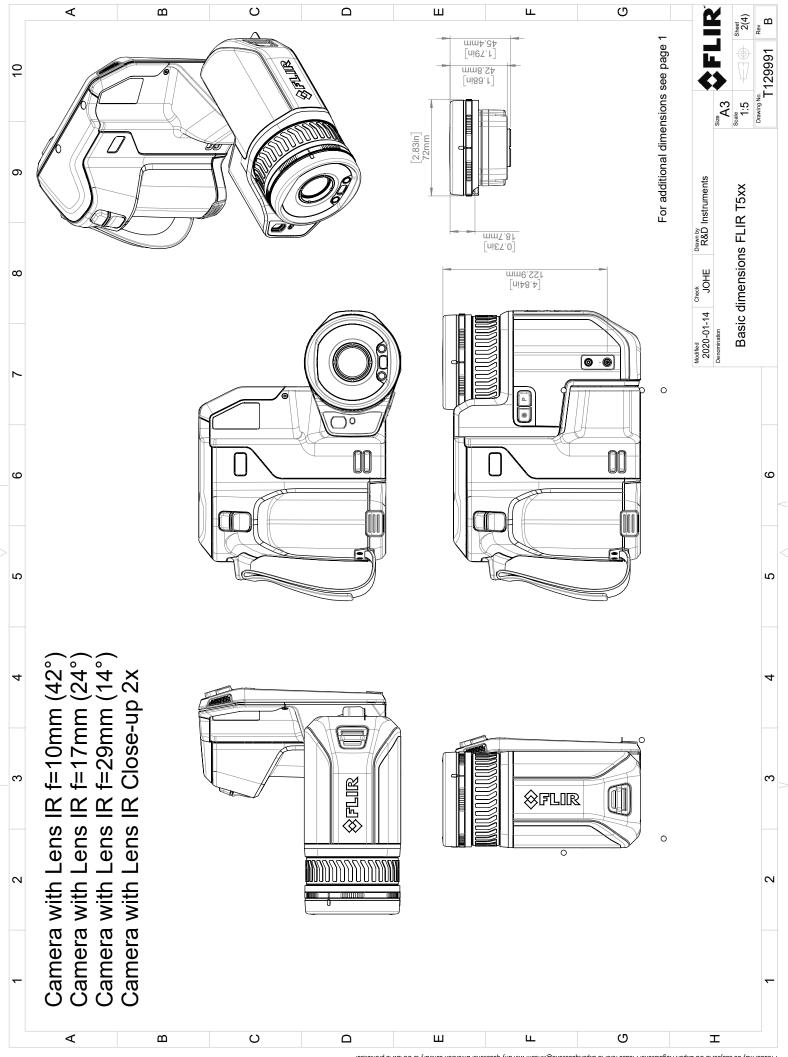
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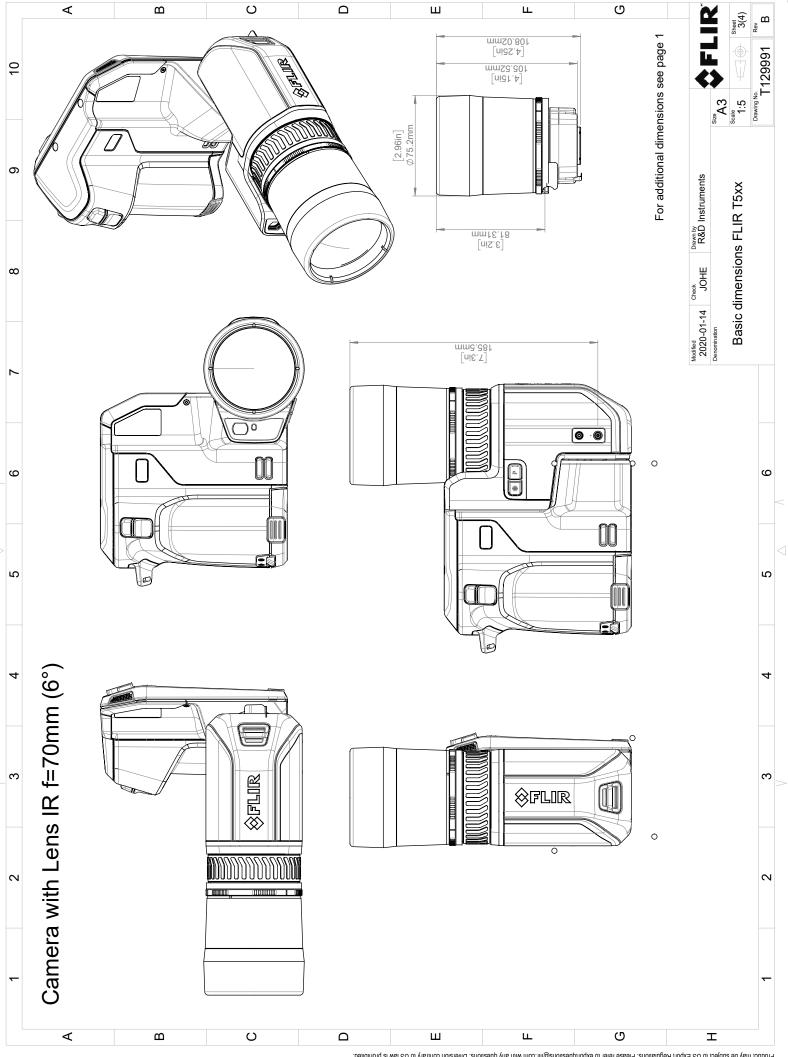
- T199590; IR lens, f=10 mm (42°) with case
- T198495; Pouch
- T197771ACC; Bluetooth Headset
- T300244; FLIR Route Creator Plugin for FLIR Thermal Studio Pro, 1 Year Subscription
- T300342; FLIR Screen-EST, Perpetual license
- T300243; FLIR Thermal Studio Pro, 1 Year Subscription
- T300083; FLIR Thermal Studio Pro, Perpetual license
- T300341; FLIR Thermal Studio Standard, 1 Year Subscription
- T300258; FLIR Thermal Studio Standard, Perpetual license
- T198583; FLIR Tools+ (download card incl. license key)
- 4232535; FLIR Research Studio, Professional Edition 1 Year Subscription (online activation)
- 4232556; FLIR Research Studio, Professional Edition Perpetual License (online activation)
- 4232590; FLIR Research Studio, Professional Edition Perpetual License (USB dongle)
- · 4232557; FLIR Research Studio, Professional Edition USB dongle only
- 4220499; FLIR Research Studio, Standard Edition 1 Year Subscription (online activation)
- 4220500; FLIR Research Studio, Standard Edition Perpetual License (online activation)
- 4220646; FLIR Research Studio, Standard Edition Perpetual License (USB dongle)
- 24971-010; FLIR Research Studio, Standard Edition USB dongle only
- T198696; FLIR ResearchIR Max 4 (hardware sec. dev.)
- T199013; FLIR ResearchIR Max 4 (printed license key)
- T199043; FLIR ResearchIR Max 4 Upgrade (printed license key)
- 4232591; FLIR ResearchIR to Research Studio, Professional Edition 1 Year License Upgrade
- INST-EW-0145; Extended Warranty 1 Year for T530
- INST-EWGM-0155; Premium Service Package for A3xx, T4xx mkll, T530
- INST-GM-0140; General Maintenance Package for T530



