

P/N: 79302-0201

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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	464 × 348 pixels
UltraMax (super-resolution)1	Yes
NETD	<40 mK @ +30°C (+86°F)
Field of view	24° × 18°
Minimum focus distance	 0.15 m (0.49 ft.) Macro mode 71 μm as option
Minimum focus distance with MSX	0.5 m (1.64 ft.)
Focal length	17 mm (0.67 in.)
Spatial resolution (IFOV)	0.90 mrad/pixel
Available extra lenses	 42° (AutoCal) 14° (AutoCal) 6° (service calibration required)
Lens identification	Automatic
f number	1.3
Image frequency	30 Hz
Focus	Continuous LDMOne-shot LDMOne-shot contrastManual
Field of view match	Yes
Digital zoom	1–6× 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

^{1.} Not supported when using macro.



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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	Object temperature range		Accuracy — for ambient temperature +15 to +35°C (+59 to +95°F)
-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%
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%
+300 to +1500°C (+572 to +2732°F)	+300 to +1500°C (+572 to +2732°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	
Measurement analysis		<u> </u>	
Spotmeter		3 in live mode	
Area		3 in live mode	
Automatic hot/cold detection		Automatic maximum/minimum markers within area	

area

^{2.} No external blackbody needed.



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Measurement analysis	
Measurement presets	 No measurements Center spot Hot spot Cold spot User preset 1 User preset 2
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	 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	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



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Area measurement information 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 Non-radiometric infrared-video recording H.264 to memory card Visual video recording H.264 to memory card Video streaming Radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture) Visual video streaming (compressed: IR, MSX, visual, Picture in Picture) Visual video streaming Ves Digital camera Resolution 5 MP with LED light Focus Fixed Fixed Field of view 53° x 41° Video lamp Built-in LED light Laser alignment Laser distance meter Laser distance meter Laser Class 2, 0.05-40 m (0.16-131 ft.) ±1% of measured distance Data communication interfaces Interfaces METERLiNK/Bluetooth Communication with headset and external sensors Wi-Fi Peer to peer (ad hoc) or infrastructure (network) Microphone and speaker for voice annotation of images USB USB Type-C: data transfer/video/power USB 2.0 High Speed Video out DisplayPort	Image annotations	
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: IR, MSX, visual, Picture in Picture) Visual video streaming Visual video streaming (compressed: IR, MSX, visual, Picture in Picture) Visual video streaming Visual video ver RTSP (Wi-Fi)	Area measurement information	Yes
Radiometric infrared-video recording Non-radiometric infrared-video recording H.264 to memory card Visual video recording H.264 to memory card Visual video recording H.264 to memory card Video streaming Radiometric infrared-video streaming (compressed: IR, MSX, visual, Picture in Picture) Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture) Visual video streaming Yes Digital camera Resolution 5 MP with LED light Focus Fixed Field of view 53° x 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 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 Sensors Wi-Fi Peer to peer (ad hoc) or infrastructure (network) Audio Microphone and speaker for voice annotation of images USB 198 USB Type-C: data transfer/video/power USB standard USB 2.0 High Speed	GPS	
Non-radiometric infrared-video recording H.264 to memory card Visual video recording H.264 to memory card H.264 to memory card Video streaming Radiometric infrared-video streaming (compressed: IR, MSX, visual, Picture in Picture) Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture) Pigital camera Pesolution SMP with LED light Focus Fixed Fixed Field of view 53° x 41° Video lamp Built-in LED light Laser alignment Position is automatically displayed on the infrared image Laser distance meter Laser Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance Data communication interfaces Interfaces 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 2.0 High Speed	Video recording in camera	
Visual video recording H.264 to memory card Video streaming Radiometric infrared-video streaming (compressed: IR, MSX, visual, Picture in Picture) Pigital camera Resolution Focus Fixed Field of view Video lamp Laser pointer Laser alignment Laser Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance Data communication interfaces Interfaces METERLiNK/Bluetooth Microphone and speaker for voice annotation of images USB USB tandard UVer UVC Over UVC H.264 (AVC) over RTSP (Wi-Fi) Pigutalized L.264 (AVC) over RTSP (Wi-Fi) H.264 (AVC) over RTSP (Wi-Fi) Per Uper IVC Autor And IN STAN (All operation) USB 10 B 10	Radiometric infrared-video recording	RTRR (.csq)
Video streaming Radiometric infrared-video streaming (compressed: IR, MSX, visual, Picture in Picture) Pigital camera Resolution Focus Fixed Field of view Video lamp Built-in LED light Laser pointer Laser alignment 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 Audio Microphone and speaker for voice annotation of images USB 198 Sund RTSP (Wi-Fi) H. 264 (AVC) over RTSP (Without)	Non-radiometric infrared-video recording	H.264 to memory card
Radiometric infrared-video streaming (compressed: IR, MSX, visual, Picture in Picture) Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture) Pigital camera Resolution Fixed Fixed Field of view Video lamp Built-in LED light Laser alignment Laser alignment Laser distance meter Laser alistance meter Laser Data communication interfaces Interfaces USB 2.0, Bluetooth, Wi-Fi, DisplayPort METERLiNK/Bluetooth Microphone and speaker for voice annotation of images USB USB 10, High Speed USB Type-C: data transfer/video/power USB Standard Video ly over RTSP (Wi-Fi) H. H. 264 (AVC) over RTSP (Wi-Fi) H. M. PEG4 over RTSP (Wi-Fi) H. M. PE4 (AVC) over RTSP (Wi-F	Visual video recording	H.264 to memory card
Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture)	Video streaming	
IR, MSX, visual, Picture in Picture) WPEG4 over RTSP (Wi-Fi) MPEG4 over RTSP (Wi-Fi) MJPEG over UVC and RTSP (William) MJPEG over UVC and RTSP (W	<u> </u>	Over UVC
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 10, Bluetooth, Wi-Fi DisplayPort Communication with headset and external sensors Wi-Fi Peer to peer (ad hoc) or infrastructure (network) Audio USB Type-C: data transfer/video/power USB standard USB 2.0 High Speed		MPEG4 over RTSP (Wi-Fi)
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 1.0 High Speed	Visual video streaming	Yes
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 1.0 High Speed	Digital camera	
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 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 108 USB Type-C: data transfer/video/power USB 2.0 High Speed	Resolution	5 MP with LED light
Video lamp Built-in LED light Laser pointer 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	Focus	Fixed
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 Type-C: data transfer/video/power USB standard USB 2.0 High Speed	Field of view	53° × 41°
Laser alignment Position is automatically displayed on the infrared image Laser distance meter Activated by dedicated button 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 Type-C: data transfer/video/power USB standard USB 2.0 High Speed	Video lamp	Built-in LED light
image Laser distance meter Activated by dedicated button 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 Type-C: data transfer/video/power USB standard USB 2.0 High Speed	Laser pointer	
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 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 Type-C: data transfer/video/power USB standard USB 2.0 High Speed	Laser alignment	1 .
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	Laser distance meter	Activated by dedicated button
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	Laser	
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	Data communication interfaces	
Sensors Wi-Fi Peer to peer (ad hoc) or infrastructure (network) Audio Microphone and speaker for voice annotation of images USB Type-C: data transfer/video/power USB standard USB 2.0 High Speed	Interfaces	USB 2.0, Bluetooth, Wi-Fi, DisplayPort
Audio Microphone and speaker for voice annotation of images USB USB Type-C: data transfer/video/power USB standard USB 2.0 High Speed	METERLiNK/Bluetooth	
images USB Type-C: data transfer/video/power USB standard USB 2.0 High Speed	Wi-Fi	Peer to peer (ad hoc) or infrastructure (network)
USB standard USB 2.0 High Speed	Audio	
	USB	USB Type-C: data transfer/video/power
Video out DisplayPort	USB standard	USB 2.0 High Speed
	Video out	DisplayPort
Video connector type DisplayPort over USB Type-C		



