

# P/N: 79303-0101

### Copyright

© 2020, 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.: 79303-0101 Commit: 70860 Language: Modified: 2020-10-08

Formatted: 2020-10-08

#### 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) <sup>1</sup>	Yes
NETD	<30 mK @ +30°C (+86°F)
Field of view	42° × 32°
Minimum focus distance	0.15 m (0.49 ft.)
Minimum focus distance with MSX	0.65 m (2.13 ft.)
Focal length	10 mm (0.39 in.)
Spatial resolution (IFOV)	2.41 mrad/pixel
Available extra lenses	24° (AutoCal)     14° (AutoCal)     6° (service calibration required)
Lens identification	Automatic
f number	1.1
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
Screen size	4 in.

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



# FLIR T530 $42^{\circ}$

P/N: 79303-0101

© 2020, FLIR Systems, Inc. #79303-0101; r. 70860;

Image presentation	
	80°
Viewing angle	
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	-20 to 120°C (-4 to 248°F)     0 to 650°C (32 to 1202°F)     Optional 300 to 1200°C (572 to 2192°F)
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):  -20 to 100°C (-4 to 212°F): ±2°C (±3.6°F)  100 to 120°C (212 to 248°F): ±2%  Range 0 to 650°C (32 to 1202°F):  0 to 100°C (32 to 212°F): ±2°C (±3.6°F)  100 to 650°C (212 to 1202°F): ±2%  Optional Range 300 to 1200°C (572 to 2192°F): ±2%
Screening mode	
Sampling average mode	Recommended temperature range: 30 to 45°C (86 to 113°F) in stable room temperature Accuracy (drift): ±0.3°C (±0.5°F)²
Inspection mode	
FLIR Inspection route	Enabled in the camera
Measurement analysis	
Spotmeter	3 in live mode
Area	3 in live mode
Automatic hot/cold detection	Automatic maximum/minimum markers within area

<sup>2.</sup> No external blackbody needed.



P/N: 79303-0101

© 2020, FLIR Systems, Inc. #79303-0101; r. 70860;

Measurement analysis	
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
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	<ul> <li>Iron</li> <li>Gray</li> <li>Rainbow</li> <li>Arctic</li> <li>Lava</li> <li>Rainbow HC</li> </ul>
Setup commands	Local adaptation of units, language, date, and time formats
Languages	21
Service functions	
Camera software update	Using USB cable or SD card
Storage of images	
Storage media	Removable memory: SD card
Time lapse (Periodic image storage)	10 seconds to 24 hours (infrared)
Remote control operation	Using USB cable or Wi-Fi
Image file format	Standard JPEG, measurement data included. Infrared-only mode
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



P/N: 79303-0101

© 2020, FLIR Systems, Inc. #79303-0101; r. 70860;

Image envetations	1
Image annotations	
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
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	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
USB standard	USB 2.0 High Speed
Video out	DisplayPort



P/N: 79303-0101

© 2020, FLIR Systems, Inc. #79303-0101; r. 70860;

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
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>
	1 00 47 Of the art to oldso B (cirilosion)
Radio spectrum	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2
Radio spectrum  Encapsulation	ETSI EN 300 228     FCC Part 15.249
	<ul> <li>ETSI EN 300 228</li> <li>FCC Part 15.249</li> <li>RSS-247 Issue 2</li> </ul>
Encapsulation	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2  IP 54 (IEC 60529)
Encapsulation Shock	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2  IP 54 (IEC 60529)  25g (IEC 60068-2-27)
Encapsulation Shock Vibration	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2     IP 54 (IEC 60529)     25g (IEC 60068-2-27)     2g (IEC 60068-2-6)
Encapsulation Shock Vibration Safety	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2     IP 54 (IEC 60529)     25g (IEC 60068-2-27)     2g (IEC 60068-2-6)
Encapsulation Shock Vibration Safety Physical data	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2  IP 54 (IEC 60529)  25g (IEC 60068-2-27)  2g (IEC 60068-2-6)  EN/UL/CSA/PSE 60950-1
Encapsulation Shock Vibration Safety  Physical data Weight (including battery)	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2  IP 54 (IEC 60529)  25g (IEC 60068-2-27)  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
Encapsulation Shock Vibration Safety  Physical data Weight (including battery) Size (L × W × H)	ETSI EN 300 228     FCC Part 15.249     RSS-247 Issue 2  IP 54 (IEC 60529)  25g (IEC 60068-2-27)  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.)

