

## P/N: 78503-0201

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### Document identity

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



<b>Imaging and optical data</b>	
Infrared resolution	384 × 288 pixels
UltraMax (super-resolution)	In FLIR Tools
NETD	<30 mK @ +30°C
Field of view	42° × 32°
Minimum focus distance	0.3 m (1.0 ft.)
Minimum focus distance with MSX	0.65 m (2.1 ft.)
Focal length	10 mm (0.39 in.)
Spatial resolution (IFOV)	1.66 mrad/pix
External optics	<ul style="list-style-type: none"> <li>• 14°</li> <li>• 42°</li> </ul>
Lens identification	Automatic
f number	1.1
Image frequency	30 Hz
Focus	Continuous, one-shot LDM (laser distance meter), one-shot contrast, or manual
Field of view match	Yes
Digital zoom	1–4× continuous
Panning	No
Low-noise mode	No
Digital image enhancement	No
<b>Detector data</b>	
Focal plane array/spectral range	7.5–14 μm
Detector pitch	17 μm
<b>Image presentation</b>	
Resolution	640 × 480 pixels (VGA)
Surface brightness (cd/m <sup>2</sup> )	400
Screen size	4 in.



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<b>Image presentation</b>	
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	1
Viewfinder	No
Image adjustment	Yes
<b>Image presentation modes</b>	
Infrared image	Yes
Visual image	Yes
Thermal fusion	No
Blending	No
MSX	Yes
FSX	No
Picture in picture	Resizable and movable
Panorama	No
Gallery	Yes
<b>Measurement</b>	
Object temperature range	<ul style="list-style-type: none"> <li>-20 to +120°C (-4 to 248°F)</li> <li>0-650°C (32-1200°F)</li> <li>+300°C to +1200°C (572-2192°F)</li> </ul>
Accuracy	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 15-35°C (59-95°F) and object temperature above 0°C (32°F)
<b>Measurement analysis</b>	
Spotmeter	3 in live mode
Area	3 in live mode
Automatic hot/cold detection	Auto-maximum/minimum markers within area
Color alarm (isotherm)	<ul style="list-style-type: none"> <li>Above</li> <li>Below</li> <li>Interval</li> <li>Condensation</li> <li>Insulation</li> </ul>
Profile	No
Measurement presets	<ul style="list-style-type: none"> <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

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<b>Measurement analysis</b>	
Measurement correction	Yes
External optics/windows correction	Yes
Screening	0,5°C (0.9°F) accuracy @ 37°C (98.6°F) with reference
<b>Alarm</b>	
Moisture alarm	Yes
Insulation alarm	Yes
Measurement alarm	Audible/visual alarms above/below
<b>Setup</b>	
Color palettes	<ul style="list-style-type: none"> <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
<b>Service functions</b>	
Camera software update	Use PC software FLIR Tools
<b>Storage of images</b>	
Storage media	Removable memory; SD card (8 GB)
Time lapse (periodic image storage)	No
Remote control operation	<ul style="list-style-type: none"> <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
<b>Image annotations</b>	
Voice	60 seconds 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
Site recognition (barcode/QR/NFC)	No
Image sketch	Yes: on infrared images only
Sketch	From touchscreen
METERLiNK	Yes: several readings
Instant report	No
Compass	Yes
Laser distance meter information	Yes
Area measurement information	Yes
Sensors (built in)	No
GPS	Yes: location data automatically added to every still image and the first frame in video from built-in GPS



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<b>Video recording in camera</b>	
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
<b>Video streaming</b>	
Radiometric infrared–video streaming (compressed)	Yes: over UVC or RTSP (Wi-Fi)
Non-radiometric video streaming (compressed: IR, MSX, VIS, PIP)	<ul style="list-style-type: none"> <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>
Dual streaming	No
Visual video streaming	No
<b>Digital camera</b>	
Resolution	5 MP with LED light
Focus	Fixed
Field of view	53° × 41°
Video lamp	Built-in LED light
<b>Laser pointer</b>	
Laser alignment	Position is automatically displayed on the infrared image
Laser distance meter	Activated by a dedicated button
Laser	Class 2, 0.05–40 m (1.6–131 ft.) ±1% of measured distance
<b>Data communication interfaces</b>	
Interfaces	USB 2.0, Bluetooth, Wi-Fi
Bluetooth	Communication with headset and external sensors
Wi-Fi	Peer to peer ( <i>ad hoc</i> ) 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
<b>Power system</b>	
Battery type	Rechargeable Li-ion battery
Battery voltage	3.6 V
Battery operating time	> 2.5 hours at 25°C (68°F) and typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or two-bay charger
Charging time (using two-bay charger)	2.5 hours to 90% capacity with charging status indicated by LEDs
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



