

## P/N: 82502-0201

### Copyright

© 2020, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

### Document identity

Publ. No.: 82502-0201

Commit: 66013

Language:

Modified: 2020-05-08

Formatted: 2020-05-08

### 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	464 × 348 pixels
UltraMax (super-resolution) <sup>1</sup>	Yes
NETD	<40 mK @ +30°C (+86°F)
Field of view	24° × 18°
Minimum focus distance	<ul style="list-style-type: none"> <li>0.15 m (0.49 ft.)</li> <li>Macro mode 71 μm as option</li> </ul>
Minimum focus distance with MSX	0.5 m (1.64 ft.)
Focal length	17 mm (0.67 in.)
Spatial resolution (IFOV)	0.90 mrad/pixel
Available extra lenses	<ul style="list-style-type: none"> <li>42° (AutoCal)</li> <li>14° (AutoCal)</li> <li>6° (service calibration required)</li> </ul>
Lens identification	Automatic
f number	1.3
Image frequency	30 Hz
Focus	<ul style="list-style-type: none"> <li>Continuous LDM</li> <li>One-shot LDM</li> <li>One-shot contrast</li> <li>Manual</li> </ul>
Field of view match	Yes
Digital zoom	1–6x continuous
<b>Detector data</b>	
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 μm
Detector pitch	17 μm
<b>Image presentation</b>	
Resolution (display)	640 × 480 pixels (VGA)
Surface brightness (cd/m <sup>2</sup> )	400

1. Not supported when using macro.

P/N: 82502-0201

© 2020, FLIR Systems, Inc.

#82502-0201; r. 66013;

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"> <li>• Automatic</li> <li>• Automatic maximum</li> <li>• Automatic minimum</li> <li>• Manual</li> </ul>	
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 +1500°C (+572 to +2732°F)	+300 to +1500°C (+572 to +2732°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) <sup>2</sup>	
Measurement analysis		
Spotmeter	3 in live mode	
Area	3 in live mode	
Automatic hot/cold detection	Automatic maximum/minimum markers within area	

2. No external blackbody needed.

P/N: 82502-0201

© 2020, FLIR Systems, Inc.

#82502-0201; r. 66013;

<b>Measurement analysis</b>	
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
Measurement corrections	Yes
External optics/windows correction	Yes
<b>Alarm</b>	
Color alarm (isotherm)	<ul style="list-style-type: none"> <li>Above</li> <li>Below</li> <li>Interval</li> <li>Condensation (moisture/humidity/dewpoint)</li> <li>Insulation</li> </ul>
Measurement function alarm	Audible/visual alarms (above/below) on any selected measurement function
<b>Set-up</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	Using USB cable or SD card
<b>Storage of images</b>	
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.
<b>Image annotations</b>	
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



# FLIR T840 24°

P/N: 82502-0201

© 2020, FLIR Systems, Inc.

#82502-0201; r. 66013;

<b>Image annotations</b>	
Area measurement information	Yes
GPS	Location data automatically added to every still image and first frame in video from built-in GPS
<b>Video recording in camera</b>	
Radiometric infrared-video recording	RTRR (.csq)
Non-radiometric infrared-video recording	H.264 to memory card
Visual video recording	H.264 to memory card
<b>Video streaming</b>	
Radiometric infrared-video streaming (compressed)	Over UVC
Non-radiometric video streaming (compressed: IR, MSX, visual, Picture in Picture)	<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>
Visual video streaming	Yes
<b>Digital camera</b>	
Resolution	5 MP with LED light
Focus	Fixed
Field of view	53° x 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 dedicated button
Laser	Class 2, 0.05–40 m (0.16–131 ft.) ±1% of measured distance
<b>Data communication interfaces</b>	
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

P/N: 82502-0201

© 2020, FLIR Systems, Inc.

#82502-0201; r. 66013;

<b>Radio</b>	
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)
<b>Power system</b>	
Battery type	Rechargeable Li-ion battery
Battery voltage	3.6 V
Battery operating time	> 4 hours at 25°C (68°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
<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)/2 cycles
EMC	<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 300 228</li> <li>FCC Part 15.249</li> <li>RSS-247 Issue 2</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)	1.4 kg (3.1 lb.)
Size (L × W × H)	<ul style="list-style-type: none"> <li>Lens vertical: 164.3 × 201.3 × 84.1 mm (6.5 × 7.9 × 3.3 in.)</li> <li>Lens horizontal: 164.3 × 201.3 × 167.3 mm (6.5 × 7.9 × 6.6 in.)</li> </ul>
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

**P/N: 82502-0201**

© 2020, FLIR Systems, Inc.

#82502-0201; r. 66013;

<b>Physical data</b>	
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
Packaging, contents	<ul style="list-style-type: none"> <li>• Accessory box I:               <ul style="list-style-type: none"> <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>◦ USB 2.0 A to USB Type-C cable</li> <li>◦ USB Type-C to HDMI and PD adapter</li> <li>◦ USB Type-C to USB Type-C cable (USB 2.0 standard)</li> </ul> </li> <li>• Accessory box II:               <ul style="list-style-type: none"> <li>◦ Lens cap strap</li> <li>◦ Lens cleaning cloth</li> <li>◦ Neck strap</li> <li>◦ Small eyecup</li> </ul> </li> <li>• Battery (2 ea)</li> <li>• Battery charger</li> <li>• FLIR Thermal Studio Pro license card (1 year subscription)</li> <li>• Hard transport case</li> <li>• Infrared camera with lens</li> <li>• Lens cap, front</li> <li>• Lens cap, front and rear (only for extra lenses)</li> </ul>
Packaging, weight	5.9 kg (13.0 lb.)
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)
EAN-13	7332558023587
UPC-12	845188018894
Country of origin	Sweden

### Supplies & accessories:

- T300238; Macro lens 2.0x with case
- 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



## FLIR T840 24°

---

**P/N: 82502-0201**

© 2020, FLIR Systems, Inc.

#82502-0201; r. 66013;

- 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
- 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