



	Imaging and optical data	
	Infrared resolution	320 × 240 pixels
	UltraMax (super-resolution) <sup>1</sup>	In FLIR Tools
VV	W tulon	<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	<ul> <li>10 mm (0.39 in.), 42°</li> <li>17 mm (0.67 in.), 24°</li> <li>29 mm (1.41 in.), 14°</li> </ul>
	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>
	Available extra lenses	• 42° • 14°
	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.





**\$**FLIR<sup>®</sup>

	Imaging and optical data			
	Imaging and optical data Focus		<ul> <li>Continuous I</li> <li>One-shot LD</li> <li>One-shot co</li> </ul>	M
	Field of view match		<ul> <li>Manual</li> <li>Yes</li> </ul>	
	Digital zoom		1–4× continuous	5
	Detector data			
	Focal plane array/spectral range		Uncooled micro	bolometer/7.5–14 µm
	Detector pitch		17 µm	
	Image presentation			
	Resolution		640 × 480 pixels	s (VGA)
	Surface brightness (cd/m <sup>2</sup> )		400	
	Screen size		4 in.	
	Viewing angle		80°	
	Color depth (bits)		24 4:3	
	Aspect ratio Auto-rotation		4.3 Yes	
	Touchscreen		Optically bonde	d PCAP
	Display technology	00	IPS	
<b>WW</b>	Cover glass material	$() \square$	Dragontrail®	
	Programmable buttons		2	
	Viewfinder		No	
	Image adjustment		<ul><li>Automatic</li><li>Automatic m</li></ul>	ovinum
			<ul> <li>Automatic m</li> <li>Automatic m</li> <li>Manual</li> </ul>	
	Image presentation modes Infrared image		Yes	
	Visual image		Yes	
	MSX		Yes	
	Picture in picture		Resizable and n	novable
	Gallery		Yes	
	Measurement			
	Camera temperature range	Object temperat	ure 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 F)	(+212 to +248°	±2%
	0 to +650°C (+32 to +1202°F)	0 to +100°C (+3	2 to +212°F)	±2°C (±3.6°F)
		+100 to + 650°C +1202°F)	; (+212 to	±2%
	Optional +300 to +1200°C (+572 to +2192°F)	+300 to +1200°0 +2192°F)	C (+572 to	±2%





	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	
WW	Color alarm (isotherm)           Color alarm (isotherm)           Measurement function alarm	<ul> <li>Above</li> <li>Below</li> <li>Interval</li> <li>Condensation (moisture/humidity/dewpoint)</li> <li>Insulation</li> </ul> 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	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	<ul> <li>Using FLIR Tools (using USB cable)</li> <li>FLIR Tools Mobile (over Wi-Fi)</li> </ul>
	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



	Image annotations		
	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	
WW	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 (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	<ul> <li>ETSI EN 300 228</li> <li>FCC Part 15.249</li> <li>RSS-247 Issue 2</li> </ul>
	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 $\times$ W $\times$ 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 $\times$ W $\times$ H)	$59 \times 66 \times 94$ mm (2.3 × 2.6 × 3.7 in.)
	Tripod mounting	UNC 1⁄4″-20



P/N: 79302-0101

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	<ul> <li>Lens cap, front</li> <li>Lens cap, front and rear (only for extra lense</li> </ul>	
Packaging, weight	5.8 kg (12.8 lb.)	
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)	
EAN-13	<ul><li>Sweden: 7332558012925</li><li>Estonia: 4743254003200</li></ul>	
UPC-12	845188014612	
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
- T130337ACC; Calibration target
- T199300ACC; Battery
- T199610; Battery charger
- T199601; Hand strap and neck strap
- T199347ACC; Hard transport case
- T199616; Option, High temperature, +300 to +1200°C
- T199609; Option, Macro mode 71/103 μm for 24°
- T300030; Option, No radio



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- 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)
- INST-EW-0145; Extended Warranty 1 Year for B/T420 mkll, B/T430sc mkll, T530
- INST-EWGM-0145; Extended Premier Warranty 1 Year for B/T200 mkl, B/T300 mkl, T530
- INST-GM-0140; Calibration incl General Maintenance for T530

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