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Täby, Sweden July 07, 2021 AQ320246

### CE Declaration of Conformity - EU Declaration of Conformity

Product:

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 T5XX-, T8XX- and GF7X-series (Product Model Name FLIR-T8210).

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

**Directives** 

Directive 2012/19/EU Waste electrical and electric equipment
Directive 2011/65/EU RoHS and 2015/830/EU (Phtalates)
Directive 2014/53/EU Radio Equipment Directive (RED)

**Standards** 

Emission: EN 61000-6-3/A1:2011 EMC – Generic standards

Immunity: EN 61000-6-2:2005 Electromagnetic Compability Generic

EN 301489-1:2016 v2.1.0 ERM – EMC for radio equipment EN 301489-17:2012 v2.2.1 ERM – EMC Wideband data

EMC Radio ETSI EN 301 489-17 v3.2.0 EMC for radio, broadband data

transmission

RoHS: EN 50581:2012 Technical documentation

Radio: ETSI EN 300 328 v2.2.2 Harmonized EN covering essential

requirements of the R&TTE Directive

ETSI EN 301 893 v.2.1.1 5GHz WLAN

Safety: IEC 62368-1:2014 Ed 2 and Cor. 1:2015, EN Audio/video, information and

62368-1:2014/AC:2015/A11:2017 communication technology equipment,

Part 1: Safety

**FLIR Systems AB**Quality Assurance

Lea Dabiri

**Quality Manager**