

P/N: 79302-0201

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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	464 × 348 pixels
UltraMax (super-resolution)	In FLIR Tools
NETD	<ul style="list-style-type: none"> • <30 mK, 42° @ +30°C • <40 mK, 24° @ +30°C • <50 mK, 14° @ +30°C
Field of view	<ul style="list-style-type: none"> • 42° × 32° • 24° × 18° • 14° × 10°
Minimum focus distance	<ul style="list-style-type: none"> • 0.3 m, 42° • 0.5 m, 24° • 1.0 m, 14° • Macro mode as option to 24°
Minimum focus distance with MSX	<ul style="list-style-type: none"> • 0.65 m, 42° • 0.5 m, 24° • 1.0 m, 14°
Focal length	<ul style="list-style-type: none"> • 10 mm, 42° • 18 mm, 24° • 29 mm, 14°
Spatial resolution (IFOV)	<ul style="list-style-type: none"> • 1.66 mrad/pix, 42° • 0.90 mrad/pix, 24° • 0.52 mrad/pix, 14°
Distance-to-spot ratio	TBD
External optics	<ul style="list-style-type: none"> • 14° • 12° • 42°
Lens identification	Automatic
f number	<ul style="list-style-type: none"> • 1.1, 42° • 1.3, 24° • 1.5, 14°
Image frequency	<ul style="list-style-type: none"> • 9 Hz • 30 Hz

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Imaging and optical data	
Focus	<ul style="list-style-type: none"> • Continuous • One-shot LDM • One-shot contrast • Manual
FOV match	Yes
Digital zoom	1–6× continuous
Panning	No
Low noise mode	No
Digital image enhancement	No
Detector data	
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 μm
Detector pitch	17 μm
Image presentation	
Display color	4.0 in., 640 × 480 pixels
Display aspect ratio	4:3
Auto-rotation	Yes
Touchscreen	Yes
Programmable buttons	2
Viewfinder	No
Image adjustment	<ul style="list-style-type: none"> • Automatic • Automatic maximum • Automatic minimum • Manual
Image presentation modes	
Infrared image	Yes
Visual image	Yes
Thermal fusion	No
Blending	No
MSX	Yes
FSX	No
Picture in picture	Resizable and movable
Panorama	Yes
Gallery	Yes
Measurement	
Object temperature range	<ul style="list-style-type: none"> • –20 to +120°C (–4 to +248°F) • 0–650°C (32–1202°F) • 300–1200°C (572–2200°F)
Special calibration	
Autorange	
Accuracy	±1 °C (±1.8°F) or ±1% of reading, for ambient temperature 15–35°C (59–95°F) and object temperature above 0°C (+32°F) to +120°C (+248°C)
Measurement analysis	
Spotmeter	3 in live mode
Area	3 in live mode

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Measurement analysis	
Automatic hot/cold detection	Automatic maximum/minimum markers within area
Color alarm (Isotherm)	<ul style="list-style-type: none"> • Above/ • Below • Interval • Condensation • Insulation
Profile	1 live line
Measurement presets	<ul style="list-style-type: none"> • 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
Measurements correction	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	<ul style="list-style-type: none"> • 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	
Autocapture	
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



FLIR T540 24°

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Image annotations	
Visual image annotation	Yes
Site recognition (barcode/QR/NFC)	No
Image sketch	Yes: on infrared only
Sketch	From touchscreen
METERLiNK	Several readings
Instant report	No
Compass	Yes
Distance/area measurement	Yes/yes
Sensors (built in)	No
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
Dual recording	No
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, VIS, PIP)	<ul style="list-style-type: none"> • H.264 (AVC) over RTSP (Wi-Fi) • MPEG4 over RTSP (Wi-Fi) • MJPEG over UVC and RTSP (Wi-Fi)
Dual streaming	No
Visual video streaming	No
Digital camera	
Digital camera	5 MP with LED light
Digital camera focus	Fixed
Digital camera FOV	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
Laser	Class 2, 0.05–40 m (1.6–130 ft.) ±1% of measured distance
Data communication interfaces	
Interfaces	USB 2.0, Bluetooth, Wi-Fi, DisplayPort
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 C: data transfer/video/power
USB standard	USB 2.0 high speed



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Data communication interfaces	
Video out	DisplayPort
Video connector type	USB-C
Power system	
Battery type	Li-ion rechargeable
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	3.5 h to 90% capacity, on-screen indicator
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
Relative humidity	
EMC	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• ETSI EN 300 228• FCC Part 15.249• RSS-247
Magnetic field	
Encapsulation	IP 54 (IEC 60529)
Shock	25g (IEC 60068-2-27)
Vibration	2g (IEC 60068-2-6)
Drop	
Safety	EN/UL/CSA/PSE 60950-1
Physical data	
Weight (including battery)	1.3 kg (2.9 lb.)
Size (L × W × H)	
Battery weight	195 g (6.89 oz.)
Battery size (L × W × H)	59 × 66 × 94 mm
Tripod mounting	UNC ¼"-20
Housing material	PCABS with TPE, magnesium
Color	Black
Warranty and service	
Warranty	
Service intervals	



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Shipping information	
Packaging (contents)	<ul style="list-style-type: none">• Battery (2 of)• Battery charger• Calibration certificate• Cardboard box I• Cardboard box II• Getting started guide• Hand strap• Hard transport case• Infrared camera with lens• Lanyard for battery charger• Lens cap, front• Lens cap, rear• Power supply (15 W/3 A)• Power supply for battery charger• SD card• Thank you card• USB-2.0 A to USB-C cable, 1.0 m (3.3 ft.)• USB-C to HDMI, standard specification UH311• USB-C to USB-C cable, 1.0 m (3.3 ft.)