# **\$FLIR**

## **FLIR T530 42°**

P/N: 79303-0101

© 2020, FLIR Systems, Inc. #79303-0101; r. 70860;

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     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 (2 ea)     Battery charger     Hard transport case     Infrared camera with lens     Lens cap, front     Lens cap, front and rear (only for extra lenses)     License card: FLIR Thermal Studio Pro (3 month subscription) + FLIR Route Creator Plugin for Thermal Studio Pro (3 month subscription)	
Packaging, weight	5.8 kg (12.8 lb.)	
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)	
EAN-13	7332558012932	
UPC-12	845188014629	
Country of origin	Sweden	

### Supplies and accessories:

- T300238; Macro lens 2.0x with case
- 1196862ACC; Lens case for Exx, T5xx, and T8xx lenses
- 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)
- T300344; EST Camera kit (FLIR Exx/T5xx/T8xx)
- T850105; FLIR Inspection Route Camera Option
- T850112; Option, Auto-screening
- T850111; Option, Dual streaming
- T130337ACC; Calibration target
- T199588; IR lens, f=29 mm (14°) with case
- T199589; IR lens, f=17 mm (24°) with case

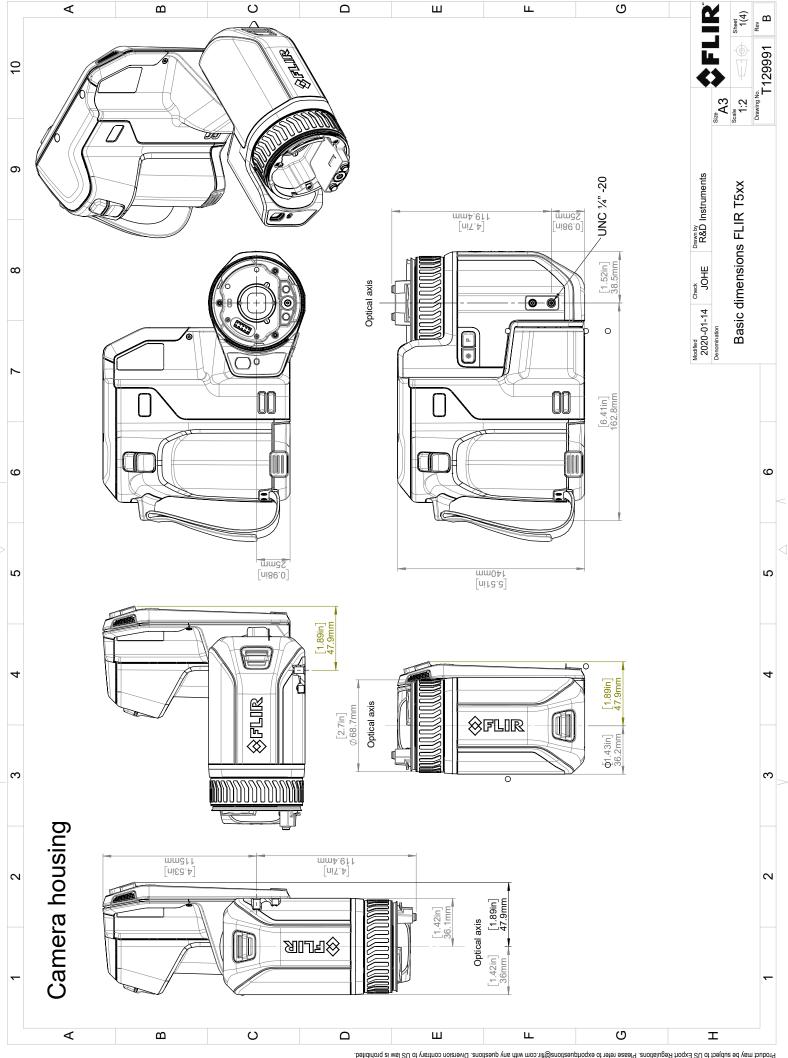
# **\$FLIR**°

## **FLIR T530 42°**

#### P/N: 79303-0101

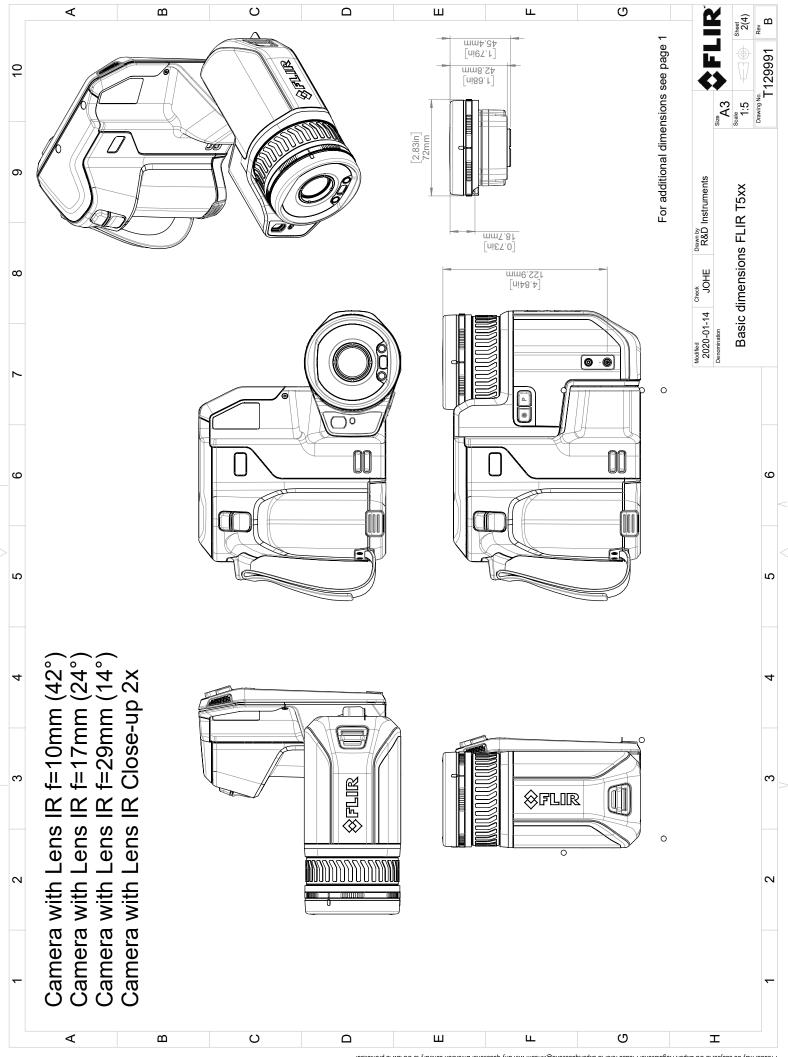
© 2020, FLIR Systems, Inc. #79303-0101; r. 70860;

