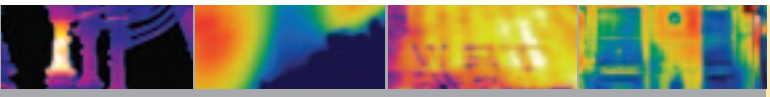
FLIR SYSTEMS™

The Global Leader in Infrared Cameras

ThermaCAM® B20HS

INFRARED CAMERA



The ThermaCAM® B20HS infrared camera offers a non-invasive means of monitoring and diagnosing the conditions of buildings – providing immediate high-resolution thermal imagery, revealing potential structural and moisture issues, energy efficiency and even rodent or pest discovery.

- Outstanding Thermal Image Quality
- JPEG Image Storage
- Interchangeable Optics
- Built-in Laser LocatIR™
- High Thermal Sensitivity and Precise Temperature Measurement
- Includes ThermaCAM® QuickView™ Software
- Removable CompactFlash® Memory

Fast Detection for Fast Action

Use the B20HS to image entire rooms instantly, inspect places that can't be physically reached with moisture meters. Reveal wet conditions behind surfaces such as enameled walls and wallpaper that don't readily water stain, track leaks to their source, monitor the drying process, and confirm when a structure is dry. An exclusive, automatic built-in dew point indicator provides valuable humidity data to facilitate moisture analysis. Plus, you can enter text comments and record voice comments with images to annotate your field data in real-time.

Rugged, Ergonomic & Lightweight

At only 4.4 lbs (2 kg), the ultra-portable B20HS fits comfortably in the palm of your hand. Lightweight, long-life, exchangeable Lithium-ion batteries assure uninterrupted in-field inspections.

Outstanding Image Quality

High thermal sensitivity lets you see problems clearly. The state-of-the-art, fourth generation 320 x 240 uncooled microbolometer FPA detector with built-in auto focus capacity delivers crisp, detailed, high-resolution images.

View color images in the integral high resolution viewfinder, ideal for outdoor inspections. Six color palette options and a suite of supplementary optics make the B20HS perfect for building diagnostic applications, regardless of target size or distance.

Flexible Viewing Options

The built-in color viewfinder is ideal for outdoor applications, while the detachable 4-inch color LCD on the camera's handle adjusts to any viewing angle, and may be used to operate the camera via redundant controls – for optimal use in hard-to-reach areas – indoors and out.

Easy to Operate

Ergonomic, intuitive controls make operation seamless and efficient. A user-friendly joystick, familiar menus, and soft control buttons on both the camera body and detachable handle provide for easy one-handed operation. The built-in Laser LocatIR™ provides point-and-shoot accuracy.

Enhanced Connectivity for Downloading and Documenting

14-bit JPEG images captured via camera memory may be downloaded directly to PCs with ThermaCAM Connect® software (included), and standard USB or serial cables, to be easily inserted into reports, or stored onto a removable CompactFlash® memory card. Plus, the B20HS features real-time video with high image definition capabilities.

Smart System Improves Productivity

System status display indicates power, communication and storage modes. There's no need to worry or guess about battery life or storage space. Configurable sleep mode increases camera life and productivity.

New Standard Features

The B20HS now comes with a plug-in remote control assembly that includes a 4-inch color LCD monitor. This remote control can be attached to the camera body or used to operate the camera via the coil-cord connector. It features a joystick and button controls that replicate those on the camera itself. The exclusive FLIR Laser LocatIR target designator also comes standard.

Automatic Dew Point Identification Alarm

Identifies potential condensation areas where mold might occur with visible and audible alarm options. The dew point is calculated in real time as a function of air temperature and relative humidity in the room and indicates potential surfaces in the room on which condensation will occur.

