

## P/N: 13302-0201

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### Document identity

Publ. No.: 13302-0201

Commit: 93760

Language: en-US

Modified: 2023-10-23

Formatted: 2023-10-23

### 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](mailto:exportquestions@flir.com) with any questions.



| Imaging and optical data  |                                                  |
|---------------------------|--------------------------------------------------|
| IR resolution             | 240 × 180 pixels                                 |
| Thermal sensitivity/NETD  | <0.06°C (0.11°F) / <50 mK at 30°C (86°F)         |
| Field of view (FOV)       | 33° × 25                                         |
| Minimum focus distance    | 0.36 m (1.18 ft.)                                |
| Spatial resolution (IFOV) | 2.5 mrad                                         |
| F-number                  | 1.4                                              |
| Image frequency           | 9 Hz                                             |
| Focus                     | Fixed focus                                      |
| Detector data             |                                                  |
| Detector type             | Focal plane array (FPA), uncooled microbolometer |
| Spectral range            | 7.5–13 µm                                        |
| User interface            |                                                  |
| Display                   | 3.5 in. 640 × 480 color LCD                      |
| Touch screen              | Capacitive touch                                 |
| Text                      | Text annotation on image using onscreen keyboard |
| Flashlight                | Manually activated bright LED                    |
| Image presentation        |                                                  |
| Display                   | 3.5 in. 640 × 480 color LCD                      |
| Image adjustment          | Automatic/Manual                                 |

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| Image presentation modes                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image modes                                                                                                         | Thermal MSX, Thermal, Picture-in-Picture, Digital camera.                                                                                                                                                                                                                                                                                                                                                  |
| Multi Spectral Dynamic Imaging (MSX)                                                                                | IR image enhanced with visible camera detail                                                                                                                                                                                                                                                                                                                                                               |
| Picture in Picture                                                                                                  | IR area on visual image                                                                                                                                                                                                                                                                                                                                                                                    |
| Measurement                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                            |
| Camera temperature range                                                                                            | <ul style="list-style-type: none"> <li>–20 to 200°C (–4 to 392°F)</li> <li>10 to 550°C (50 to 1022°F)</li> </ul>                                                                                                                                                                                                                                                                                           |
| Object temperature range and accuracy (for ambient temp. 10 to 35°C (50 to 95°F) and object temp. above 0°C (32°F)) | <ul style="list-style-type: none"> <li>Range –20 to 200°C (–4 to 392°F): <ul style="list-style-type: none"> <li>0 to 100°C (32 to 212°F): ±2°C (±3.6°F)</li> <li>100 to 200°C (212 to 392°F): ±2%</li> </ul> </li> <li>Range 10 to 550°C (50 to 1022°F): <ul style="list-style-type: none"> <li>10 to 100°C (50 to 212°F): ±4°C (±7.2°F)</li> <li>100 to 550°C (212 to 1022°F): ±4%</li> </ul> </li> </ul> |
| Measurement analysis                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                            |
| Spotmeter                                                                                                           | Center spot, box with min./max.                                                                                                                                                                                                                                                                                                                                                                            |
| Isotherm                                                                                                            | Above alarm, Below alarm                                                                                                                                                                                                                                                                                                                                                                                   |
| Delta T                                                                                                             | Yes, NFPA 70B compliant                                                                                                                                                                                                                                                                                                                                                                                    |
| Emissivity correction                                                                                               | Variable from 0.1 to 1.0                                                                                                                                                                                                                                                                                                                                                                                   |
| Emissivity table                                                                                                    | Emissivity table of predefined materials                                                                                                                                                                                                                                                                                                                                                                   |
| Measurements correction                                                                                             | Emissivity, matt/semi-matt/semi-gloss + custom value, reflected apparent temperature, atmospheric compensation                                                                                                                                                                                                                                                                                             |
| Set-up                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                            |
| Color palettes                                                                                                      | Iron, White hot, Black hot, Rainbow, Arctic, Lava, Rainbow HC                                                                                                                                                                                                                                                                                                                                              |
| Set-up commands                                                                                                     | Local adaptation of units, language, date and time formats                                                                                                                                                                                                                                                                                                                                                 |
| Storage of images                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                            |
| File formats                                                                                                        | Standard JPEG, 14-bit measurement data included                                                                                                                                                                                                                                                                                                                                                            |
| Storage media                                                                                                       | Internal memory and onboard FLIR Ignite cloud connectivity (with Wi-Fi)                                                                                                                                                                                                                                                                                                                                    |
| Digital camera                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                            |
| Digital camera, resolution                                                                                          | 5 MP                                                                                                                                                                                                                                                                                                                                                                                                       |
| Digital camera, FOV                                                                                                 | 52.7°                                                                                                                                                                                                                                                                                                                                                                                                      |
| Video streaming                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                            |
| Radiometric IR video streaming                                                                                      | Yes, USB connection                                                                                                                                                                                                                                                                                                                                                                                        |
| Non-radiometric video streaming                                                                                     | Yes; MSX, Thermal, Visual, Picture in Picture. USB Video Class colorized uncompressed with overlay 9 Hz.                                                                                                                                                                                                                                                                                                   |

