



Seeing is Believing! Impressive Resolution with Multi-Function Features!

Heat Spy® Imager HSI270 Thermal Imaging Camera

The Heat Spy® Imager HSI270 is a handheld thermography camera which offers a high resolution 384 x 288 thermal detector, for sharp images, and a 8MP resolution optical camera.

Its 3.5" LCD touch screen has a choice of thermal only, optical only, fusion (a merging of thermal and optical for a more defined image with the ability to read printed labels and nameplates), and picture-in-picture (an overlay of the center of the thermal image on top of the center of the optical image outlining the thermal image with the optical image around it).

All of these screens show cursor temperature data, even on the optical only screen. These features help technicians find problem temperatures quickly, for solving safety and efficiency issues.

HSI270 Key Functions

Thermography: Device detects and displays real-time infrared temperature on the LCD screen.

Data Storage: Device stores individual captured images with selectable text messages or voice recordings and recorded video with sound, in thermal only, optical only, merged thermal/optical, and picture-in-picture modes, all on an included 64GB Micro SD Card.

Image Displays: Live images, saved images, and saved videos can be displayed on the screen in thermal only, optical only, thermal and optical merge, or thermal and optical picture-in-picture modes.

Palettes and Alarms: Device will display in several color and two black and white (grayscale) modes. Programmable Alarms can be set and if target goes outside of programmed parameters, visual colored differing palette colors will appear and an audible alarm, if switched on, will sound.

Wi-Fi Function: Device can be connected to local Wi-Fi networks. Other devices can be added to see live viewing and individual image capture or video recording.

Digital Zoom: Device has 1X, 2X, and 4X digital zoom for thermal image.

LED Light: Switchable and programmable LED light can be used as a flashlight for navigation, a flashbulb for taking optical included images, and a light for optical included videos, all in dark areas.

Laser Pointer: To properly aim at the selected target of choice designated by the center of screen cursor.



HSI270 Key Features

- 384 x 288 Resolution (Thermal) and 1080P resolution (Optical)
- DDE (Digital Detail Enhancement) technique with Fusion
- 3D DNR (Digital Noise Reduction), Adaptive AGC (Automatic Gain Control) for Suppression Of Internal Electrical Noise
- Touch Screen Display: 640 x 480 Resolution 3.5" LCD
- Removable Rechargeable Lithium-ion Batteries (2) With Up To 4 Hours Continuous Run Time Per Battery
- Foam Lined, Lockable, Waterproof, Hard Shell Case with Shoulder Strap
- IP54 Protection

**IP54
COMPLIANT**

**ISO 9001:2015
CERTIFIED QUALITY
MANAGEMENT SYSTEM**

**TWO YEAR
WARRANTY**
Camera

**TEN YEAR
WARRANTY**
Array

Specifications continued on next page

HSI270 Specifications

THERMAL MODULE	
Image Sensor	Uncooled focal plane array
Array Size / Image Resolution	384 x 288 array / 110,592 Pixels
Frame Rate	25 Hz or 9 Hz
Pixel Pitch	17µm
Spectral Range	8µm to 14µm
NETD (Sensitivity)	< 40 mk (@ 25° C)
Field of View	37.5° x 28.5°
Focal Length	10 mm (manual focus)
IFOV (mrad)	1.7 mrad
Aperture	f/1.0
3D DNR	Level 3 Dimensional Digital Noise Reduction with adaptive AGC (Automatic Gain Control)

Specifications subject to change without notice. Heat Spy is a registered trademark of Wahl Instruments, Inc.

HSI270 Specifications continued

OPTICAL MODULE	
Maximum Resolution	1920 x 1080
Picture Resolution	Display: 384 x 288; Capture: 1920 x 1080
Video Resolution	Display: 384 x 288; Capture: 1920 x 1080
IMAGE DISPLAY	
LCD Display Screen	640 × 480 Resolution 3.5" LCD Touch Display
Palettes	Black Hot, White Hot, Red Hot, Rainbow, Ironbow, HotMetal Rainbow HC (High Contrast)
Digital Zoom	Thermal Only: 1X, 2X, 4X
Thermal/Optical	Thermal Only Or Optical Only With Temperatures
Fusion Image	Fusion Image – Combined Thermal and Optical Showing Object Outlines and Allowing Reading Of Text in Thermal Image
Picture In Picture	Picture In Picture-Partial Size Adjustable Thermal Image Over Center of Optical Image
Record Video	Records Live Action Video With Sound
THERMOGRAPHY	
Rules/Measurement Points	Center Point Cursor; Moving / Seeking Max & Min Point Cursors; Up To Ten Additional Movable Custom Cursors Can Be Added; Up To Three Area Boxes; adjustable In Size and Position, each with Max, Min, and Average Temperatures Displayed; and a Profile Line, Horizontal, Vertical, or in-Between, Showing Max, Min, & Average Temperature along the line.
Temperature Ranges	-4° to 302°F / -20° to 150°C / 253 to 423K Low Range & 212° to 1022°F / 100° to 550°C / 373 to 823K High Range
Temperature Accuracy	± 2°C or ± 2%, whichever is greater
Battery Type	2- Removable & Rechargeable Lithium-ion Batteries
Battery Run Time	Four Hours Continuous Running per Battery
FUNCTIONS	
Aiming Laser	For Measuring Point Selection, Screen Aiming Point is Center Point Cursor
Flashlight	Use In Dark Areas As Flashlight To Navigate or Lighting For Optical Videos, Also Photo Flash For Optical Images
Memory Storage	64GB Micro SD Memory Card included. Will Accept Higher Level Memory Cards
Individual Images	Thermal Only/ Optical Only/Fusion Image/Picture-In Picture Image, All With Temperatures
Videos	Thermal Only/ Optical Only/Fusion Image/Picture-In Picture Image, All With Temperatures
Alarms	Individual Alarms are available as visible assorted colored isotherms and audible alarms if cursor temperature detects a temperature above the alarm set point, if cursor temperature detects a temperature below the alarm set point, or if the cursor temperature goes above or below the high and low alarm set points.
Wi-Fi	Allows connection to local Wi-Fi network. Also has Wi-Fi Hot spot to generate its own Area Network.
Text Comments	Text Comments Can Be Added to Individual Saved Images
Voice Comments	Voice Comments Can Be Added to Individual Saved Images
Languages	English, Spanish, French, German, Italian, Portuguese, Russian and Korean
GENERAL	
Power	12 VDC / 1.5 A, 5 VDC/2 A (charging via USB with battery in imager, or by external charger with battery removed)
Power Consumption	Approximately 5 W (Wi-Fi on), 4.2 W (Wi-Fi off)
Hardware Interface	Through Micro USB or Bluetooth
Ambient Working Temperature	-4° to 122° F (-20° to 50° C)
Protection Level	IP54
Drop Test Height	2 Meters
Dimensions	9.6" x 3.9" x 4.1" (244 mm x 100 mm x 104 mm)
Weight	Approximately 1.46 lb (660 g)
Included Accessories	Foam-Lined Hard Shell Waterproof Lockable Case with Shoulder Strap; (2) Removable and Rechargeable Lithium-Ion Batteries; Dual-Port Charger with Worldwide Plug Adapters; 64GB Micro SD Memory Card and USB Adapter; USB Cable; Report Writing Software and User Manual (Expanded User Manual available as Download)



Camera



Array

