Technical Data
FLIR T335 (9 Hz)

Part number:

45609-0201

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Legal disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply.

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General description

FLIR T335 is a small and light-weight infrared camera with excellent image quality, high sensitivity and a broad temperature range, ideal for maintenance professionals for finding electrical hot spots and faulty equipment. The camera has Picture-in-Picture, text/voice annotations and interchangeable lenses.

Key features:

- Tiltable IR unit
- Touch screen
- High image quality (320 × 240)
- High sensitivity (50 mK)
- Digital camera 3.1 Mpixel
- Laser pointer
- Picture-in-Picture (scalable)
- Voice/Text annotation
- Zoom 2×
- MeterLink connection
- IR Window Auto-Correction
- Copy to USB
- FLIR QuickReport analysing s/w

Unmatched quality, outstanding ease of use, excellent ergonomics, lightweight and small!

Imaging and optical data

Field of view (FOV)	25° × 19°
Minimum focus distance	0.4 m (1.31 ft.)
Focal length	18 mm (0.7 in.)
Spatial resolution (IFOV)	1.36 mrad
Lens identification	Automatic
F-number	1.3
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK
Image frequency	9 Hz
Focus	Automatic or manual
Digital zoom	1–2× continuous
Panning	Panning over zoomed-in images

Detector data

Detector type	Focal plane array (FPA), uncooled microbolometer
Spectral range	7.5–13 µm
IR resolution	320 × 240 pixels

1 800 464 6372
CANADA: 1 800 613 0507

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Image presentation

Display	Built-in touch screen, 3.5 in. LCD, 320 × 240 pixels
Image adjustment	Auto (min span 4°C / 7.2°F) or manual (min span 2°C / 3.6°F)

Image presentation modes

Image modes	IR image, visual image, picture in picture, thumbnail gallery
Picture in Picture	Scalable IR area on visual image

Measurement

Object temperature range	−20°C to +120°C (−4°F to +248°F) 0°C to +350°C (+32°F to +662°F) +200°C to +650°C (+392°F to +1202°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading

Measurement analysis

Spotmeter	5
Area	5 boxes with max./min./average
Automatic hot/cold detection	Auto hot or cold spotmeter markers within area
Isotherm	Detect high/low temperature/interval
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
External optics/windows correction	Automatic, based on inputs of optics/window transmission and temperature
Measurement corrections	Reflected temperature, optics transmission and atmospheric transmission

Set-up

Color palettes	BW, BW inv, Iron, Rain
Set-up commands	Local adaptation of units, language, date and time formats

Storage of images

Image storage	Standard JPEG, including measurement data, on memory card
Image storage mode	IR/visual images; simultaneous storage of IR and visual images

Image annotations

Voice	60 seconds
Text	Text from predefined list or soft keyboard on touch screen
External sensors	Possible to connect (Bluetooth®): Extech Moisture Meter MO297 Extech Clamp Meter EX845
Report generation	• Separate PC software with extensive report generation

Video recording in camera and streaming to PC

Radiometric IR-video streaming	Full dynamic to PC using USB
Non-radiometric IR-video streaming	MPEG-4 to PC using USB

Digital camera

Built-in digital camera	3.1 Mpixel (2048 × 1536 pixels), and video lamp
Digital camera, focus	Fixed focus
Built-in digital lens data	FOV 53° × 41°
Digital camera, aspect ratio	4:3
Digital camera, image frequency	15–30 Hz auto exposure time

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Digital camera

Digital camera, color depth	24 bits on a GretagMacBeth ColorCheckerChart with an illumination of 10 lux

Laser pointer

Laser	Activated by dedicated button
Laser alignment	Position is automatic displayed on the IR image
Laser classification	Class 2
Laser type	Semiconductor AlGaInP diode laser
Laser power	1 mW
Laser wavelength	635 nm (red)

Data communication interfaces

SD Card	One card slot for removable SD memory cards
Audio	Microphone headset connection for voice annotation of images
Audio, connector type	4-pole 3.5 mm jack
USB	• USB-A: Connect external USB device (copy to memory stick) • USB Mini-B: Data transfer to and from PC / streaming MPEG-4
USB, standard	USB 1.1 full speed (12 Mbps)
USB, connector type	• USB-A connector • USB Mini-B connector

Composite video

Video out	Composite video output
Video, standard	CVBS (ITU-R-BT.470 PAL/SMPTE 170M NTSC)
Video, connector type	4-pole 3.5 mm jack