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| Data communication interfaces    |                                                                                                                                                                                                                                 |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interfaces                       | USB-C: Data transfer to and from PC and Mac device                                                                                                                                                                              |
| Wi-Fi                            | Infrastructure (network)                                                                                                                                                                                                        |
| Radio                            |                                                                                                                                                                                                                                 |
| Wi-Fi                            | <ul style="list-style-type: none"> <li>Standard: 802.11 a/b/g/n</li> <li>Frequency range: <ul style="list-style-type: none"> <li>2400–2473 MHz</li> <li>5150–5250 MHz</li> </ul> </li> <li>Max. output power: 16 dBm</li> </ul> |
| Power system                     |                                                                                                                                                                                                                                 |
| Battery type                     | Rechargeable Lithium-ion battery                                                                                                                                                                                                |
| Battery voltage                  | 3.65 V                                                                                                                                                                                                                          |
| Battery operating time           | 4 hours at +25°C (+77°F) ambient temperature and typical use                                                                                                                                                                    |
| Charging system                  | Battery is charged inside the camera or in specific charger.                                                                                                                                                                    |
| Charging time                    | 2 hours in charger. 4 hours to 90% capacity in camera.                                                                                                                                                                          |
| Power management                 | Automatic shut-down                                                                                                                                                                                                             |
| AC operation                     | AC adapter, 100–240 VAC input, 5 VDC output to camera                                                                                                                                                                           |
| Battery documents                | For documents like MSDS and UN38.3 test reports/summaries, see: <a href="https://support.flir.com/resources/msds">https://support.flir.com/resources/msds</a>                                                                   |
| 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                                                                                                                                                                                       |
| EMC                              | <ul style="list-style-type: none"> <li>EN 301 489-1</li> <li>EN 301 489-17</li> <li>EN 61000-6-2 (Immunity)</li> <li>EN 61000-6-3</li> <li>FCC 47 CFR Part 15 Class B (Emission)</li> </ul>                                     |
| Radio spectrum                   | <ul style="list-style-type: none"> <li>ETSI EN 300 328</li> <li>ETSI EN 301 893</li> <li>FCC 47 CFR Part 15 C, E</li> <li>RSS-247 Issue 2</li> </ul>                                                                            |
| Hazardous substances             | <ul style="list-style-type: none"> <li>WEEE 2012/19/EU</li> <li>RoHs 2011/65/EU</li> </ul>                                                                                                                                      |
| Shock                            | 25 g (IEC 60068-2-27)                                                                                                                                                                                                           |
| Vibration                        | 2 g (IEC 60068-2-6)                                                                                                                                                                                                             |

