

P/N: 89202-0101

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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 | 640 × 480 pixels |
| UltraMax (super-resolution) ¹ | Yes |
| NETD | <40 mK @ +30°C (+86°F) |
| Field of view | 24° × 18° |
| Minimum focus distance | <ul style="list-style-type: none"> 0.15 m (0.49 ft.) Macro mode 50 μm as option |
| Minimum focus distance with MSX | 0.5 m (1.64 ft.) |
| Focal length | 17 mm (0.67 in.) |
| Spatial resolution (IFOV) | 0.7 mrad/pixel |
| Available extra lenses | <ul style="list-style-type: none"> 42° (AutoCal) 14° (AutoCal) 6° (service calibration required) |
| Lens identification | Automatic |
| f number | 1.3 |
| Image frequency | 30 Hz |
| Focus | <ul style="list-style-type: none"> Continuous LDM One-shot LDM One-shot contrast Manual |
| Field of view match | Yes |
| Digital zoom | 1–8x continuous |
| Detector data | |
| Focal plane array/spectral range | Uncooled microbolometer/7.5–14 μm |
| Detector pitch | 12 μm |
| Image presentation | |
| Resolution (display) | 640 × 480 pixels (VGA) |
| Surface brightness (cd/m ²) | 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 | Yes | |
| Image adjustment | <ul style="list-style-type: none"> • 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 2000°C (572 to 3632°F) | 300 to 2000°C (572 to 3632°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 | | |
| Spotmeter | 3 in live mode | |
| Area | 3 in live mode | |
| Automatic hot/cold detection | Automatic maximum/minimum markers within area | |
| Measurement presets | <ul style="list-style-type: none"> • No measurements • Center spot • Hot spot • Cold spot • User preset 1 • User preset 2 | |

2. No external blackbody needed.

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| Measurement analysis | |
|-------------------------------------|---|
| 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) | <ul style="list-style-type: none"> • 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 | <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 | 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 |
| Laser distance meter information | Yes |
| Area measurement information | Yes |
| GPS | Location data automatically added to every still image and first frame in video from built-in GPS |



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| 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 |
| Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture) | <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) |
| 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 |



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| | |
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| Power system | |
| 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 | <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 Issue 2 |
| 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) | 1.4 kg (3.1 lb.) |
| Size (L × W × H) | <ul style="list-style-type: none"> • Lens vertical: 164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in.) • Lens horizontal: 164.3 × 201.3 × 167.3 mm (6.5 × 7.9 × 6.6 in.) |
| Battery weight | 195 g (6.89 oz.) |
| Battery size (L × W × H) | 59 × 66 × 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 | <ul style="list-style-type: none"> • Accessory box I: <ul style="list-style-type: none"> ◦ 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: <ul style="list-style-type: none"> ◦ Lens cap strap ◦ Lens cleaning cloth ◦ Neck strap ◦ Small eyecup • 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 | 5.9 kg (13.0 lb.) |
| Packaging, size | 500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.) |
| EAN-13 | 7332558024959 |
| UPC-12 | 845188020705 |
| Country of origin | Sweden |

Supplies & accessories:

- T199300ACC; Battery
- T199610; Battery charger
- T199347ACC; Hard transport case for FLIR T8xx, T5xx, and GF7x series
- T300030; Option, No radio
- T130531ACC; Large eyecup
- T300188; Hand strap and neck strap
- 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
- 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



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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-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