



FLIR® B620

INFRARED CAMERA



- New 640 x 480 Infrared Detector
- Powerful Thermal Sensitivity: <math><0.065^{\circ}\text{C}</math>
- Dew Point and Insulation Alarms
- FLIR Fusion Picture in Picture
- 3.2 Mpixel Visible Light Camera
- Easy Text and Voice Annotation

New and Improved Detector

The B620 infrared camera includes a new 640 X 480 infrared detector that delivers four times greater detail than cameras with 320 x 240 IR resolution. The new detector also delivers optimum <math><0.065^{\circ}\text{C}</math> thermal sensitivity at +30°C to help capture the finest image detail to determine trouble spots in buildings and infrastructure.

The B620's high-resolution capability enables accurate readings to be taken at greater distances, which helps ensure productivity, safety, and cost-effectiveness.

Survey at Safe Distances

For those applications where safe distances need to be maintained, the B620 can be used with interchangeable lenses and an optional FLIR handheld Wireless LAN-based remote control and display. The B620 also features a large target-distance to spot-size ratio for accurate measurements and analyses. This enables professionals to conduct quick, easy, and safe IR inspections.

Viewfinder and LCD

The B620 includes a tiltable color viewfinder (800 X 600) and a high resolution LCD (1024 X 600). The tilt-able viewfinder is ideal for outdoor work, especially in bright sunlight. The LCD provides convenient and comfortable viewing for extensive survey work.

FLIR Fusion

FLIR Fusion technology makes it easy to create compelling reports and communicate trouble spots to your team. Simply move, resize, and reshape IR images inside images you take with the B620's integral 3.2 Mpixel camera. What's more, the B620 camera supports thermal fusion, which lets you control the right level of infrared and visible light detail in your images. Infrared and visible light images taken with the B620 can be stored in standard JPEG formats. In addition, the B620 takes full-radiometric video clips to further boost productivity of IR inspections.

Visual Target Illuminator

The B620 visible-light camera has a target illuminator or lamp for taking pictures in low light areas, such as electrical cabinets. The target illuminator ensures good reference visual images can be documented regardless of the lighting conditions.

FLIR Reporter Software

Images are easily downloaded and managed using FLIR QuickReport and optional FLIR Reporter software.

Productive Auto Focus

Manual and Auto Focus allows operators greater flexibility when collecting images in a range of settings. Auto Focus allows new users to be productive sooner and manual focus provides the added control when needed.

Wireless Remote Control

Professional infrared camera users often work in hazardous areas or in places that are difficult to access. We have responded to our customers' feedback and developed a remote control that allows you to control all vital functions of the camera from a safe distance in a wireless mode.

Text and Voice Annotation

Simplify your reporting with the advanced text capabilities of the B620 camera. Create comments using the camera's soft key display or even download text from a PDA to automate image description.

Three Hours Run-Time on a Single Battery

The B620 includes an intelligent charging station capable of conditioning and charging two 3-hour batteries at a time. In addition, like a cell phone, you can plug the B620 into an AC outlet or optional 12V cable and charge the battery while still in the camera.

Factory Infrared Certification Training and Support

In addition to worldwide service and support, FLIR Systems offers Thermographer certification classes and high quality interactive thermography training from the most qualified international thermography instructor. The FLIR Systems infrared training Center (ITC) is the Global leader in IR Thermography Training.

