

## P/N: 79306-0101

## Copyright

© 2017, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

#### **Document identity**

Publ. No.: 79306-0101

Release: Commit: 46844 Language: en-US Modified: 2017-12-11 Formatted: 2017-12-11

#### 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	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	<ul> <li>0.65 m (2.13 ft.), 42°</li> <li>0.5 m (1.64 ft.), 24°</li> <li>1.0 m (3.28 ft.), 14°</li> </ul>	
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.

1 (11) www.flir.com



P/N: 79306-0101

Imaging and optical data	
Focus	Continuous LDM One-shot LDM One-shot contrast Manual
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 x 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)



P/N: 79306-0101

Measurement analysis	
Spotmeter	3 in live mode
Area	3 in live mode
Automatic hot/cold detection	Automatic maximum/minimum markers within area
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	
Color alarm (isotherm)	Above     Below     Interval     Condensation (moisture/humidity/dewpoint)     Insulation
Measurement function alarm	Audible/visual alarms (above/below) on any selected measurement function
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



P/N: 79306-0101

	_
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	Wireless connection (Bluetooth) to:
	FLIR meters with METERLINK
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)	<ul> <li>H.264 (AVC) over RTSP (Wi-Fi)</li> <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	Fixed
Field of view	53° × 41°
Video lamp	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



P/N: 79306-0101

Data communication interfaces		
USB standard	USB 2.0 High Speed	
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	25g (IEC 60068-2-27)	
Vibration	2g (IEC 60068-2-6)	
Safety	EN/UL/CSA/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 × W × H)	59 × 66 × 94 mm (2.3 × 2.6 × 3.7 in.)	
Tripod mounting	UNC 1/4"-20	



P/N: 79306-0101

© 2017, FLIR Systems, Inc. #79306-0101; r. /46844; en-US

Physical data		
Housing material	PCABS with TPE, magnesium	
Color	Black	
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 (2 ea) Battery charger Extra lens, 14° 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	6.4 kg (14.1 lb.)	
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)	
EAN-13	<ul><li>Sweden: 7332558012963</li><li>Estonia: 4743254003248</li></ul>	
UPC-12	845188014650	
Country of origin	Sweden and/or Estonia	

### Supplies and accessories:

- T198495; Pouch
- T197771ACC; Bluetooth Headset
- T911706ACC; Car adapter 12 V
- T199588; Lens 14° + case
- T199590; Lens 42° + case
- T199589; Lens 24° + case
- 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

