

## FLIR T420bx & T440bx

High Performance Infrared Camera With on-board Visual Camera, Thermal Fusion, Touch Screen, Wi-Fi Connectivity, & Interchangeable Lens, Plus MSX™ Image Enhancement & FOV Match

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

**New! MSX™ Enhancement** – Multi-Spectral Dynamic Imaging adds visible spectrum definition to IR images in real time for extraordinary thermal detail that instantly highlights and orients problem locations (T440bx only)

**New! Field of View (FOV) Match** – Now you have the option to automatically match the visible camera field of view to the IR FOV for better documentation

**New! Compass** – Adds camera pointing direction to every image for additional location documentation (T440bx only)

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

**Accurate Temperature Measurements** – Accuracy calibrated within  $\pm 2^{\circ}\text{C}$  or  $\pm 2\%$  of reading

**Temperature Range** – measuring up to  $1202^{\circ}\text{F}$  ( $650^{\circ}\text{C}$ ) targeting insulation, HVAC, and building applications (T440bx model)

**Scalable P-i-P and Thermal Fusion** – Blend thermal with visible light images on-screen; includes picture-in-picture window sizing

**Humidity, Dew Point, & Insulation Alarms** – Alerts user when it detects moisture intrusion and insulation issues

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

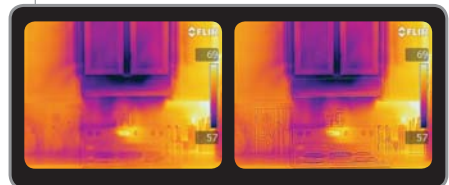
**Annotation** – Add voice comments via Bluetooth headset and text notes from the touchscreen keypad; New! T440bx has image sketch feature to draw circles and pointers on IR/Visual stored images

**InstantReport** – Create PDF document directly from the camera

**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® headset, lens cap, neckstrap, and hard case



Wi-Fi Connectivity



Original IR Image on the Left and with MSX™ Enhancement on the Right image (available on T440bx model)



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



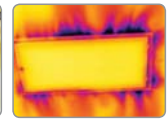
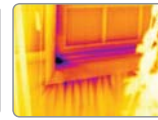
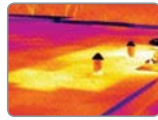
Thermal Fusion is an Infrared image shown above, below or within temperature interval blended onto a digital image



Wireless METERLINK® Communication via Bluetooth®



## 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                                               | -4°F to 662°F (-20°C to 350°C)                                                                                                                                                                                                             | -4°F to 1202°F (-20°C to 650°C)                                       |
| 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                            |
| Measurement Presets                                             | —                                                                                                                                                                                                                                          | Presets for standard measurements                                     |
| Profile Measurement Analysis                                    | —                                                                                                                                                                                                                                          | Shows a live graph of temperatures across a line profile on the image |
| Compass                                                         | —                                                                                                                                                                                                                                          | Adds camera pointing direction to each image                          |
| COMMON FEATURES                                                 |                                                                                                                                                                                                                                            |                                                                       |
| Frame Rate                                                      | 60Hz                                                                                                                                                                                                                                       |                                                                       |
| Field of view/Minimum focus distance/FOV Match                  | 25° x 19° / 1.31ft (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                                                                                                                                                                                                                                |                                                                       |
| Display                                                         | Built-in touch-screen 3.5" color LCD                                                                                                                                                                                                       |                                                                       |
| Image modes                                                     | Thermal/Visual/Fusion/P-i-P 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 100, 50µm lenses available)                                                                                                                                                                      |                                                                       |
| Video Lamp                                                      | Bright LED lamp                                                                                                                                                                                                                            |                                                                       |
| Laser 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                                               | 4.2x7.9x4.9" (106x201x125mm)/1.94lbs (0.88kg), including battery                                                                                                                                                                           |                                                                       |
| 2-5-10 Warranty                                                 | When the camera is registered within 60 days: 2 years on Parts/Labor for the Camera; 5 years of Coverage on Batteries; 10 years of Protection on the IR Detector                                                                           |                                                                       |

## Ordering Information

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

### ACCESSORIES

1196398..... Li-Ion Rechargeable Battery  
 1910490..... Cigarette Lighter Adapter Kit, 12VDC (1.2m cable)  
 T197650..... 2-Bay Battery Charger including Power Supply (multi plugs)  
 T911048..... Camera Pouch Case  
 T197717 ..... FLIR Reporter Professional  
 4114887..... FLIR ThermoTrak™

### CERTIFICATION TRAINING

ITC LEVEL I ..... ITC Level I Certification Training per attendee



10-Year Detector  
Protection  
5-Year Battery  
2-Year Parts & Labor