

## **FLIR T-Series** 640 x 480

\_IR T620

First Choice for Professional Thermographers

The exciting new FLIR T620 moves to the head of its class in professional and expert level cameras, providing the highest infrared resolution in the T-Series line and a new list of impressive features.

- 5 MP visible light camera with lamp
- 4.3" Bright Touch-screen LCD
- 4× Digital Zoom
- Voice, text, sketch, and draw-direct annotation





Touch-Screen



Tiltable Lens

thermal images

Instant Reports

• Realtime video frame rate

5 MP Digital Camera with Lamp



Delta T-Differential Temperature

# FLIR T620 Features

- New! Highest IR Resolution in Its Class - Crisp thermal images up to 307,200 pixels (640 x 480) for greater accuracy and readability from longer range distances
- **New! Higher Resolution Digital** Camera - 5 megapixel detector with LED lamps provides sharper visible light images for clear reference pictures of target objects
- New! Large Touch-screen 4.3" LCD displays bright, sharp images and graphics with intuitive interface and efficient on-screen report generation
- **New! More Measurement Tools** - Report further details with 10 measurement spots, 5 box areas, Delta T-Differential temperature, isotherm, and auto hot/cold markers
- High Thermal Sensitivity -• Sensitivity of 0.05°C at 30°C. Detailed, low-noise imaging to detect the smallest temperature differences and subtle problems

- Ergonomic Tilting Lens Popular T-Series design allows 120° rotation of optical block for more comfortable operation when capturing images from challenging angles
- Advanced Optics A range of lenses to fit your application needs including the standard 25° and optional 15°, and 45° optics
- Thermal Fusion and P-i-P Blend thermal and visible light images onscreen and scale picture-in-picture overlays to identify targets and locations easily
- Video Recording MPEG4 nonradiometric IR or daylight video recording to SD card
- Realtime video frame rate
- Instant Reports