ThermaCAM® B20HS Technical Specifications

Imaging Performance	
Field of view/min focus distance	20° x 15° / 0.3 m
Spatial resolution (IFOV)	1.1 mrad
Thermal sensitivity	50 mK at 30° C (86° F)
Electronic zoom function	2,4, interpolating
Focus	Automatic or manual
Digital image enhancement, on/off	Normal and enhanced
Detector type	Focal plane array (FPA) uncooled microbolometer; 320 x 240 pixels
Spectral range	7.5 to 13 µm
Image Presentation	
Viewfinder	Built-in high-resolution color LCD (TFT)
Video output	RS170 EIA/NTSC or CCIR/PAL composite video, 4" LCD remote
Color palettes	6 options
External display	Built-in high-resolution color 4" LCD (TFT) with integrated remote control
Measurement	
Temperature ranges	-40° C to +120° C (-40° F to +248° F)
Accuracy (% of reading)	± 2° C or ± 2% (3.6° F)
Measurement modes	1 movable spot, 1 movable area, automatic temperature differences, automatic placement and reading of maximum and minimum temperatures, minimum and maximum isotherms, automatic dewpoint alarm
Measurement corrections	Reflected ambient, distance, relative humidity, external optics. Automatic, based on user input, emissivity
Lens recognition and measurement corrections	Automatic
Alarming	Audible and visual >T, <T
Image Storage	
Type	Removable CompactFlash® (128 MB) memory card
File format	Standard JPEG; 14 bit thermal measurement data included
Voice annotation of images	Input via supplied Bluetooth® wireless headset, up to 30 seconds of digital voice clip per image stored with image
Text annotation of images	Predefined by user and stored with image
System Status Indicator	
LCD display	Shows status of battery and storage media. Indication of power, communication and storage modes.
Power Source	
Battery type	Lithium-Ion, rechargeable, field-replaceable
Battery operating time	2 hours continuous operation
Charging system	In camera or 2 bay intelligent charger 12V
In-camera battery charging	AC adapter or 12V from car
AC operation	AC adapter 110/220 VAC, 50/60 Hz
Power saving	Automatic shutdown and sleep mode (user-selectable)
Environmental	
Operating temperature range	-15° C to +50° C (5° F to 122° F)
Storage temperature range	-40° C to +70° C (-40° F to 158° F)
Humidity	Operating and storage 10% to 95%, non-condensing
Encapsulation	IP 54 IEC 529
Shock	Operational: 25G, IEC 68-2-29
Vibration	Operational: 2G, IEC 68-2-6
Physical Characteristics	
Weight	2 kg (4.4 lbs), including battery 1.2 kg (2.6 lbs), excluding battery
Size (L x W x H)	100mm x 120mm x 220 mm (3.9" x 4.7" x 8.7")
Tripod mounting	1/4" - 20
Lenses	
Lens identification	Automatic

ThermaCAM B20HS System Includes:
IR camera with remote with LCD
ThermaCAM QuickView Software
LaserLocatIR™ target illuminator
Carrying case
Lens cap, shoulder strap, hand strap
User manual (multilingual)
Batteries (2)
Power supply including cable
Battery charger including cable
Video cable RCA-plug
USB-cable
CompactFlash card
Tripod mount hole (1/4" x 20)
Bluetooth wireless headset
Options Available:
Power cable for 12V from car

Lenses (optional)	
Field of view/ minimum focus distance	3X Telescope (5.6º x 4.2º/4m) 2X Telescope (10º X 7.4º/1.2m) 0.5X Wide angle (37º x 28º/0.1m) 0.3X Wide angle (68º x 51º/0.1m) 164 µm Close-up (52mm x 39mm/150mm) 88 µm Close-up (28mm x 21mm/80mm) 38.5 µm Close-up (12mm x 9mm/19mm)
Interfaces	
USB / RS232	Image, measurement data, voice transfer to PC
IrDA	Two-way data transfer from laptop, PDA
Laser LocatIR™	
Classification type	Class 2 Semiconductor AlGainP Diode Laser: 1 mW/635 nm (red)

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www.flirthermography.com/B20HSdata

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