

P/N: 79302-0101

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Document identity

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Website

http://www.flir.com

Customer support

http://support.flir.com

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Imaging and optical dataInfrared resolution320 × 240 pixelsInfrared resolution)1YesNETD<40 mK @ 30°C (86°F)Field of view24° × 18°Minimum focus distance. 0.15 m (0.49 ft) • Macro mode 103 µm as optionMinimum focus distance with MSX0.5 m (1.64 ft)Focal length17 mm (0.67 in)Spatial resolution (IFOV)1.31 mrad/pixelAvailable extra lenses• 42° (AutoCal) • 6° (service calibration required)Lens identificationAutomaticf number1.3Image frequency30 HzFocus• Continuous LDM • One-shot cDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousFocal plane array/spectral rangeUncooled microbolometer/7.5–14 µmDetector pitch17 µmImage presentation640 × 480 pixels (VGA)			
UltraMax (super-resolution)1YesNETD<40 mK @ 30°C (86°F)Field of view24° x 18°Minimum focus distance• 0.15 m (0.49 ft) • Macro mode 103 µm as optionMinimum focus distance with MSX0.5 m (1.64 ft)Focal length17 mm (0.67 in)Spatial resolution (IFOV)1.31 mrad/pixelAvailable extra lenses• 42° (AutoCal) • 6° (service calibration required)Lens identificationAutomaticf number1.3Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector dataFocus plane array/spectral rangeUncooled microbolometer/7.5-14 µmDetector pitch17 µmImage presentation640 × 480 pixels (VGA)	Imaging and optical data		
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HardHommstore (ker y)Field of view24° × 18°Minimum focus distance• 0.15 m (0.49 ft) • Macro mode 103 µm as optionMinimum focus distance with MSX0.5 m (1.64 ft)Focal length17 mm (0.67 in)Spatial resolution (IFOV)1.31 mrad/pixelAvailable extra lenses• 42° (AutoCal) • 6° (service calibration required)Lens identificationAutomaticf number1.3Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector dataIncooled microbolometer/7.5-14 µmDetector pitch17 µmImage presentation640 × 480 pixels (VGA)	UltraMax (super-resolution) ¹	Yes	
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Spatial resolution (IFOV)1.31 mrad/pixelAvailable extra lenses• 42° (AutoCal) • 14° (AutoCal) • 6° (service calibration required)Lens identificationAutomaticf number1.3Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector data1Focus pictor pitch17 µmImage presentation640 × 480 pixels (VGA)	Minimum focus distance with MSX	0.5 m (1.64 ft)	
Available extra lenses42° (AutoCal) • 14° (AutoCal) • 6° (service calibration required)Lens identificationAutomaticf number1.3Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousFocus protector data1Focus protector pitch17 μmImage presentation640 × 480 pixels (VGA)	Focal length	17 mm (0.67 in)	
• 42° (AutoCal) • 14° (AutoCal) • 6° (service calibration required)Lens identificationAutomaticf number1.3Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector dataFocus presentation17 μmImage presentation60 × 480 pixels (VGA)	Spatial resolution (IFOV)	1.31 mrad/pixel	
f number1.3Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector dataFocal plane array/spectral rangeUncooled microbolometer/7.5–14 µmDetector pitch17 µmImage presentation640 × 480 pixels (VGA)	Available extra lenses	• 14° (AutoCal)	
Image frequency30 HzFocus• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector dataFocal plane array/spectral rangeUncooled microbolometer/7.5–14 μmDetector pitch17 μmImage presentation640 × 480 pixels (VGA)	Lens identification	Automatic	
Focus· Continuous LDM · One-shot LDM · One-shot contrast · ManualField of view matchYesDigital zoom1-4× continuousDetector dataImage presentationImage presentation17 μmResolution640 × 480 pixels (VGA)	f number	1.3	
• Continuous LDM • One-shot LDM • One-shot contrast • ManualField of view matchYesDigital zoom1-4× continuousDetector dataImage presentationFocal plane array/spectral rangeUncooled microbolometer/7.5–14 μmDetector pitch17 μmImage presentation640 × 480 pixels (VGA)	Image frequency	30 Hz	
Digital zoom 1-4× continuous Detector data Focal plane array/spectral range Uncooled microbolometer/7.5-14 μm Detector pitch 17 μm Image presentation 640 × 480 pixels (VGA)	Focus	One-shot LDMOne-shot contrast	
Detector data Uncooled microbolometer/7.5–14 μm Focal plane array/spectral range Uncooled microbolometer/7.5–14 μm Detector pitch 17 μm Image presentation 640 × 480 pixels (VGA)	Field of view match	Yes	
Focal plane array/spectral range Uncooled microbolometer/7.5–14 μm Detector pitch 17 μm Image presentation 640 × 480 pixels (VGA)	Digital zoom	1–4× continuous	
Detector pitch 17 μm Image presentation 640 × 480 pixels (VGA)	Detector data		
Image presentation 640 × 480 pixels (VGA)	Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm	
Resolution 640 × 480 pixels (VGA)	Detector pitch	17 μm	
	Image presentation		
Surface brightness (cd/m ²) 400	Resolution	640 × 480 pixels (VGA)	
	Surface brightness (cd/m ²)	400	

