

## P/N: 79306-0101

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### Website

http://www.flir.com

### **Customer support**

http://support.flir.com

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Imaging and optical data	
Infrared resolution	320 × 240 pixels
UltraMax (super-resolution)1	In FLIR Tools
NETD	<ul> <li>&lt;30 mK, 42° @ +30°C (+86°F)</li> <li>&lt;40 mK, 24° @ +30°C (+86°F)</li> <li>&lt;50 mK, 14° @ +30°C (+86°F)</li> </ul>
Field of view	<ul> <li>42° × 32°</li> <li>24° × 18°</li> <li>14° × 10°</li> </ul>
Minimum focus distance	<ul> <li>0.15 m (0.49 ft.), 42°</li> <li>0.15 m (0.49 ft.), 24°</li> <li>1.0 m (3.28 ft.), 14°</li> <li>Macro mode 103 μm as option to 24°</li> </ul>
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)	<ul> <li>2.41 mrad/pixel, 42°</li> <li>1.31 mrad/pixel, 24°</li> <li>0.75 mrad/pixel, 14°</li> </ul>
Lens identification	Automatic
f number	<ul> <li>1.1, 42°</li> <li>1.3, 24°</li> <li>1.5, 14°</li> </ul>
Image frequency	30 Hz

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

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Imaging and optical data	
Focus	Continuous LDM One-shot LDM One-shot contrast Manual
Field of view match	Yes
Digital zoom	1-4x 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	2
Viewfinder	No
Image adjustment	<ul><li>Automatic</li><li>Automatic maximum</li><li>Automatic minimum</li><li>Manual</li></ul>
Image presentation modes	
Infrared image	Yes
Visual image	Yes
MSX	Yes
Picture in picture	Resizable and movable
Gallery	Yes
Measurement	
Object temperature range	<ul> <li>-20 to +120°C (-4 to +248°F)</li> <li>0-650°C (32-1202°F)</li> <li>Optional: 300-1200°C (572-2192°F)</li> </ul>
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)



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Measurement analysis	
Spotmeter	3 in live mode
Area	3 in live mode
Automatic hot/cold detection	Automatic maximum/minimum markers within area
Color alarm (Isotherm)	Above     Below     Interval     Condensation     Insulation
Measurement presets	<ul> <li>No measurements</li> <li>Center spot</li> <li>Hot spot</li> <li>Cold spot</li> <li>User preset 1</li> <li>User preset 2</li> </ul>
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 at 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
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



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Image annotations	
Voice	60 seconds with 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 only
Sketch	From touchscreen
METERLINK	Yes, several readings
Area measurement information	Yes
GPS	Location data automatically added to every still image and 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)	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	
1	53° × 41°
Video lamp	53° × 41°  Built-in LED light
Video lamp  Laser pointer	
Laser pointer	Built-in LED light  Position is automatically displayed on the infrared
Laser pointer  Laser alignment	Built-in LED light  Position is automatically displayed on the infrared image
Laser pointer  Laser alignment  Laser distance meter	Position is automatically displayed on the infrared image  Activated by dedicated button  Class 2, 0.05–40 m (0.16–131 ft.) ±1% of
Laser pointer  Laser alignment  Laser distance meter  Laser	Position is automatically displayed on the infrared image  Activated by dedicated button  Class 2, 0.05–40 m (0.16–131 ft.) ±1% of
Laser pointer  Laser alignment  Laser distance meter  Laser  Data communication interfaces	Built-in LED light  Position is automatically displayed on the infrared image  Activated by dedicated button  Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance
Laser pointer  Laser alignment  Laser distance meter  Laser  Data communication interfaces  Interfaces	Position is automatically displayed on the infrared image  Activated by dedicated button  Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance  USB 2.0, Bluetooth, Wi-Fi, DisplayPort  Communication with headset and external
Laser pointer  Laser alignment  Laser distance meter  Laser  Data communication interfaces  Interfaces  Bluetooth	Position is automatically displayed on the infrared image  Activated by dedicated button  Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance  USB 2.0, Bluetooth, Wi-Fi, DisplayPort  Communication with headset and external sensors
Laser pointer  Laser alignment  Laser distance meter  Laser  Data communication interfaces  Interfaces  Bluetooth  Wi-Fi	Position is automatically displayed on the infrared image  Activated by dedicated button  Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance  USB 2.0, Bluetooth, Wi-Fi, DisplayPort  Communication with headset and external sensors  Peer to peer (ad hoc) or infrastructure (network)  Microphone and speaker for voice annotation of