P/N: 13302-0201

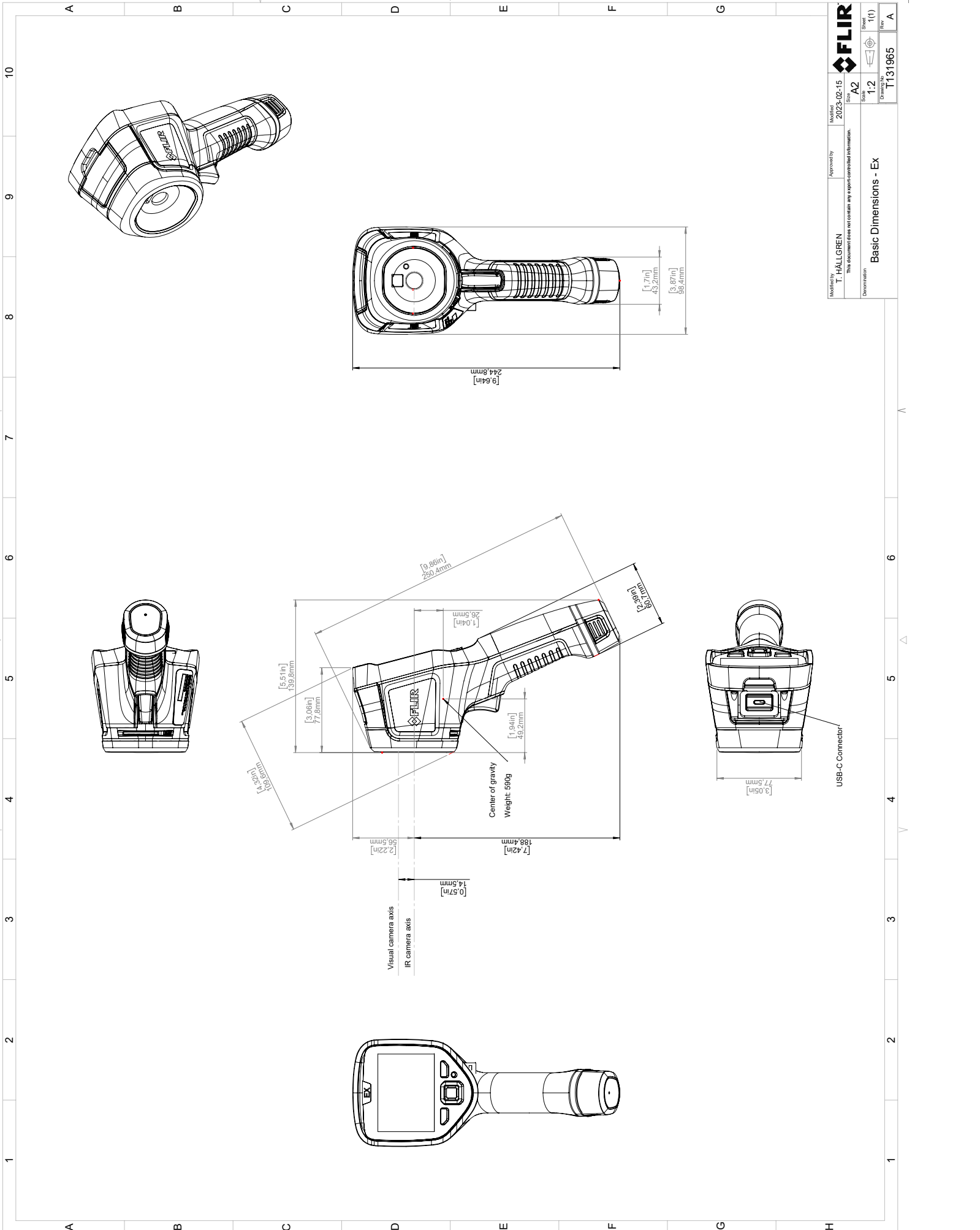
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| Environmental data           |                                                                                                                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety                       | Camera: <ul style="list-style-type: none"> <li>• IEC/EN 62368-1</li> </ul> Power supply: <ul style="list-style-type: none"> <li>• IEC/EN 62368-1</li> <li>• UL/J/(AS/NZS) 62368-1</li> <li>• GB 4943</li> </ul>                      |
| Declaration of conformity    | See: <a href="https://support.flir.com/resources/DoC">https://support.flir.com/resources/DoC</a>                                                                                                                                     |
| Physical data                |                                                                                                                                                                                                                                      |
| Camera weight, incl. battery | 0.590 kg (1.3 lb.)                                                                                                                                                                                                                   |
| Camera size (L x W x H)      | 244 x 95 x 140 mm (9.6 x 3.7 x 5.5 in.)                                                                                                                                                                                              |
| Color                        | Black                                                                                                                                                                                                                                |
| Shipping information         |                                                                                                                                                                                                                                      |
| Packaging, type              | Cardboard box                                                                                                                                                                                                                        |
| List of contents             | <ul style="list-style-type: none"> <li>• Infrared camera with battery</li> <li>• Power supply</li> <li>• USB cable</li> <li>• FLIR Thermal Studio Starter</li> <li>• Printed documentation</li> <li>• Hard transport case</li> </ul> |
| Packaging, weight            | 3.13 kg (6.9 lb.)                                                                                                                                                                                                                    |
| Packaging, size              | 385 x 165 x 315 mm (15.2 x 6.5 x 12.4 in.)                                                                                                                                                                                           |
| EAN-13                       | 4743254006461                                                                                                                                                                                                                        |
| UPC-12                       | 845188029159                                                                                                                                                                                                                         |
| Country of origin            | Estonia                                                                                                                                                                                                                              |

## Supplies & accessories:

- T198528; Hard transport case FLIR Ex series
- T198531; Battery charger incl power supply
- T198532; Car charger
- T198534; Power supply USB-micro
- T198529; Pouch FLIR Ex and ix series
- T198533; USB cable Std A <-> Micro B
- T199362ACC; Battery Li-ion 3.6 V, 2.6 Ah, 9.4 Wh
- T911630ACC; Power supply for camera, 15 W/3 A
- T911689ACC; Pouch for FLIR E-series
- T911093; Tool belt
- T300083; FLIR Thermal Studio Pro, Perpetual license
- T300341; FLIR Thermal Studio Standard, 1 Year Subscription
- T300258; FLIR Thermal Studio Standard, Perpetual license
- T199233; FLIR Atlas SDK for .NET



|                                                                   |             |          |            |
|-------------------------------------------------------------------|-------------|----------|------------|
| Modified by                                                       | Approved by | Modified | 2023-02-15 |
| T. HALLGREN                                                       |             | Size     | A2         |
| This document does not contain any export-controlled information. |             |          |            |
| Denomination                                                      | Sheet       | Drawn by | Rev        |
| Basic Dimensions - Ex                                             | 112         | T131965  | A          |