Power system

Battery type	Rechargeable Li Ion battery
Battery voltage	7.2 V
Battery capacity	2.2 Ah, at +20°C to +25°C (+68°F to +77°F)
Battery operating time	Approx. 4 hours at +25°C (+77°F) ambient temperature and typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging time	2.5 h to 95% capacity, charging status indicated by LED's
Power management	Automatic shutdown and sleep mode (user selectable)
AC operation	AC adapter, 90–260 VAC input, 12 V output to camera
Start-up time from sleep mode	Instant on

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 +25°C to +40°C (+77°F to +104°F)
EMC	• EN 61000-6-2 (Immunity) • EN 61000-6-3 (Emission) • FCC 47 CFR Part 15 B (Emission)
Magnetic fields	EN 61 000-4-8, Test level 5 for continous field (Severe industrial environment)
Encapsulation	Camera housing and lens: IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)

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Vibration	2 g (IEC 60068-2-6)
Safety	Power supply: EN/UL/CSA 60950-1

Physical data

Camera weight, incl. battery	0.88 kg (1.94 lb.)
Camera size (L × W × H)	106 × 201 × 125 mm (4.2 × 7.9 × 4.9 in.), with built-in lens pointing forward
Tripod mounting	UNC ¼"-20
Material	Polycarbonate + acrylonitrile butadiene styrene (PC-ABS) Thixomold magnesium Thermoplastic elastomer (TPE)
Color	Titanium gray and black with a red contour

Scope of delivery

- Hard transport case
- Infrared camera with lens
- Battery (2 ea.)
- Battery charger
- Bluetooth® USB micro adapter
- Calibration certificate
- FLIR QuickReport™ PC software CD-ROM
- Headset
- Memory card with adapter
- Power supply, incl. multi-plugs
- Printed Getting Started Guide
- Printed Important Information Guide
- Sunshield
- USB cable
- User documentation CD-ROM
- Video cable
- Warranty extension card or Registration card

Optional Accessories

- 1196961 IR lens, f = 30 mm, 15° incl. case
- 1196960 IR lens, f = 10 mm, 45° incl. case
- T197215 Close-up 4× (100 µm) incl. case
- T197214 Close-up 2× (50 µm) incl. case
- T197408 IR lens, 76 mm (6°) with case and mounting support for T/B-200/400
- T197412 IR lens, 4 mm (90°) with case and mounting support for T/B2xx-4xx
- 1196818 Lens cap camera
- T197000 High temp. option +1200°C/+2192°F for FLIR T/B2xx to T/B4xx and A/SC3xx Series
- 1196398 Battery
- 1196497 Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.
- T197667 Battery package
- T197650 2-bay battery charger, incl. power supply with multi plugs
- T910750 Power supply, incl. multi plugs
- 1910475 Adapter, SD memory card to USB
- T910737 Memory card micro-SD with adapters
- 1910423 USB cable Std A <-> Mini-B
- 1910582 Video cable
- 1196895 Hard transport case for FLIR T/B2xx-4xx
- 1910489 Headset, 3.5 mm plug
- 1124545 Pouch
- 1124544 Neck strap
- 1123970 Sun shield
- T951235 Bluetooth® USB micro adapter
- T910972 EX845: Clamp meter + IR therm TRMS 1000A AC/DC
- T910973 MO297: Moisture meter, pinless with memory
- T199800 One year extended warranty for T-Series

Optional Software

- T197453 FLIR ResearchIR 1.2
- T197453L5 FLIR ResearchIR 1.2, 5 user licenses
- T197453L10 FLIR ResearchIR 1.2, 10 user licenses
- T197454 FLIR QuickPlot 1.2
- T197454L5 FLIR QuickPlot 1.2, 5 user licenses
- T197454L10 FLIR QuickPlot 1.2, 10 user licenses
- T197717 FLIR Reporter 8.5 SP2, Professional
- T197717L5 FLIR Reporter 8.5 SP2, Professional, 5 user licenses
- T197717L10 FLIR Reporter 8.5 SP2, Professional, 10 user licenses
- T197778 FLIR BuildIR 2.1

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Optional Software

- T197778L5 FLIR BuildIR 2.1, 5 user licenses
- T197778L10 FLIR BuildIR 2.1, 10 user licenses
- DSW-10000 FLIR IR Camera Player