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Data communication interfaces	
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	> 4 hours at 25°C (68°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
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)/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 Class B (emission)</li> </ul>
Radio spectrum	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2
Encapsulation	IP 54 (IEC 60529)
Shock	25° (IEC 60069 2 27)
	25g (IEC 60068-2-27)
Vibration	2g (IEC 60068-2-6)
Vibration Safety	
	2g (IEC 60068-2-6)
Safety	2g (IEC 60068-2-6)
Safety Physical data	2g (IEC 60068-2-6) EN/UL/CSA/PSE 60950-1
Physical data Weight (including battery)	2g (IEC 60068-2-6)  EN/UL/CSA/PSE 60950-1  1.3 kg (2.9 lb.)  • Lens vertical: 140 × 201.3 × 84.1 mm (5.5 × 7.9 × 3.3 in.)  • Lens horisontal: 140 × 201.3 × 167.3 mm (5.5
Physical data Weight (including battery) Size (L × W × H)	2g (IEC 60068-2-6)  EN/UL/CSA/PSE 60950-1  1.3 kg (2.9 lb.)  • Lens vertical: 140 × 201.3 × 84.1 mm (5.5 × 7.9 × 3.3 in.)  • Lens horisontal: 140 × 201.3 × 167.3 mm (5.5 × 7.9 × 6.6 in.)
Physical data Weight (including battery) Size (L × W × H)  Battery weight	2g (IEC 60068-2-6)  EN/UL/CSA/PSE 60950-1  1.3 kg (2.9 lb.)  • Lens vertical: 140 × 201.3 × 84.1 mm (5.5 × 7.9 × 3.3 in.)  • Lens horisontal: 140 × 201.3 × 167.3 mm (5.5 × 7.9 × 6.6 in.)  195 g (6.89 oz.)
Physical data Weight (including battery) Size (L × W × H)  Battery weight Battery size (L × W × H)	2g (IEC 60068-2-6)  EN/UL/CSA/PSE 60950-1  1.3 kg (2.9 lb.)  • Lens vertical: 140 × 201.3 × 84.1 mm (5.5 × 7.9 × 3.3 in.)  • Lens horisontal: 140 × 201.3 × 167.3 mm (5.5 × 7.9 × 6.6 in.)  195 g (6.89 oz.)  59 × 66 × 94 mm (2.3 × 2.6 × 3.7 in.)



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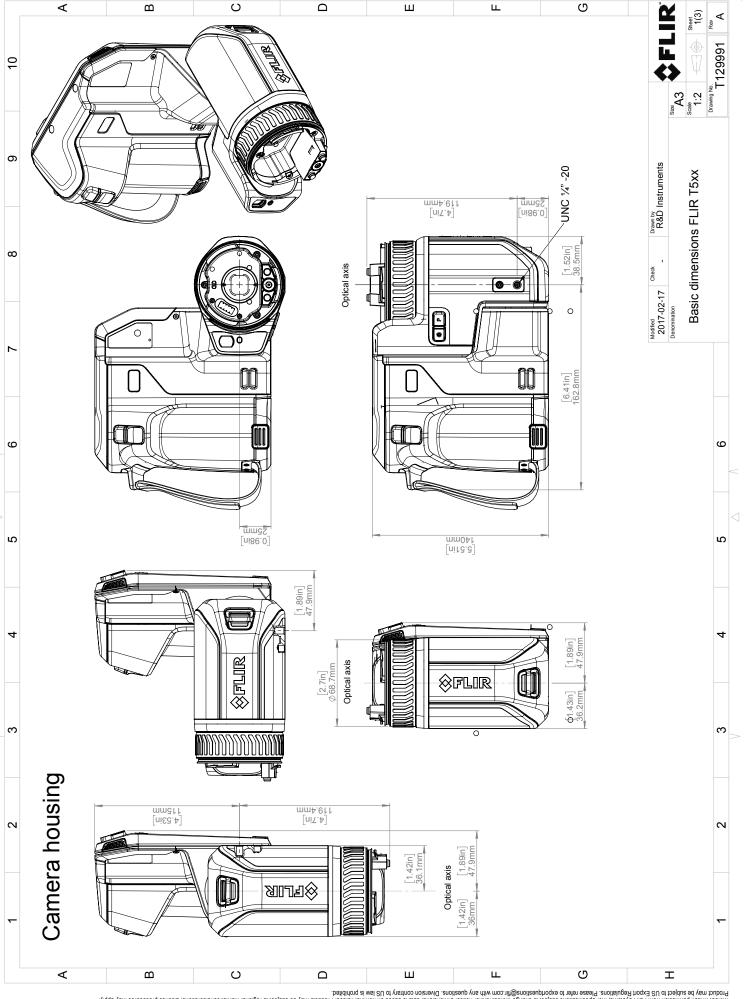
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Warranty and service	
Warranty	http://www.flir.com/warranty/
Shipping information	
Packaging, type	Cardboard box
Packaging, contents	Accessory box I:     Power supply for battery charger     Power supply, 15 W/3 A     Printed documentation     SD card (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:     Lanyard strap, battery charger     Lens cap strap     Lens cleaning cloth     Neck strap      Battery (2 ea)     Battery charger     Extra lens, 14°     Extra lens, 42°     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	Sweden: 7332558012963     Estonia: 4743254003248
UPC-12	845188014650
Country of origin	Sweden and/or Estonia