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<b>Environmental data</b>	
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)/two cycles
Electromagnetic compatibility	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• ETSI EN 300 328</li> <li>• FCC Part 15.249</li> <li>• RSS-247</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
<b>Physical data</b>	
Weight (including battery)	1 kg (2.2 lb.)
Size (L × W × H)	278.4 × 116.1 × 113.1 mm (11.0 × 4.6 × 4.4 in.)
Battery weight	140 g (4.9 oz.)
Battery size (L × W × H)	150 × 46 × 55 mm (5.9 × 1.8 × 2.2 in.)
Tripod mounting	UNC ¼"-20
Housing material	PCABS with TPE, magnesium
Color	Black
<b>Warranty and service</b>	
Warranty	<a href="http://www.flir.com/warranty/">http://www.flir.com/warranty/</a>
<b>Shipping information</b>	
Packaging, type	Cardboard box
List of contents	<ul style="list-style-type: none"> <li>• Battery (2 of)</li> <li>• Battery charger</li> <li>• Cardboard box I</li> <li>• Cardboard box II</li> <li>• Cardboard box III</li> <li>• Front protection</li> <li>• Hand strap</li> <li>• Hard transport case</li> <li>• Infrared camera with lens</li> <li>• Lanyard, battery charger</li> <li>• Lanyard, camera</li> <li>• Lens cap, front</li> <li>• Lens cap, rear</li> <li>• Lens cleaning cloth</li> <li>• Power supply for battery charger</li> <li>• Power supply, 15 W/3 A</li> <li>• Printed documentation</li> <li>• SD card (8 GB)</li> <li>• Torx screwdriver</li> <li>• USB 2.0 A to USB Type-C cable, 1 m</li> <li>• USB Type-C to HDMI cable, standard specification UH311</li> <li>• USB Type-C to USB Type-C cable, 1.0 m</li> <li>• Wrist strap</li> </ul>
Packaging, weight	



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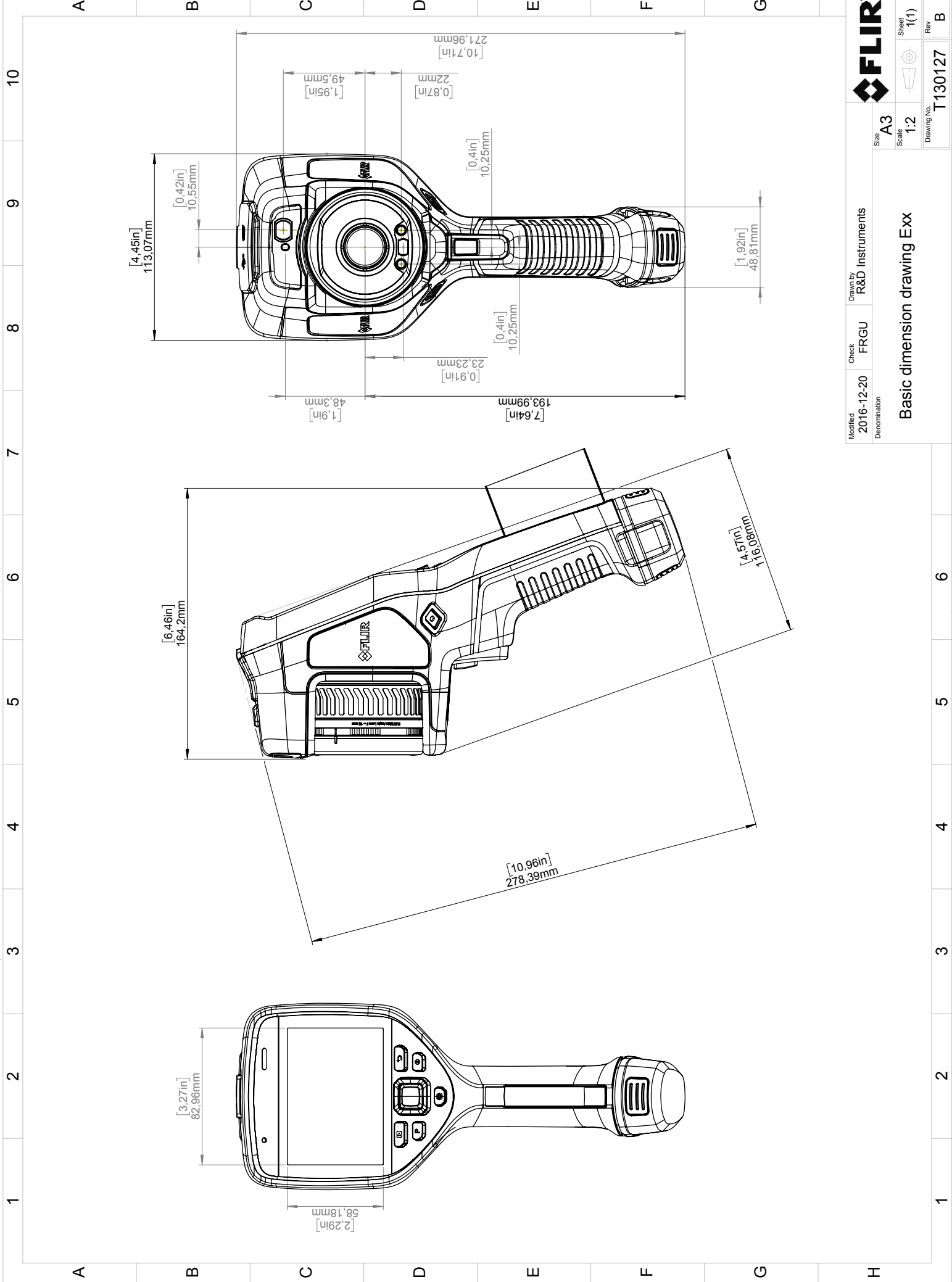
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Shipping information	
Packaging, size	
EAN-13	4743254002685
UPC-12	845188013912
Country of origin	Estonia

**Supplies & accessories:**



Modified	2016-12-20	Check	FRGU	Drawn by	R&D Instruments	Size	A3
Denomination				Basic dimension drawing Exx		Scale	1:2
						Sheet	1(1)
						Drawing No.	T130127
						Rev	B