Electrical: Hot Fuses

Motor: Internal Winding Problem

Motor: Bearing Problem

Building: Heat Loss



# FLIR T620 Specifications

Imaging and optical data Field of view (FOV) / Minimum focus distance	25° ··· 10° / 0.25 ··· / 0.82 ft )
	25° × 19°/0.25 m (0.82 ft.)
Spatial resolution (IFOV)	0.68 mrad
Thermal sensitivity/NETD	<50 mK@+30°C(+86°F)
Image frequency Focus	30 Hz
Zoom	Automatic (one shot) or manual
Focal Plane Array (FPA) / Spectral range	1–4× continuous, digital zoom, including panning Uncooled microbolometer / 7.8–14 um
IR resolution	640 × 480 pixels
Image presentation	040×400 pixels
Display	Built-in Touch-screen, 4.3 in. wide screen LCD, 800 × 480 pixels
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 modes	IR image, visual image, thermal fusion, Picture-in-Picture, thumbnail gallery
Thermal fusion	IR image shown above, below or within temp interval on visual image
Picture-in-Picture	Resizable and movable IR area on visual image
Measurement	
Temperature range	-20°C to +150°C (-4°F to +302°F), +100°C to +650°C (+212°F to +1202°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading
Measurementanalysis	
Spotmeter	10
Area	5 boxes or circles with max./min./average
Automatic hot/cold detection	Max/Min temp. value and position shown within box, circle or on a line
Isotherm	Above/below/interval
Difference temperature	Delta temperature between measurement functions or reference tempera
Reference temperature	Manually set or captured from any measurement function
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
Measurement corrections	Reflected temperature, optics transmission, atmospheric transmission
	and external optics
Set-up	
Color palettes	Iron, Gray, Rainbow, Arctic, Lava, Rainbow HC
Set-up commands	Configure information to be shown in image; programmable button; local
Commence of the second se	adaptation of units, language, date and time formats, camera software upd Use PC software FLIR Tools
Camera software update Storage of images	USE PC SOTTWARE FLIK TOOIS
	Standard IDEC including macaurament data an memory card
Image storage Image storage mode	Standard JPEG, including measurement data, on memory card IR/visual images, simultaneous storage of IR and visual images.
linage stolage mode	Visual and IR image automatically grouped together
Video recording in camera and streaming to PC	visual and in finage automatically grouped together
Non-radiometric IR and Digital camera video recording	MPEG-4 to memory card
Non-radiometric IR and Digital streaming	MPEG4 using USB
Data communication interfaces	
Interfaces	
	USR-mini USR-A Bluetooth Wi-Fi DigitalVideo Output
	USB-mini, USB-A, Bluetooth, Wi-Fi, Digital Video Output Communication with beadset and external sensors
Bluetooth	Communication with headset and external sensors
Bluetooth Wi-Fi	Communication with headset and external sensors Wireless communication between camera and external device
	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device
Bluetooth Wi-Fi USB	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming
Bluetooth Wi-Fi USB Video out	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI)
Bluetooth Wi-Fi USB Video out Video, connector type	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming
Bluetooth Wi-Fi USB Video out Video, connector type Powersystem	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time
Bluetooth Wi-Fi USB Video out Video, connector type Powersystem	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12V from a vehicle) or 2-bay charger
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12V from a vehicle) or 2-bay charger
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range	Communication with headset and external sensors Wireless communication between camera and external device •USB-A: Connect external USB device •USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12 V from a vehicle) or 2-bay charger Automatic shutdown and sleep mode (user selectable)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range	Communication with headset and external sensors Wireless communication between camera and external device • USB-A: Connect external USB device • USB Mini-B: Data transfer to and from PC/streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12V from a vehicle) or 2-bay charger Automatic shutdown and sleep mode (user selectable) -15°C to +50°C (+5°F to +122°F)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range	Communication with headset and external sensors         Wireless communication between camera and external device         • USB-A: Connect external USB device         • USB Mini-B: Data transfer to and from PC/streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range	Communication with headset and external sensors Wireless communication between camera and external device • USB -A: Connect external USB device • USB Mini-B: Data transfer to and from PC / streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12V from a vehicle) or 2-bay charger Automatic shutdown and sleep mode (user selectable) -15°C to +50°C (+5°F to +122°F) -40°C to +70°C (-40°F to +158°F) IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C
Bluetooth Wi-Fi USB Video out Video, connector type Powersystem Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage)	Communication with headset and external sensors Wireless communication between camera and external device • USB -A: Connect external USB device • USB Mini-B: Data transfer to and from PC / streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12V from a vehicle) or 2-bay charger Automatic shutdown and sleep mode (user selectable) -15°C to +50°C (+5°F to +122°F) -40°C to +70°C (-40°F to +158°F) IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)/2 cycles
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump	Communication with headset and external sensors Wireless communication between camera and external device • USB -A: Connect external USB device • USB Mini-B: Data transfer to and from PC / streaming Digital Video Output (DVI) HDMI compatible Li Ion, 3 hours operating time In camera (AC adapter or 12 V from a vehicle) or 2-bay charger Automatic shutdown and sleep mode (user selectable) -15°C to +50°C (+5°F to +122°F) -40°C to +70°C (-40°F to +158°F) IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles IP 54 (IEC 60529)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump	Communication with headset and external sensors         Wireless communication between camera and external device         •USB -A: Connect external USB device         •USB Mini-B: Data transfer to and from PC / streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)         IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C         (+77°F to +104°F)/2 cycles         IP 54 (IEC 60529)         25 g (IEC 60068-2-29)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump Vibration	Communication with headset and external sensors         Wireless communication between camera and external device         •USB -A: Connect external USB device         •USB Mini-B: Data transfer to and from PC / streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)         IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C         (+77°F to +104°F)/2 cycles         IP 54 (IEC 60529)         25 g (IEC 60068-2-29)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump Vibration Physical data	Communication with headset and external sensors         Wireless communication between camera and external device         •USB-A: Connect external USB device         •USB Mini-B: Data transfer to and from PC/streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12 V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)         IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles         IP 54 (IEC 600529)         25 g (IEC 60068-2-29)         2 g (IEC 60068-2-6)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump Vibration Physical data Weight	Communication with headset and external sensors         Wireless communication between camera and external device         •USB-A: Connect external USB device         •USB Mini-B: Data transfer to and from PC / streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12 V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)         IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles         IP 54 (IEC 60068-2-29)         25 g (IEC 60068-2-29)         2 g (IEC 60068-2-6)         1.3 kg (2.87 lb.)
Bluetooth Wi-Fi USB Video out Video, connector type Power system Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump Vibration Physical data Weight Size (L × W × H)	Communication with headset and external sensors         Wireless communication between camera and external device         •USB-A: Connect external USB device         •USB Mini-B: Data transfer to and from PC / streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12 V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)         IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)/2 cycles         IP 54 (IEC 60529)         25 g (IEC 60068-2-6)         1.3 kg (2.87 lb.)         143 × 195 × 95 mm (5.6 × 7.7 × 3.7 in.)
Bluetooth Wi-Fi USB Video out Video, connector type Powersystem Battery Charging system Power management Environmental data Operating temperature range Storage temperature range Humidity (operating and storage) Encapsulation Bump Vibration Physical data Weight Size (L × W × H) Tripod mounting	Communication with headset and external sensors         Wireless communication between camera and external device         •USB-A: Connect external USB device         •USB Mini-B: Data transfer to and from PC / streaming         Digital Video Output (DVI)         HDMI compatible         Li Ion, 3 hours operating time         In camera (AC adapter or 12 V from a vehicle) or 2-bay charger         Automatic shutdown and sleep mode (user selectable)         -15°C to +50°C (+5°F to +122°F)         -40°C to +70°C (-40°F to +158°F)         IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)/2 cycles         IP 54 (IEC 60529)         25 g (IEC 60068-2-6)         1.3 kg (2.87 lb.)         143 × 195 × 95 mm (5.6 × 7.7 × 3.7 in.)

Infrared li Pie

#### **Picture-in-Picture Fusion**

Allows for easier identification and interpretation of infrared images. This advanced technology enhances the value of an infrared image by allowing you to overlay it directly over the corresponding visible image. This functionality combines the benefits of both the infrared image and visual picture at the push of a button.



### Training

The center offers a wide variety of infrared courses from entry-level thermography to advanced IR training. ITC infrared thermography certifications are globally recognized and are designed to exceed the requirements of international certification standards.

Check the ITC course schedule in the Asia Pacific region: www.flir.com/thg/itc



### Optional . Software

FREE FLIR QuickReport™ Allows the user to organize, analyze and present infrared image data in a report. Delivered with your FLIR camera.

## FLIR Reporter™

A powerful yet easy-to-use tool to generate comprehensive and professional infrared inspection reports.

FLIR BuildIR™

Software designed to carry out advanced analysis of building structures. It is used to analyze images taken with an infrared camera and create inspection reports based on these images.

Accessories Pouch

Extra battery Battery charger , Car charger Selection of lenses



#### www.flir.com **FLIR offices in Asia Pacific**

45° Lens

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25° Lens

15° Lens