## Supplies and accessories:

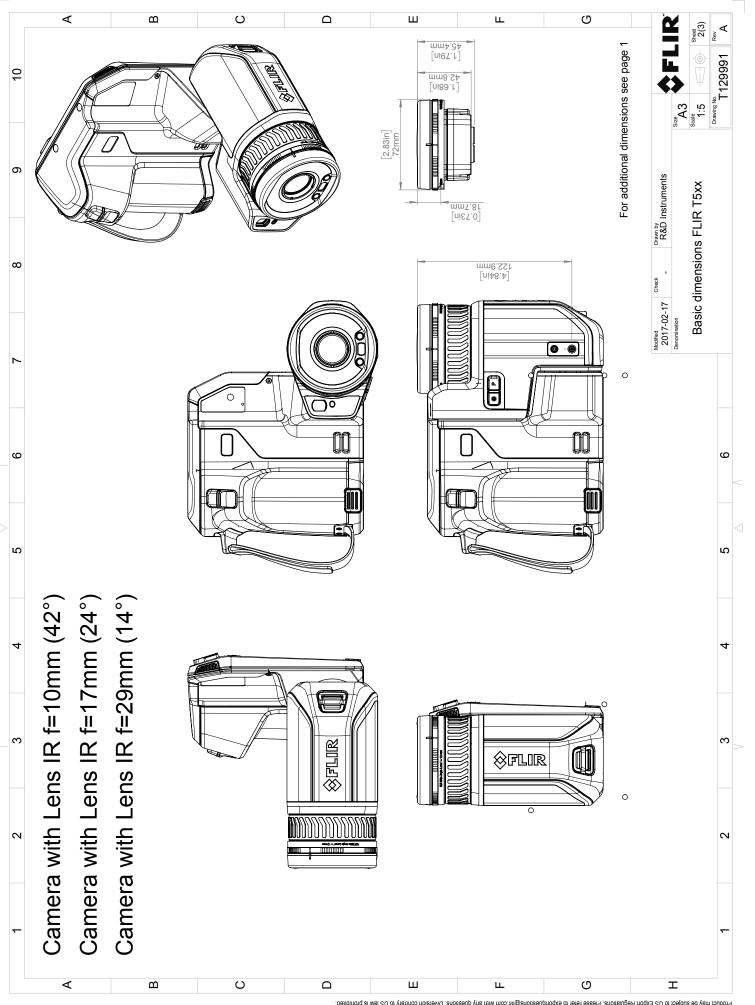
- T198495; Pouch
- T197771ACC; Bluetooth Headset
- T911705ACC; USB Type-C to USB Type-C cable (USB 2.0 standard), 1.0 m
- T911632ACC; USB Type-C to HDMI adapter, standard specification UH311
- T911631ACC; USB 2.0 A to USB Type-C cable, 0.9 m
- T911630ACC; Power supply for camera, 15 W/3 A
- T911633ACC; Power supply for battery charger
- T199610; Battery charger
- T199300ACC; Battery
- T199601; Hand strap and neck strap
- T199347ACC; Hard transport case
- T199609; Macro mode 71/103  $\mu m$  for 24°
- T199616; High temperature option, +300 to +1200°C
- T198583; FLIR Tools+ (download card incl. license key)
- 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)