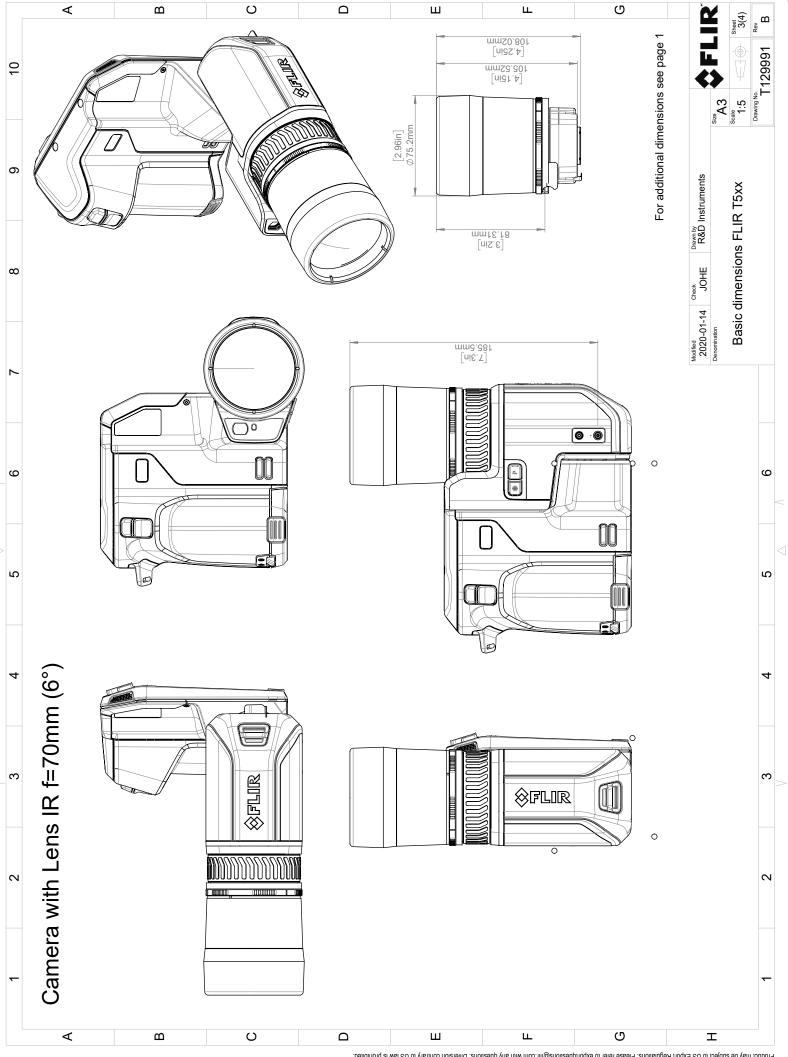
- T199590; IR lens, f=10 mm (42°) with case
- T300095; IR lens, f=70 mm (6°) with case
- T911630ACC; Power supply for camera, 15 W/3 A
- T911631ACC; USB 2.0 A to USB Type-C cable, 0.9 m
- T911633ACC; Power supply for battery charger
- T911705ACC; USB Type-C to USB Type-C cable (USB 2.0 standard), 1.0 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
- 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)
- 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)
- 4220499; FLIR Research Studio 1 Year Subscription (online activation)
- 4220500; FLIR Research Studio Perpetual License (online activation)
- 4220646; FLIR Research Studio Perpetual License (USB dongle)
- 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



© 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 form, or by any means, electronic, mechanical, produced may be subject to regional market considerations. License procedures may apply.

Product may be subject to US Export Regulations, Please refer to exportquestions@fir.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 form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written routes. Dimensional written permission from FLIR Systems, Inc. Specifications subject to change without further 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@filti.com with any questions. Diversion contravt by US law is prohibited.

February 2, 2019

Täby, Sweden

AQ320246

# CE Declaration of Conformity – EU Declaration of Conformity

Product: FLIR T5XX-, T8XX- and GF7X-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-, 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:

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:

Stalldalds.		
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
	ETSI EN 301 893 v.2.1.1	5GHz WLAN
	EN 303 413 v1.1.0	Radio Spectrum Efficiency (gps)
SAR:	EN 50566:2013/AC:2014	Handheld and body mounted wireless

SAR:

EN 50566:2013/AC:2014

EN 62209-02:2010

Safety:

IEC 60950-1:2005+A1:2009+ A2:2013 EN 60950-1:2006+

A11:2009+AC:2011+A12:2011

RoHS:

EN 50581:2012

Technical documentation

Handheld and body mounted wireless

Information technology equipment

**FLIR Systems AB Quality Assurance** 

Lea Dabiri

**Quality Manager**