

WAHL HSI3000 THERMAL IMAGERS

Building Inspections, Maintenance, Energy Savings, Affordable and Easy!

The most powerful and affordable, full specification thermal imaging cameras on the market today!

- Proprietary reporting software (included) documents all of your work effortlessly
- Fully Radiometric - capture detailed, high quality images for LIVE analysis of any of 19,200 pixels in the entire image
- Dual cursors, moveable anywhere on the image, can be selected to automatically identify hot & cold spots
- Advanced high resolution 160 x 120 detector shows image details clearly and precisely on the large, bright, 3-1/2" screen
- Adjustable Emissivity for maximum accuracy
- Dual Temperature + Differential Measurement
- Store up to 20,000 images on supplied 2 GB SD Card
- Easily download images directly to PC
- Rugged, lightweight, and comfortable to use for any application
- Comes complete in rugged waterproof carrying case

Why buy a Wahl HSI3000 thermal imager?

Thermal imaging is the best non-invasive, non-destructive method for diagnostics of potential problems without damage to property, danger to person, or shut down of process.

Wahl Heat Spy® HSI3000 thermal imaging cameras give you the most accurate, clear, high resolution pictures, with the ability to modify and analyze images in a complete detailed report, at an affordable price.

**Backed by Palmer Wahl's
Service, Warranty, Training,
and Guarantee!**

- ▶ Trigger activated laser pointer
- ▶ One hand operation with intuitive, sure-touch keys always in reach



PALMER Wahl
INSTRUMENTATION GROUP

Wahl Thermal Imager HSI3000 Series

High Performance Portable Thermal Imaging Cameras

The most powerful and affordable, full specification thermal imaging cameras on the market today!

Fully Radiometric - capture detailed, high quality images for LIVE on screen analysis. Dual cursors allow you to select and measure two temperatures of any of 19,200 pixels in the entire image live on the screen!

- **Multi-Purpose HSI3000** - Operates in the temperature range of 14° to 482°F (-10° to 250°C)
- **Mid-Temperature HSI3001** - with the addition or removal of a lens filter, and a simple change of a menu setting, switch between temperature range of 392° to 932°F (200° to 500°C) or 14° to 482°F (-10° to 250°C)
- **High-Temperature HSI3002** - with the addition or removal of a lens filter, and a simple change of a menu setting, switch between temperature range of 392° to 1652°F (200° to 900°C) or 14° to 482°F (-10° to 250°C)
- **Long Distance HSI3003** - Locate and detect temperature measurements of small objects over long distances, with a narrow angle 9.1° x 6.8° lens, in the range of 32° to 482°F (0° to 250°C)



HSI3000 shown with OPTIONAL Magnifying Eye Piece/Sun Shield improves visibility of the screen, and protects against glare in bright sunlight. Also prevents display from illuminating users face for law enforcement applications.

► Find the right model to fit your needs

TWO YEAR
2
WARRANTY

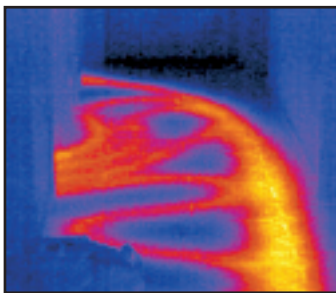


**Buy it,
you'll like it;
GUARANTEED!**

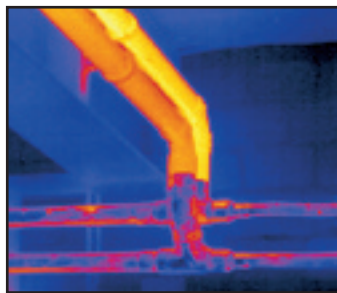
USA only

APPLICATIONS FOR ALL INDUSTRIES

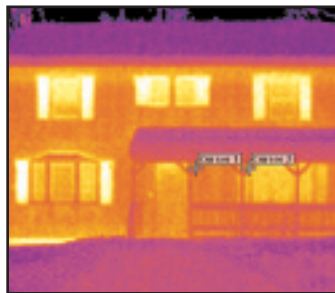
Asphalt	Manufacturing	Process Monitoring
Automation & Control	Marine Surveying	Pulp & Paper
Automotive	Mechanical	Quality Control
Building Envelope	Medical / Veterinary	R & D Testing
Condition Monitoring	Metal & Glass	Roofing
Electrical	Petro Chemical	Steel
Energy Audits	Predictive Maintenance	Utilities
Law Enforcement	Product Development	Weatherization