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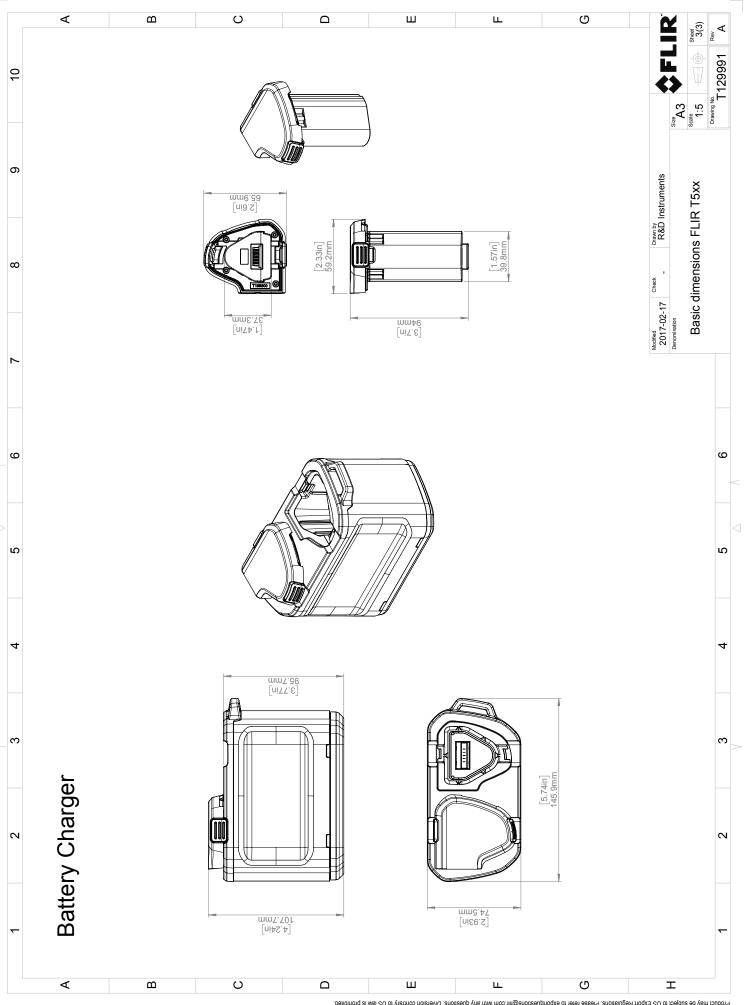


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AQ320246

Täby, Sweden

June 29, 2017

# CE Declaration of Conformity – EU Declaration of Conformity

Name and address of the manufacturer: Product: FLIR T5XX -series

FLIR Systems AB

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 -series (Product Model Name FLIR-T8210).

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

Directives:

Directive Directive Directive

Electromagnetic Compability 2014/30/EU Directive Directive

Waste electrical and electric equipment Low Voltage Directive

Limitation of exposure to electromagnetic fields (SAR) Radio Equipment Directive (RED) 2014/35/EU 2012/19/EU 2014/53/EU 1999/519/EC

Standards:

mmunity:

Radio: Laser:

EMC for radio, broadband data transmission ETSI EN 301 489-1 + -17 EMC Radio: Emission:

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

Electromagnetic Compability Generic ERM – EMC for radio equipment EN 301489-17:2012 v2.2.1 EN 301489-1:2016 v2.1.0 EN 61000-6-2:2005

requirements of the R&TTE Directive Harmonized EN covering essential ERM – EMC Wideband data Safety of laser products ETSI EN 300 328 v2.1.1 EN 60825-1

Handheld and body mounted wireless Handheld and body mounted wireless EN 50566:2013/AC:2014

**5GHz WLAN** 

ETSI EN 301 893 v.2.1.1

Information technology equipment IEC 60950-1:2005+A1:2009+ A2:2013 EN 60950-1:2006+ EN 62209-02:2010

Safety:

SAR:

A11:2009+AC:2011+A12:2011

**FLIR Systems AB** 

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to tolar

Quality Manager

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Low Voltage Directive 2014/35/EU

Waste electrical and electric equipment 2012/19/EU

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Directive

Directive

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Handheld and body mounted wireless

EN 50566:2013/AC:2014

Safety:

SAR:

A11:2009+AC:2011+A12:2011

**FLIR Systems AB** 

Quality Assurance

Lea Dabiri

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Quality Manager

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Low Voltage Directive 2014/35/EU

Waste electrical and electric equipment 2012/19/EU

2014/53/EU 1999/519/EC Directive Directive

Directive

Directive

Limitation of exposure to electromagnetic fields (SAR) Radio Equipment Directive (RED)

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Radio: Laser:

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ERM – EMC Wideband data EN 301489-17:2012 v2.2.1 EN 60825-1

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Handheld and body mounted wireless

EN 50566:2013/AC:2014

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SAR:

A11:2009+AC:2011+A12:2011

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