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Radio	T
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	 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 Class B (emission)
Radio spectrum	ETSI EN 300 228FCC Part 15.249RSS-247 Issue 2
Encapsulation	ID = 4 (IEQ 00=00)
	IP 54 (IEC 60529)
Shock	1P 54 (IEC 60529) 25g (IEC 60068-2-27)
	<u> </u>
Shock	25g (IEC 60068-2-27)
Shock Vibration	25g (IEC 60068-2-27) 2g (IEC 60068-2-6)
Shock Vibration Safety	25g (IEC 60068-2-27) 2g (IEC 60068-2-6)
Shock Vibration Safety Physical data	25g (IEC 60068-2-27) 2g (IEC 60068-2-6) EN/UL/CSA/PSE 60950-1
Shock Vibration Safety Physical data Weight (including battery)	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
Shock Vibration Safety Physical data Weight (including battery) Size (L × W × H)	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.)

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FLIR T540 24°

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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 charger FLIR Thermal Studio Pro license card (1 year subscription) Hard transport case Infrared camera with lens Lens cap, front Lens cap, front and rear (only for extra lenses)	
Packaging, weight	5.8 kg (12.8 lb.)	
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)	
EAN-13	7332558012970	
UPC-12	845188014667	
Country of origin	Sweden	

Supplies and accessories:

- T300238; Macro lens 2.0x with case
- T199300ACC; Battery
- T199610; Battery charger
- T199601; Hand strap and neck strap
- T199347ACC; Hard transport case for FLIR T8xx, T5xx, and GF7x series
- T300030; Option, No radio
- T199609; Option, Macro mode 50/71/101 μm for 24°
- T850105; FLIR Inspection Route Camera Option
- 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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FLIR T540 24°

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- T198495; Pouch
- T197771ACC; Bluetooth Headset
- T300244; FLIR Route Creator Plugin for FLIR Thermal Studio Pro, 1 Year Subscription
- T300243; FLIR Thermal Studio Pro, 1 Year Subscription
- T300083; FLIR Thermal Studio Pro, Perpetual license
- T300258; FLIR Thermal Studio, 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-0155; Extended Warranty 1 Year for A3xxf, T540, T600/bx, T610, T840, T860
- INST-EWGM-0165; Premium Service Package for T540, T600/bx, T610, T840, T860
- INST-GM-0150; General Maintenance Package for T540, T6xx, T840, T860