FLIR® B620 Technical Specifications

Imaging Performance	
Thermal	
Field of view/min focus distance	24° x 18° / 0.3 m (with standard lens)
Spatial resolution (IFOV)	0.65 mrad (with standard lens)
Thermal sensitivity @ 30°C	<0.065°C
Electronic zoom / pan function	1 - 2 x continuous, including pan function
Image Frequency	30 Hz (non-interlaced)
Focus	Auto, electric and manual
IR Lens	24° plus optional interchangeable FLIR lenses
Detector type	Focal plane array (FPA) uncooled microbolometer; 640 x 480 pixels
Spectral range	7.5 to 13 µm
IR Resolution	640 x 480 pixels
Visual	
Built-in digital video	3.2 Mpixel, full color / built-in Target Illuminator / auto focus
Image Presentation	
Image Fusion	Picture-in-Picture: move, resize, and reshape IR image inside visible light images. Thermal Fusion: Merging of visual and infrared image (interval, above/below).
Reference image	Show live IR image and reference image on screen for easy troubleshooting.
Viewfinder	Built-in, tiltable, high-resolution color viewfinder (800 x 600 pixels)
Built-in display	Built-in 5.6" LCD (1024 x 600 pixels)
Video output	RS170 EIA/NTSC or CCIR/PAL composite video, USB
Measurement	
Object temperature ranges	-40°C to +120°C
Accuracy	2°C or 2% of reading
Measurement analysis	3 spotmeters, 3 areas; auto hot/cold detection, Isotherms (above, below, interval), Delta T, Line Probe, Reference temperature function
Menu controls	Palettes, load custom palettes, auto adjust (manual/continuous/based on histogram equalization), on screen live and reference image, image gallery, programmable storage, user profiles, programmable buttons
Alarm functions	Automatic alarm on any selected measurement function, audible/visible alarm above/below, humidity (includes dew point), insulation
Emissivity correction	Variable from 0.01 to 1.0 or select from listings in pre-defined material list
Measurement features	Automatic corrections based on user input for reflected ambient temperature, distance, relative humidity, atmospheric transmission, and external optics
Optics transmission correction	Automatic, based on signals from internal sensors
Image Storage	
Type	Removable SD-card (1GB)
Image storage modes	Single image, simultaneous storage of IR and visual images
Periodic image storage	Every 10 seconds up to 24 hours
File format – THERMAL	Standard JPEG; 14 bit thermal measurement data included
File format –VISUAL	Standard JPEG inked with corresponding thermal image
Voice annotation of images	60 sec. of digital voice "clip" stored together with the image wired headset
Text annotation of images	Predefined by user and stored with image
Image marker	Markers on visual image
Video Streaming	
Non radiometric IR-video streaming	MPEG 4 streaming to PC using USB or WLAN, with optional Wireless remote control
Laser LocatIR™	
Classification type	Class 2, Semiconductor AlGaInP Diode Laser: 1 mW/635 nm (red)
Laser	Laser pointer activated by dedicated button
Power Source	
Battery type	Li-Ion, rechargeable, field-replaceable
Battery operating time	>3 hours at 25°C typical use
Charging system	In camera (AC adapter or 12V from car) or 2 bay intelligent charger or 12V from car with optional DC 12V connection cable
External power operation	AC adapter 90-260 VAC, 50/60Hz or 12V from car (cable with standard plug optional)
Power saving	Automatic shutdown and sleep mode (user-selectable)
Environmental	
Operating temperature range	-15° C to +50° C
Storage temperature range	-40° C to +70° C
Humidity (operating and storage)	10% to 95%, IEC 68-2-30
Encapsulation	IP 54 IEC 529
Shock	Operational: 25G, IEC 68-2-30
Vibration	Operational: 2G, IEC 68-2-6
Physical Characteristics	
Weight	1.8 kg (incl. lens and battery)
Size (L x W x H)	324 X 144 X 147mm (incl. standard lens)
Tripod mounting	1/4" – 20

Interfaces	
USB-A	Connect external USB device
USB Mini-B	Data transfer to/from PC
IrDA	Wireless communication
SD-card slots (2)	I/O slot; storage slot
Camera includes:	
User documentation in CD-ROM	
Camera with visual and IR lens	
Power supply	
2 batteries (3 hours operating time on each)	
2 bay charging station	
FLIR QuickReport software	
Manual and Quick Reference Card	
SD-card with USB Card Reader	
Headset	
Cables (USB, Video)	
Lenses (optional)	
<i>Automatic lens identification</i>	
Field of view/minimum focus distance	
25 micron / 18mm	
85° / 100m	
7° x 5.25° / 6m telelens	
12° x 9° / 1.2 m telelens	
45° x 34° / 0.2m wide angle lenses	
Close-up 50µm 32 mm x 24 mm / 75 mm	
Other Options	
FLIR Reporter software	
FLIR Image Builder software	
Wireless remote control including WLAN interface	



Optional Wireless Local Area Network remote control and display.

