



FLIR T620bx & T640bx

High performance thermal imaging with on-board 5MP visual camera, interchangeable lens options, auto-focus, and large 4.3" touchscreen LCD

These thermal cameras combine excellent ergonomics with superior image quality, providing the ultimate image clarity and accuracy plus extensive communication possibilities.

Highest IR resolution in its class – Crisp thermal images with 307,200 pixels (640 x 480) for the best detection, pictures, and temperature measurements from long range.

Precision focus – Manual control and the fastest auto-focus available for the ultimate clarity, accuracy, and efficiency.

MSX® 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.

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

Field of View (FOV) match – Option to match the visible camera field of view to the IR FOV for better documentation.

GPS and compass – Automatically adds geo-location data and camera pointing direction to images to include in reports.

Programmable button – Provides easy access to favorite functions.

Wi-Fi connectivity – Send images and data to smartphones and tablets and share critical information quickly with the FLIR Tools Mobile for Apple® and Android™, featuring live video streaming and remote control via the mobile device.

Accuracy – Calibrated within $\pm 2^{\circ}\text{C}$ or $\pm 2\%$ of reading.

Temperature range – measures to 650°C .

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

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

Multiple measurements – Report all the details with 10 measurement spots, 5 box areas, Delta T temperature differential, isotherm, and auto hot/cold markers.

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

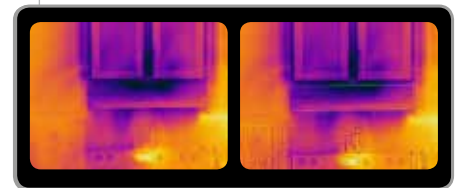
Annotation – Add voice comments via Bluetooth headset and text notes from the touchscreen keypad. Sketch circles, pointers and notes on stored IR/visual images.

InstantReport – Create PDF document directly from the camera.

Includes – See specification chart on back.



Wi-Fi connectivity



Original IR Image on the left and with MSX™ enhancement on the right image



Auto orientation keeps on-screen data upright

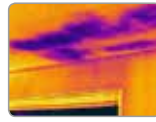
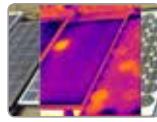
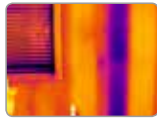


Built-in 5MP digital camera, LED lamps, laser pointer, image capture button and auto/manual focus capability. 120° rotating optical block

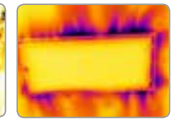
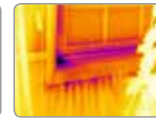
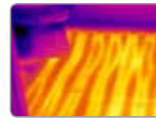


Sketch on IR/visual -- use touchscreen to draw circles, pointers, etc. on stored images

Applications



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



Insulation — Energy loss, home inspection, and HVAC

Imaging specifications

FEATURES	FLIR T620bx	FLIR T640bx
Thermal sensitivity (N.E.T.D)	<0.04°C at 30°C	<0.035°C at 30°C
Zoom	4X continuous	8X continuous
Focus	Manual or automatic (one shot)	Continuous, manual or automatic (one shot)
Viewfinder	—	Color viewfinder for viewing images in bright or sunny conditions
Profile measurement analysis	—	Shows a live graph of temperatures across a line on the image
COMMON FEATURES		
Temperature range	-40°C to 650°C (-40°F to 1202°F)	
Sketch on IR/visual	Draw on stored images right on touchscreen	
Measurement presets	6 presets: center spot; hot spot (box max); cold spot (box min); no measurements; user preset 1; user preset 2	
Multi-Spectral Dynamic Imaging (MSX)	IR image with enhanced detail presentation	
GPS	Location data automatically added to every image from built-in GPS	
Compass	Indicates direction camera is pointing for target documentation	
Frame rate	30Hz	
Field of view/minimum focus distance/FOV match	25° x 19° / 0.25m / Field of View match where digital image FOV adapts to the IR lens	
Detector type - focal plane array (FPA) uncooled microbolometer	640 x 480 pixels	
Spectral range	7.5 to 14µm	
Lens	25° or 45° models (optional 7°, 15°, 25°, 45°, 80°, Close up 100µm, 50µm lenses available)	
Display	Built-in touch-screen 4.3" color LCD (800 x 480 pixels)	
Image modes	Thermal/Visual/P-i-P (Resizable and movable)/MSX and thumbnail gallery	
Automatic image adjustment	Continuous/manual; linear or histogram based; possible to lock max, min or span temperature	
Manual image adjustment	Level/span/max/min	
Image storage	1000 radiometric JPEG images (SD card memory)	
Image annotation	Voice (60 sec); text comments, sketch	
Periodic image storage	7 seconds to 24 hours (IR) and 14 seconds to 24 hours (IR and visual)	
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	10 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	
GPS	Location data automatically added to every image from built-in GPS	
Video recording in camera and video streaming	Non-radiometric IR-video recording (MPEG-4 to memory card), visual and 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)	
Battery type/operating time	Li-Ion/ 2.5 hours, Display shows battery status	
Charging system	In camera AC adaptor/2 bay charging system	
Shock/vibration/encapsulation/safety	25G, IEC 60068-2-29 / 2G, IEC 60068-2-6 / IP54; EN/UL/CSA/PSE 60950-1	
Dimensions/weight	143x196x94mm/1.3kg, including battery	
Accessories included	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, Bluetooth® headset, lens cap, neckstrap, and hard case	

Ordering information

55901-4302	FLIR T620bx Thermal imaging IR camera (640x480) with Wi-Fi and standard 25° lens
55901-4303	FLIR T620bx Thermal imaging IR camera (640x480) with Wi-Fi plus 45° lens
55902-4502	FLIR T640bx Thermal imaging IR camera (640x480) with Wi-Fi and standard 25° lens
55902-4503	FLIR T640bx Thermal imaging IR camera (640x480) with Wi-Fi plus 45° lens



*After product registration on www.flir.com

ACCESSORIES

T197914 IR lens, f=41.3 mm (15°) with case	T198066 Close-up IR lens, 1.5x (25 µm) with case	T198625 Hard transport case
T197922 IR lens, f=24.6 mm (25°) with case	T910814 Power supply, incl. multi plugs	T198495 Pouch
T197915 IR lens, f=13.1 mm (45°) with case	T198506 Li-Ion battery pack 3.7V 29Wh	T198497 Large eyecap
T198059 Close-up IR lens, 2.9x (50 µm) with case	T911230ACC . Memory card SDHC 4 GB	T198498 Tripod adapter
T198060 Close-up IR lens, 5.8x (100 µm) with case	1910423 USB cable Std A <-> Mini-B	T198496 Stylus pen
T198166 IR lens, f=88.9 mm (7°) with case and support	T198509 Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.	T198499 Neck strap
T198065 IR lens, f=6.5 mm (80°) with case	T910930ACC . HDMI type C to DVI cable 1.5 m	T197771ACC . Bluetooth headset
	T910891ACC . HDMI type C to HDMI type A cable 1.5 m	T198583 FLIR Tools+ (license only)
		T911093 Tool belt



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