



## FLIR T420bx & T440bx

High performance infrared camera with on-board visual camera, touch screen, Wi-Fi connectivity, & interchangeable lens, plus MSX<sup>®</sup> image enhancement & auto orientation

Get maximum flexibility and efficiency out of 320 x 240 thermal imaging from our new T400bx line.

**Superior thermal imaging** – Sharp thermal resolution at 76,800 pixels for solid accuracy from farther away.

**MSX<sup>®</sup> enhancement** – Multi-Spectral Dynamic Imaging adds visible spectrum definition to IR images in real time for excellent thermal detail to help you instantly recognize the problem locations.

**Advanced Optics** – The widest array of lens options to fit the view and spot size you need for your application.

**Compass** – Adds camera pointing direction to every image for additional location documentation.

**Wi-Fi Connectivity** – Send images and data to smart phones and tablets (ie. iPhone<sup>®</sup>, iPad<sup>®</sup>, iPod touch<sup>®</sup>, or Android<sup>™</sup>) to share images and critical information quickly using FLIR Tools Mobile app.

**Accurate temperature measurements** – Accuracy calibrated within +/- 2°C or +/- 2% of reading.

**Temperature range** – measuring up to 650°C (1202°F) targeting insulation, HVAC, and building applications (T440bx model).

**Scalable P-i-P** – Overlay thermal images onto visible light photos as an alternative reference.

**Humidity, dew Point, & insulation alarms** – Alerts user when it detects moisture intrusion and insulation issues.

**METERLINK<sup>®</sup>** – Wirelessly transmit vital diagnostic data from clamp and moisture meters directly to the camera for annotating thermal images to further support findings.

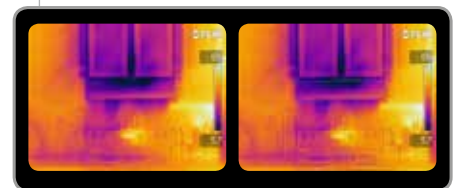
**Annotation** – Add voice comments via Bluetooth headset and text notes from the touchscreen keypad; New! T440bx has image sketch feature to add circles and pointers on IR/visual stored images.

**Auto orientation** – Automatically orients onscreen temperature measurement data whether in portrait or landscape view.

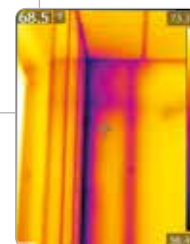
**Includes** – SD Memory card, 100-260V AC adaptor/charger, two Li-Ion rechargeable batteries, 2-bay battery charger, power supply (with multi-plugs), FLIR Tools software, USB cable, video cable, sun shield, Bluetooth<sup>®</sup> headset, lens cap, neckstrap, and hard case.



Wi-Fi connectivity



Original IR image on the left and with MSX<sup>™</sup> enhancement on the right image



Auto orientation keeps on-screen data upright

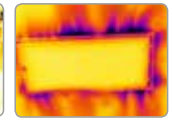
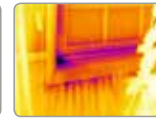
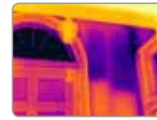
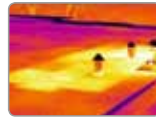
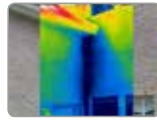


Built-in 3.1MP digital camera, LED lamp, laser pointer, fine focus adjust, and auto focus & image capture button. 120° rotating lens with 8X continuous zoom



