

P/N: 78502-0201

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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	384 × 288 pixels
UltraMax (super-resolution)	In FLIR Tools
NETD	<40 mK @ +30°C
Field of view	24° × 18°
Minimum focus distance	0.5 m (1.6 ft.)
Minimum focus distance with MSX	0.5 m (1.6 ft.)
Focal length	17 mm (0.67 in.)
Spatial resolution (IFOV)	0.90 mrad/pix
External optics	• 14° • 42°
Lens identification	Automatic
f number	1.3
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
Detector data	
Focal plane array/spectral range	7.5–14 μm
Detector pitch	17 μm
Image presentation	
Resolution	640 × 480 pixels (VGA)
Surface brightness (cd/m²)	400
Screen size	4 in.



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Image presentation	
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
Image presentation modes	
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
Measurement	
Object temperature range	 -20 to +120°C (-4 to 248°F) 0-650°C (32-1200°F) +300°C to +1200°C (572-2192°F)
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)
Measurement analysis	
Spotmeter	3 in live mode
Area	3 in live mode
Automatic hot/cold detection	Auto-maximum/minimum markers within area
Color alarm (isotherm)	Above Below Interval Condensation Insulation
Profile	No
Measurement presets	 No measurements Center spot Hot spot Cold spot User preset 1 User preset 2
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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Measurement analysis	
Measurement correction	Yes
External optics/windows correction	Yes
Screening	0,5°C (0.9°F) accuracy @ 37°C (98.6°F) with reference
Alarm	
Moisture alarm	Yes
Insulation alarm	Yes
Measurement alarm	Audible/visual alarms above/below
Setup	
Color palettes	IronGrayRainbowArcticLavaRainbow HC
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 (8 GB)
Time lapse (periodic image storage)	No
Remote control operation	Using FLIR Tools (using USB cable)FLIR Tools Mobile (over Wi-Fi)
Image file format	Standard JPEG, measurement data included. Infrared-only mode
Image annotations	
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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Video recording in camera	
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
Video streaming	
Radiometric infrared–video streaming (compressed)	Yes: over UVC or RTSP (Wi-Fi)
Non-radiometric video streaming (compressed: IR, MSX, VIS, PIP)	H.264 (AVC) over RTSP (Wi-Fi) MPEG4 over RTSP (Wi-Fi) MJPEG over UVC and RTSP (Wi-Fi)
Dual streaming	No
Visual video streaming	No
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 a dedicated button
Laser	Class 2, 0.05–40 m (1.6–131 ft.) ±1% of measured distance
Data communication interfaces	
Interfaces	USB 2.0, Bluetooth, Wi-Fi
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
Power system	
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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FLIR E85 24°

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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)/two cycles
Electromagnetic compatibility	 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	ETSI EN 300 328FCC Part 15.249RSS-247
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 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 1/4"-20
Housing material	PCABS with TPE, magnesium
Color	Black
Warranty and service	
Warranty	http://www.flir.com/warranty/
Shipping information	
Packaging, type	Cardboard box
List of contents	Battery (2 of) Battery charger Cardboard box I Cardboard box II Cardboard box III Front protection Hand strap Hard transport case Infrared camera with lens Lanyard, battery charger Lanyard, camera Lens cap, front Lens cap, rear Lens cleaning cloth Power supply for battery charger Power supply, 15 W/3 A Printed documentation SD card (8 GB) Torx screwdriver USB 2.0 A to USB Type-C cable, 1 m USB Type-C to HDMI adapter, standard specification UH311 USB Type-C to USB Type-C cable (USB 2.0 standard), 1.0 m Wrist strap



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Shipping information	
Packaging, weight	
Packaging, size	
EAN-13	4743254002678
UPC-12	845188013905
Country of origin	Estonia

Supplies & accessories:

N/A