## **\$FLIR**

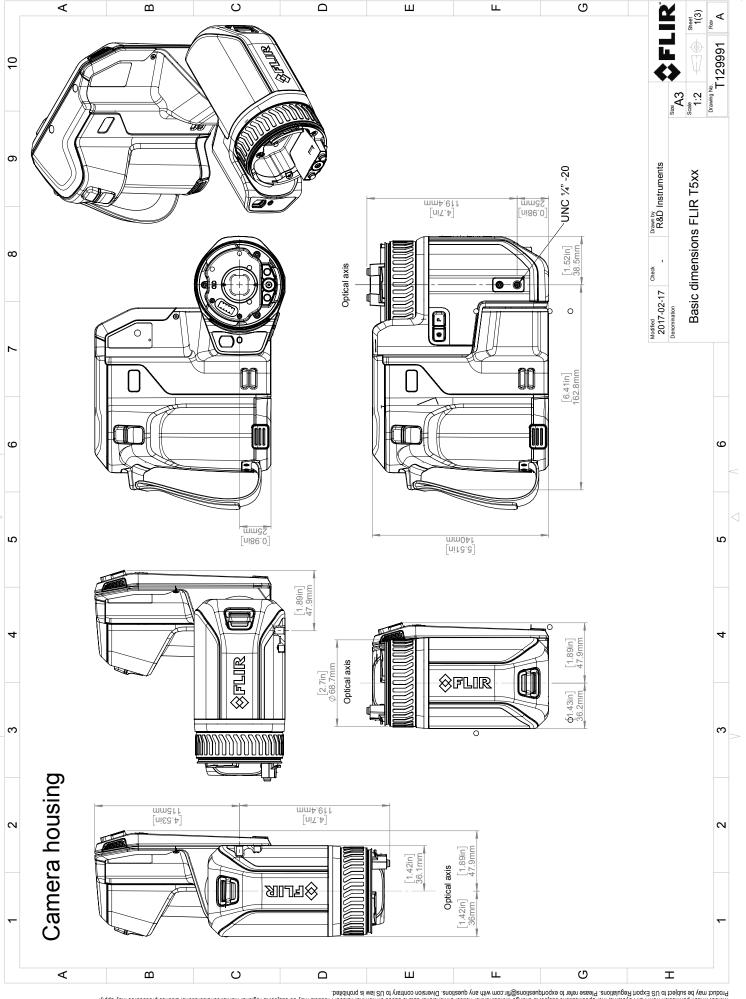
## FLIR T530 24° + 14° & 42°

P/N: 79306-0101

© 2017, FLIR Systems, Inc. #79306-0101; r. /46844; en-US

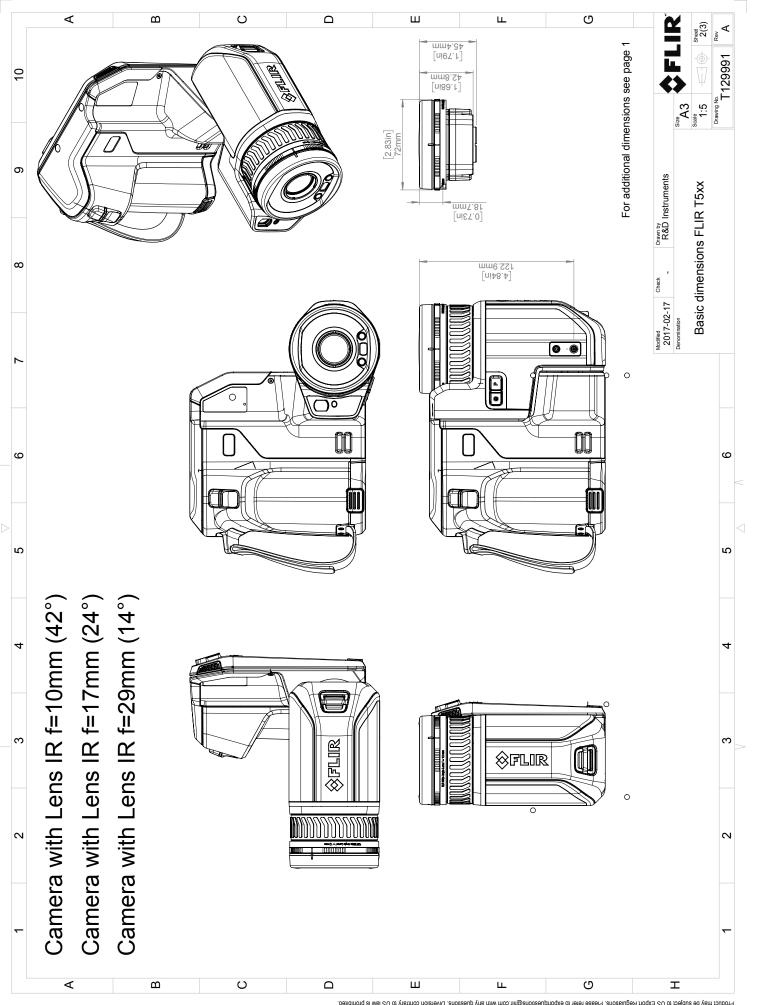
- T199601; Hand strap and neck strap
- T199347ACC; Hard transport case
- T199609; Macro mode 71/103  $\mu m$  for 24°
- T199616; High temperature option, +300 to +1200°C
- T198583; FLIR Tools+ (download card incl. license key)
- T198696; FLIR ResearchIR Max 4 (hardware sec. dev.)
- T199013; FLIR ResearchIR Max 4 (printed license key)
- T199043; FLIR ResearchIR Max 4 Upgrade (printed license key)