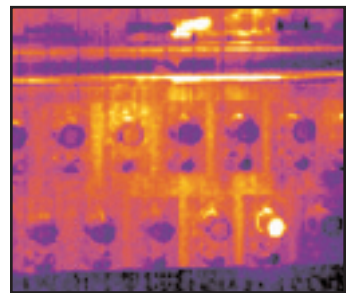
Underfloor heating system



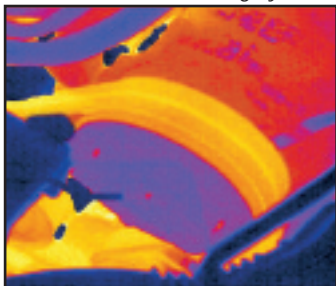
Overheat in process monitoring



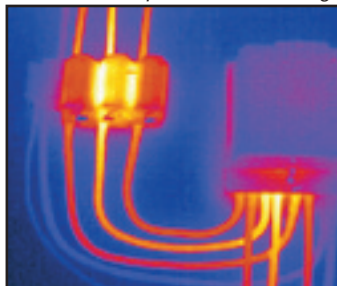
Heat loss caused by poor insulation



Overheat in process machinery



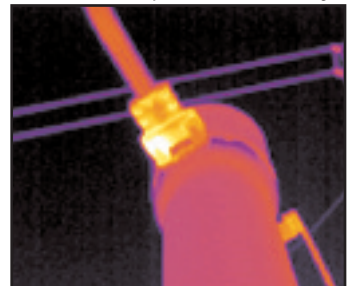
Improper tension in drive belt



Overheat in electrical box



Overheat in power transformer



Overheat in transmission lines

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Calibration Services Available

WAHL Heat Spy® HSI3000 SERIES SPECIFICATIONS

Model Number	HSI3000	HSI3001	HSI3002	HSI3003
	MULTI-PURPOSE	MID TEMPERATURE	HIGH TEMPERATURE	LONG DISTANCE
Measurement Range	14° to 482°F (-10° to 250°C)	14° to 482°F (-10° to 250°C)	14° to 482°F (-10° to 250°C)	32° to 482°F (0° to 250°C)
Measurement Range with Filter	(No Filter)	392° to 932°F (200° to 500°C)	392° to 1652°F (200° to 900°C)	(No Filter)
Field of View	20° x 15°	20° x 15°	20° x 15°	9.1° x 6.8°
Focus	Manual Focus with 2X Digital Zoom			
Minimum Focus	11.81" (30cm)	19.68" (50cm)	19.68" (50cm)	19.68" (50cm) (120cm for Radiometry)
Spectral Response	8 μm to 14 μm			
Thermal Sensitivity	0.10°C @ 23°C ambient and 25°C Scene Temperature	0.10°C @ 23°C ambient and 25°C Scene Temperature	0.10°C @ 23°C ambient and 25°C Scene Temperature	0.10°C @ 23°C ambient and 25°C Scene Temperature
Thermal Sensitivity with Filter	(No Filter)	0.7°C @ 23°C ambient and 50°C Scene Temperature	1°C @ 23°C ambient and 50°C Scene Temperature	(No Filter)
Frame Rate	Rapid 9 Hz Frame Rate			
Detector	Advanced high resolution 160 x 120 detector with 19,200 pixels			
Image Storage	Up to 20,000 images on supplied 2 GB SD Card (or MMC)			
Accuracy	The greater of ± 2°C or ± 2% of reading in °C	The greater of ± 2°C or ± 2% of reading in °C	The greater of ± 2°C or ± 2% of reading in °C	The greater of ± 2°C or ± 2% of reading in °C
Accuracy with Filter	(No Filter)	The greater of ± 15°C or ± 5% of reading in °C	The greater of ± 20°C or ± 5% of reading in °C	(No Filter)
Display	3-½" Color LCD and LED Backlight with high resolution images, show images clearly and precisely			
Color Palettes	4 Color Palettes: Rainbow, Ironbow, High Contrast, and Grayscale			
Laser Pointer	Trigger activated Class II Laser aligned with center of display aiming circle			
Radiometry	Dual temperature measurement cursors, moveable anywhere in the image, with delta temperature measurement			
Emissivity Correction	User selectable 0.2 to 1.0 in steps of 0.01 with reflected ambient temperature compensation.			
Ambient Operating Range	5° to 113°F (-15° to +45°C)			
Storage Range	-4° to 158°F (-20° to +70°C)			
IP Rating	IP42			
MIL SPECS	Vibration: MIL-PRF-28800F Class 2 Section 4.5.5.3.1 Shock: MIL-PRF-28800F Class 2 Section 4.5.5.4.1			
Humidity	10% to 90% non-condensing			
Power	Field Replaceable, High Capacity, Rechargeable Lithium Batteries with up to 7 hrs continuous operation, AC Adapter included			
Interfaces	USB Type B			
Housing	Impact Resistant Plastic with Protective Rubber Boot and Wrist Strap			
Dimensions	9.05 x 4.72 x 4.33 inches (230mm x 120mm x 110mm)			9.05 x 4.72 x 5.31 inches (230mm x 120mm x 135mm)
Weight (with Battery)	approx. 1.65 lbs (0.75kg)			approx. 1.76 lbs (0.8kg)
Mounting	Hand Held & Tripod Mounting			
Included Accessories	Easy Report & Report Writer Software, Rubber Boot, Carrying Case, Wrist Strap, Rechargeable Battery, AC Adapter, User Manual and Image Analysis Software CD, USB Cable, SD Card, and SD Card Reader. HSI3003 includes Folding Sun Shade.			
Optional Accessories	Desktop Charger, Car Charger, Magnifying Eye Piece/Sun Shade and additional Battery. Optional Folding Sun Shade for the HSI3000, HSI3001 and HSI3002. (included on the HSI3003)			
Optional Frame Rate	Optional 30Hz Frame Rate - add "Z" to end of part number: HSI3001Z (USA only)			