1. Not supported when using macro.





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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	AutomaticAutomatic maximumAutomatic minimumManual
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%
Inspection mode	
FLIR Inspection route	Enabled in the camera
Measurement analysis	
Measurement analysis Spotmeter	3 in live mode
	3 in live mode 3 in live mode
Spotmeter	
Spotmeter Area	3 in live mode Automatic maximum/minimum markers within
Spotmeter Area Automatic hot/cold detection	3 in live mode Automatic maximum/minimum markers within area • No measurements • Center spot • Hot spot • Cold spot • User preset 1





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Measurement analysis		
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	 Arctic White hot Black hot Iron Lava Rainbow Rainbow HC 	
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:	
A	FLIR meters with METERLINK	
Area measurement information GPS	Yes 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	





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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	
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	



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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	
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	 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, class B (emission) 	
Radio spectrum	 ETSI EN 300 328 ETSI EN 301 893 FCC 47 CFR part 15 C FCC 47 CFR part 15 E 	
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)	 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) 	
Battery weight	195 g (6.89 oz)	
Battery size (L \times W \times H)	$59 \times 66 \times 94$ mm (2.3 × 2.6 × 3.7 in)	
Tripod mounting	UNC ¼"-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 License card: FLIR 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	7332558012925	
UPC-12	845188014612	
Country of origin	Sweden	

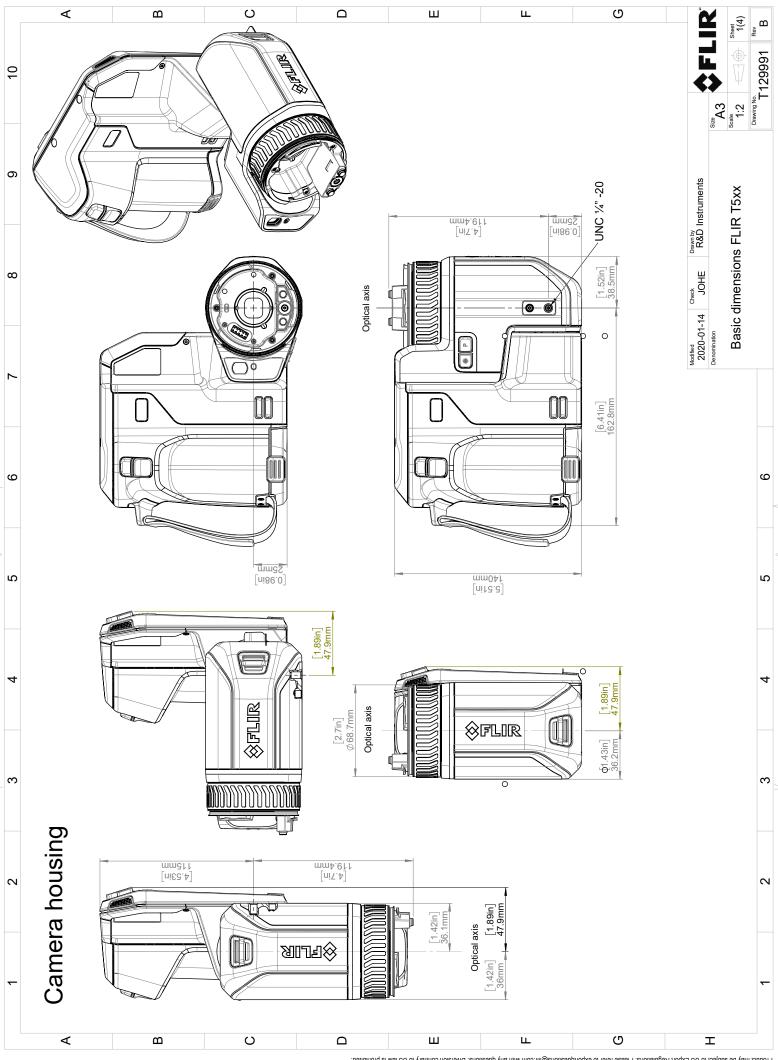
Supplies and accessories:

- T300238; Macro lens 2.0x 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 μm for 24°
- T130337ACC; Calibration target
- T199588; IR lens, f=29 mm (14°) with case
- T199589; IR lens, f=17 mm (24°) with case
- 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

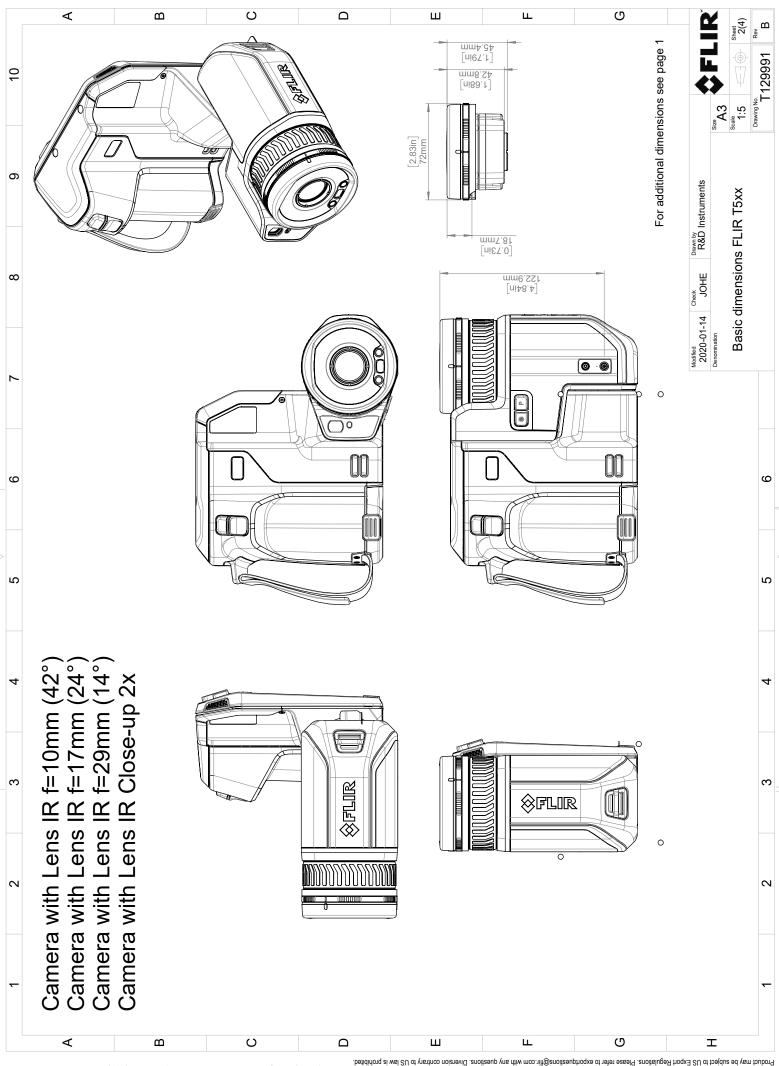


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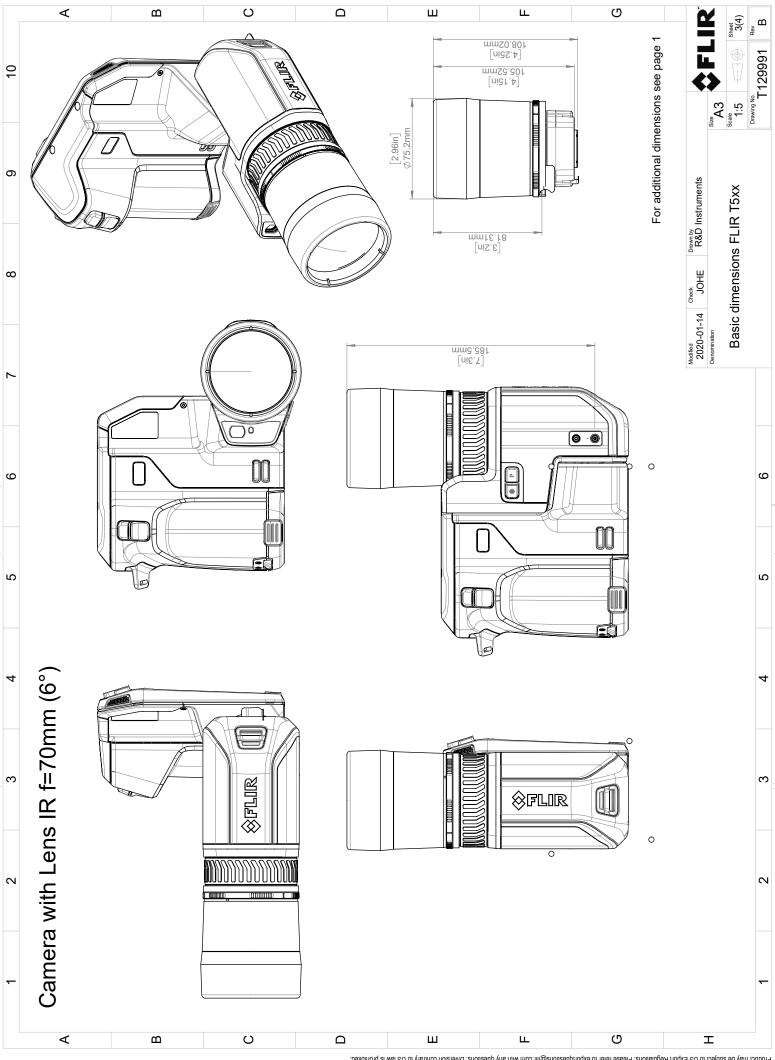
- T300437ACC; Lens case
- T198495; Pouch
- T197771ACC; Bluetooth Headset
- T300244; FLIR Route Creator Plugin for FLIR Thermal Studio Pro, 1 Year Subscription
- T300342; FLIR Screen-EST, Perpetual license
- T300243; FLIR Thermal Studio Pro, 1 Year Subscription
- T300083; FLIR Thermal Studio Pro, Perpetual license
- T300341; FLIR Thermal Studio Standard, 1 Year Subscription
- T300258; FLIR Thermal Studio Standard, Perpetual license
- T198583; FLIR Tools+ (download card incl. license key)
- 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 mkII, T530
- INST-GM-0140; General Maintenance Package for T530



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Täby, Sweden May 5, 2021

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:

Directives

Directive Directive	2012/19/EU 2011/65/EU	Waste electrical and electric equipment 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	L	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 v2.1.1		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 62368-1:2014/AC:2015/A	-	Audio/video, information and communication technology equipment, Part 1: Safety

FLIR Systems AB Quality Assurance

ter Polon

Lea Dabiri Quality Manager

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