7 (11) www.flir.com



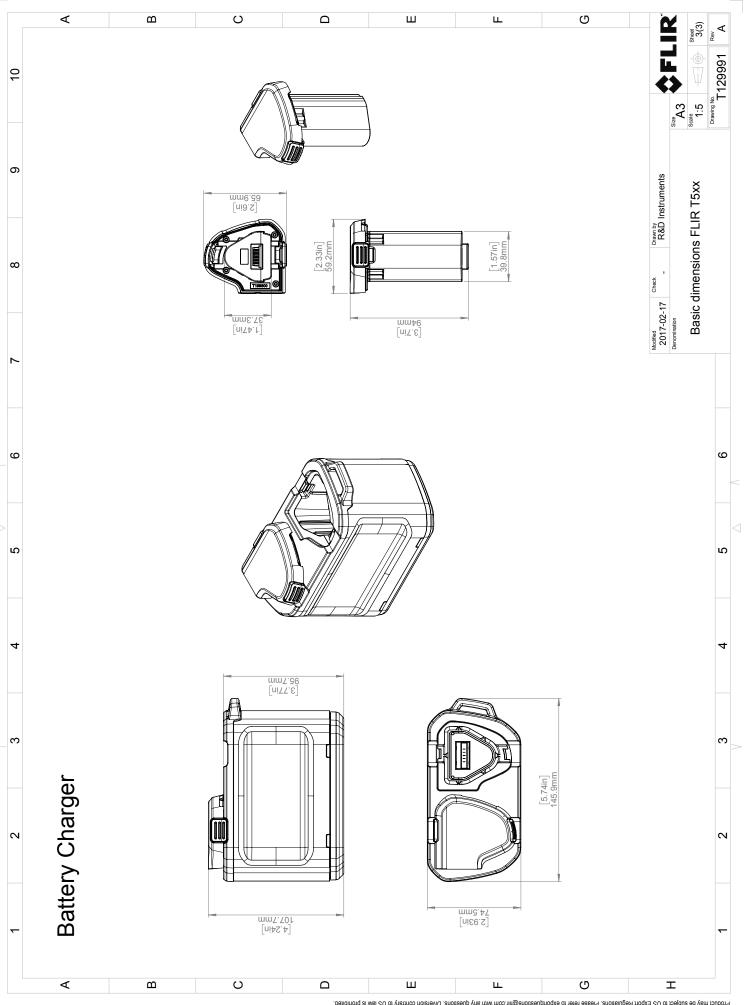
© 2016, FLIR Systems, Inc. All rights reserved worldwide. No part of this drawing may be reproduced, stored in a retrieval system, or transmitted in any for my or by any means, electronic, mechanical, problemspring, recording, or otherwise, without written permission from FLIR Systems, Inc. Specifications unbject to regions unithor notice. Dimensional data is based on nominal values. Products may be subject to regional market considerations. License procedures may apply.

Product may be subject to US Export Regulations. Please refer to exportquestions@inf.com with any questions. Diversion contrary to US law is prohibited.



© 2016, FLIR Systems, Inc. All rights reserved worldwide. No part of this drawing may be reproduced, stored in a retrieval system, or transmitted in any fore upon, or by any means, electronic, mechanical, protocopying, recording, or otherwise, without written permission from FLIR Systems, Inc. Specifications upon the properties of the stored or notice. Diversion requires to may be subject to regional market considerations. License procedures may apply.

Product may be subject to US Export Regulations. Pleaser refer to exportquestions@incom with any questions. Diversion contrary to US law is prohibited.



© 2016, FLIR Systems, Inc. All rights reserved worldwide. No part of this drawing may be reproduced, stored in a retrieval system, or transmitted in any for uniten permission from FLIR Systems, Inc. Specifications uniten without written permission from FLIR Systems, Inc. Specifications uniten to export the systems. Inc. Specifications uniten product may be subject to regional market considerations. License procedures may apply. Product may be subject to regional market considerations. License procedures may apply.



November 13, 2017 Täby, Sweden

AQ320246

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

Product: FLIR T5XX -series

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 -series (Product Model Name FLIR-T8210).

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

n:	rec	-iv	100
וט	1ec	LIV	E5.

Directive	2014/30/EU	Electromagnetic Compability
Directive	2014/35/EU	Low Voltage Directive
Directive	2012/19/EU	Waste electrical and electric equipment
Directive	2014/53/EU	Radio Equipment Directive (RED)
Directive	1999/519/EC	Limitation of exposure to electromagnetic fields (SAR)
Directive	2011/65/EU	RoHS and 2015/830/EU

#### Standards:

SAR:

Safety:

EMC Radio:	ETSI EN 301 489-1 + -17	EMC for radio, broadband data transmission
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
Laser:	EN 60825-1	Safety of laser products
Radio:	ETSI EN 300 328 v2.1.1	Harmonized EN covering essential

	•
	requirements of the R&TTE Directive
ETSLEN 301 893 v.2.1.1	5GHz WLAN

EN 303 413 v1.1.0	Radio Spectrum Efficiency (gps)
EN 50566:2013/AC:2014	Handheld and body mounted wireless
EN 62209-02:2010	Handheld and body mounted wireless
100 1000 1 1000 11111	

LIN 02203 02.2010	Hariancia and body mounted wireless
IEC 60950-1:2005+A1:2009+	Information technology equipment
A2:2013 EN 60950-1:2006+	

A11:2009+AC:2011+A12:2011

RoHS: EN 50581:2012 Technical documentation

**FLIR Systems AB**Quality Assurance

Lea Dabiri Quality Manager