

Part number:

55902-2502

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Legal disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply.

Information and equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited.



Imaging and optical data

IR resolution	640 × 480 pixels
Thermal sensitivity/NETD	<35 mK @ +30°C (+86°F)
Field of view (FOV) / Minimum focus distance	25° × 19° / 0.25 m (0.82 ft.)
Spatial resolution (IFOV)	0.69 mrad
Image frequency	30 Hz
Focus	Continuous, one shot or manual
Zoom	1–8× continuous, digital zoom
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–14 μm

Image presentation

Display	Built-in touch screen, 4.3 in. wide screen LCD, 800 × 480 pixels
Viewfinder	Built-in 800 × 480 pixels
Automatic image adjustment	Continuous/manual; linear or histogram based; possible to lock max, min or span temperature
Manual image adjustment	Level/span/max/min
Image modes	IR-image, visual image, thermal fusion, picture in picture, thumbnail gallery
Thermal fusion	IR image shown above, below or within temp interval on visual image
Multi Spectral Dynamic Imaging (MSX)	IR-image with enhanced detail presentation
Picture in Picture	Resizable and movable IR area on visual image

Measurement

Temperature range	–40°C to +150°C (–40°F to +302°F) +100°C to +650°C (+212°F to +1202°F) +300°C to +2000°C (+572°F to +3632°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading

Measurement analysis

Spotmeter	10
Area	5 boxes or circles with max./min./average
Automatic hot/cold detection	Max/Min temp. value and position shown within box, circle or on a line
Isotherm	Above/below/interval
Profile	1 live line
Measurement presets	Yes
Difference temperature	Delta temperature between measurement functions or reference temperature

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Measurement analysis

Reference temperature	Manually set
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
Measurement corrections	Reflected temperature, optics transmission, atmospheric transmission and external optics
Measurement function alarm	Audible/visual alarms (above/below) on any selected measurement function

Set-up

Color palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Set-up commands	Configure information to be shown in image; programmable button; local adaptation of units, language, date and time formats, camera software update
Camera software update	Use PC software FLIR Tools

Storage of images

Image storage	Standard JPEG, including measurement data, on memory card
Image storage mode	IR/visual images, simultaneous storage of IR and visual images. Visual and IR image automatically grouped together.
Periodic image storage	7 seconds to 24 hours (IR) 14 seconds to 24 hours (IR and visual)

Image annotations

Voice	60 seconds (via Bluetooth) stored with the image
Text	Select text from predefined list, editable in camera or type direct on soft keyboard on touch screen
Sketch	From touch screen
Image sketch	On IR and visual image
Meterlink	Wireless connection (Bluetooth®) to: Extech Moisture Meter MO297 Extech Clamp Meter EX845
Report generation	<ul style="list-style-type: none"> Instant Report (*.pdf file) in camera Separate PC software with extensive report generation
GPS	Location data automatically added to every image from built-in GPS

Video recording in camera

Non-radiometric IR-video recording	MPEG-4 to memory card
Visual video recording	MPEG-4 to memory card

Video streaming

Radiometric IR-video streaming	Full dynamic to PC using USB or Wi-Fi
Non-radiometric IR-video streaming	MPEG-4 using Wi-Fi Uncompressed colorized video using USB
Visual video streaming	MPEG-4 using Wi-Fi Uncompressed colorized video using USB

Digital camera

Built-in digital camera	5 Mpixel with LED light
Digital camera, FOV	Adapts to the IR lens

Laser pointer

Laser	Activated by dedicated button
Laser alignment	Position is automatic displayed on the IR image

Data communication interfaces

Interfaces	USB-mini, USB-A, Bluetooth, Wi-Fi, Digital Video Output
Bluetooth	Communication with headset and external sensors
Wi-Fi	Peer to peer (ad-hoc) or infrastructure (network)

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Data communication interfaces

USB	<ul style="list-style-type: none"> • USB-A: Connect external USB device • USB Mini-B: Data transfer to and from PC / Uncompressed colorized video
Video out	Digital Video Output (DVI)
Video, connector type	HDMI compatible

Radio

Wi-Fi	Standard: 802.11 b/g Frequency range: 2412–2462 MHz Max output power: 15 dBm
Bluetooth	Frequency range: 2402–2480 MHz
Antenna	Internal

Power system

Battery	Li Ion, 2.5 hours operating time
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging temperature	0°C to +45°C (+32°F to +113°F)
Power management	Automatic shutdown and sleep mode (user selectable)

Environmental data

Operating temperature range	–15°C to +50°C (+5°F to +122°F)
Storage temperature range	–40°C to +70°C (–40°F to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles
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) • ICES-003
Radio spectrum	<ul style="list-style-type: none"> • ETSI EN 300 328 • FCC Part 15.247 • RSS-210
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Safety	EN/UL/CSA/PSE 60950-1

Physical data

Weight	1.3 kg (2.87 lb.)
Size (L × W × H)	143 × 195 × 95 mm (5.6 × 7.7 × 3.7 in.)
Tripod mounting	UNC ¼"-20



FLIR T640 25° (incl. Wi-Fi)

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Shipping information

- Infrared camera with lens
 - Battery (2 ea.)
 - Battery charger
 - Bluetooth headset
 - Calibration certificate
 - Downloads brochure
 - FLIR Tools download card
 - FLIR apps card
 - Getting Started Guide
 - HDMI-DVI cable
 - HDMI-HDMI cable
 - Hard transport case
 - Important Information Guide
 - Large eyecap
 - Lens cap
 - Memory card with adapter
 - Neck strap
 - Optics brochure
 - Power supply, incl. multi-plugs
 - Service & training brochure
 - Thank you card
 - Tripod adapter
 - USB cable, Std A to Mini-B
 - User documentation CD-ROM
 - Warranty extension card
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