Specifications subject to change without notice

HeatSpy® is a registered trademark of Wahl Instruments, Inc.

Calibration Services Available



Powerful Features of the Wahl HSI3000 Series Image Processing Software

• Modify, Analyze, and Store Thermal Images



Long Distance HSI3003

Wahl HeatSpy® HSI3000 Series Thermal Imagers include easy to use, Heat Spy® image processing software allowing the user to manipulate, analyze, and store thermal images. Utilize included software to change every image setting on your PC if corrections are needed. *No other software package can do this!*

Download and View previously stored thermal images. Images are date and time stamped, contain imager settings, and the temperature of each individual pixel (160 x 120) composing the thermal scene. View individual pixels by moving your mouse anywhere in the scene.

Enhance Image Details by manually or automatically adjusting temperature level and span. Change emissivity and reflected temperature settings if necessary. Select from four-color palettes and a zoom capability up to 4X. Interpolate the image to 320 x 240 or 640 x 480.

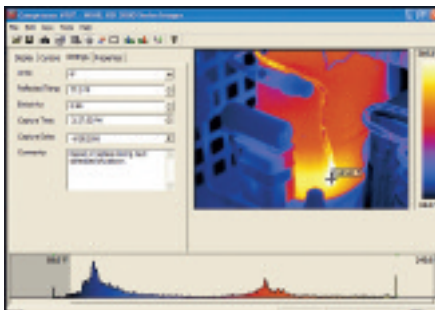
and coldest measurements in the scene. The values of these (and their difference) are shown in a measurement cursors list. In addition, output all individual pixel temperatures in the image to a Microsoft Excel .csv file for further analysis and trending.

Perform Accurate Detailed Temperature Measurement Analysis with histograms, 2D profiles, dual isotherms, and optional multiple temperature points anywhere in the scene. Or select the "hot and cold spot cursors" feature to direct cursors to the hottest

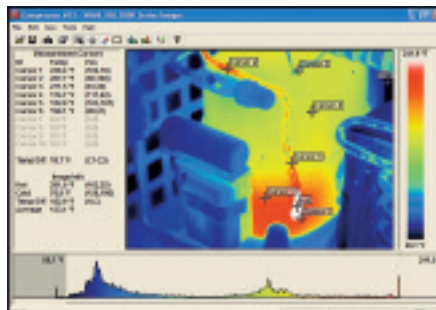
Add Comments to each image. Copy a screen capture of the application window, or copy to Bitmap (BMP) and paste into a picture editor or Microsoft Office applications.



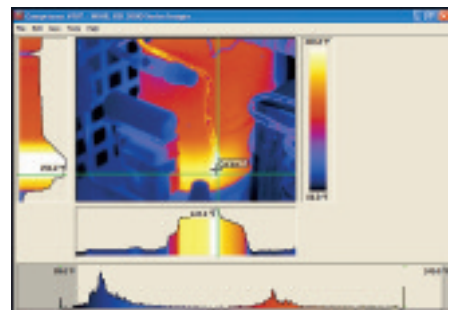
ENHANCE IMAGE DETAILS



Add comments to the image: select either °F, °C or °K: adjust the target object emissivity: adjust the reflected temperature correction: adjust span and range temperature scale settings.



Placing measurement cursors anywhere in the image creates a list that includes the spot measurement, pixel position, and the difference between measurement cursors 1 and 2. Also displays the hottest and coldest measurements in the scene, their difference, and the average.



2D profile displays a graphical representation of the temperature values along the selectable vertical and horizontal lines. Thermal intensity plots correspond to the vertical and horizontal cross-sections through the image.

Simple operation and training support help you get the most from Wahl HSI3000 Thermal Imagers
www.palmerwahl.com/training

Buy it, you'll like it; GUARANTEED!

USA only



To order parts and items, go to www.instrumentation.com or call (800) 346-4620