Wireless METERLINK<sup>®</sup> communication via Bluetooth<sup>®</sup>

## Applications



Water damage — Water leak on ceiling, gutter, & roof top

Insulation — Energy loss, home inspection, and HVAC

## Imaging specifications

FEATURES	FLIR T420bx	FLIR T440bx
Temperature range	-20°C to 350°C (-4°F to 662°F)	-20°C to 650°C (-4°F to 1202°F)
Zoom	4X continuous	8X continuous
LCD image sketch	—	Draw on stored images right on touchscreen
Multi-Spectral Dynamic Imaging (MSX)	IR image with enhanced detail presentation	IR image with enhanced detail presentation
Measurement presets	7 presets: center spot; hot spot (box max); cold spot (box min); 3 spots; hot spot - spot (box max + spot + delta); hot spot - temperature (box max + ref temp + delta); no measurements	6 presets: center spot; hot spot (box max); cold spot (box min); no measurements; user preset 1; user preset 2
Profile measurement analysis	—	Shows a live graph of temperatures across a line profile on the image
COMMON FEATURES		
Frame rate	60Hz	
Field of view/minimum focus distance/FOV Match	25° x 19° / 0.4m / Field of View match where digital image FOV adapts to the IR lens	
Focus	Manual/automatic	
Thermal sensitivity (N.E.T.D)	<0.045°C at 30°C	
Detector type - Focal plane array (FPA) uncooled microbolometer	320 x 240 pixels	
Spectral range	7.5 to 13µm	
Compass	Adds camera pointing direction to each image	
Display	Built-in touch-screen 3.5" color LCD	
Image modes	Thermal/visual/P-i-P (resizable and movable)/MSX and thumbnail gallery	
Image storage	1000 radiometric JPEG images (SD card memory)	
Image annotation	Voice (60 sec); text comments, sketch, image markers on IR	
Periodic image storage	7 seconds to 24 hours (IR) and 14 seconds to 24 hours (IR and visual)	
Lens	25° (optional 6°, 15°, 45°, 90°, Close up 100µm, 50µm lenses available)	
Video lamp	Bright LED lamp	
Laser pointer classification/type	Class 2/Semiconductor AlGaInP Diode laser: 1mW/635nm (red)	
Set-up controls	Mode selector, color palettes, configure info to be shown in image, local adaptation of units, language, date and time formats, and image gallery	
Measurement modes	5 spotmeters, 5 box areas, Isotherm, auto hot/cold spot, Delta T	
Alarm alerts	1 humidity alert, 1 dew point alert, and insulation alert	
Measurement correction	Reflected ambient temperature & emissivity correction	
Video recording in-camera and video streaming	Non-radiometric IR-video recording (MPEG-4 to memory card), Radiometric IR-video streaming (Full dynamic to PC using USB or Wi-Fi), and Non-radiometric IR-video streaming (MPEG-4 using Wi-Fi and uncompressed colorized video using USB)	
Instant report	Create a Thermographic Inspection report directly in the camera	
Battery type/operating time	Li-Ion/ >4 hours, display shows battery status	
Charging system	In camera AC adapter/2 bay charging system	
Shock/Vibration	25G, IEC 60068-2-29 / 2G, IEC 60068-2-6	
Dimensions/Weight	106x201x125mm/0.88kg, including battery	

## Ordering Information

62101-0501 ..... FLIR T420bx Thermal Imaging InfraRed Camera (320x240)  
 62101-0701 ..... FLIR T440bx Thermal Imaging InfraRed Camera (320x240)



\*After product registration on www.flir.com

### ACCESSORIES

**1196961** ..... IR lens, f = 30 mm, 15° incl. case  
**1196960** ..... IR lens, f = 10 mm, 45° incl. case  
**T197215** ..... Close-up 4x (100 µm) incl. case  
**T197214** ..... Close-up 2x (50 µm) incl. case  
**T197408** ..... IR lens, 76 mm (6°) with case and mounting support  
**T197412** ..... IR lens, 4 mm (90°) with case and mounting support  
**1196398** ..... Battery

**T197667** ..... Battery package  
**T197650** ..... 2-bay battery charger, incl. power supply with multi plugs  
**T910750** ..... Power supply, incl. multi plugs  
**T911230ACC** . Memory card SDHC 4 GB  
**1910423** ..... USB cable Std A <-> Mini-B  
**T198509** ..... Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.  
**1910582ACC** . Video cable

**T198370**.....Hard transport case  
**T198495** ..... Pouch for FLIR T4xx series  
**T198493** ..... Sun shield  
**T198499** ..... Neck strap  
**T197771ACC** .. Bluetooth Headset  
**T198583** ..... FLIR Tools+ (license only)  
**T911093** ..... Tool belt



**FLIR Commercial Systems**  
 Luxemburgstraat 2  
 2321 Meer  
 Belgium  
 Tel. : +32 (0) 3665 5100  
 Fax : +32 (0) 3303 5624  
 E-mail : flir@flir.com

**FLIR Systems AB**  
 Sweden  
 Tel. : +46 (0)8 753 25 00

**FLIR Systems UK**  
 Tel. : +44 (0)1732 220 011

**FLIR Systems GmbH**  
 Germany  
 Tel. : +49 (0)69 95 00 900

**FLIR Systems France**  
 Tel. : +33 (0)1 60 37 55 02

**FLIR Systems Italy**  
 Tel. : +39 (0)2 99 45 10 01

**FLIR Commercial Systems**  
 Spain  
 Tel. : +34 91 573 48 27

**FLIR Systems, Middle East FZE**  
 Dubai - United Arab Emirates  
 Tel. : +971 4 299 6898

**FLIR Systems Russia**  
 Tel. : + 7 495 669 70 72