



z50 INSPECTOR

Designed for the pro, save and export thermal and digital images with easy report writing software.

z30 DETECTOR

Designed for on the spot routine maintenance inspections.

First upgradeable camera *after purchase*. Maximize scalability by upgrading your camera with up to 15 configurations - *at any time!*

First *user* upgradeable camera. Maximize value by easily upgrading your z30 Detector to a z50 Inspector - *in the field!*

First extended warranty plan to *include* annual recalibration, inspection and firmware upgrades. Maximize performance and *increase the life of your Heat Spy!* (Excludes Battery and SD Card)

FEATURES

Upgrade both models with a High Temperature option, Wide Angle Lens and / or Telephoto Lens - at any time!

"z" speed at 30 Hertz captures clear, sharp images! (USA Customers only)

Camera acclimates quickly. Sudden ambient temperature changes won't slow you down!

Every Pixel is individually calibrated!

"Double Vision" provides **simultaneous capture** of both a Thermal and Digital picture, and can include up to a 45 second voice recording. (z50 Series only)

Hands-free flashlight (optional) screws into camera to brighten dark areas for clear digital pictures. Operates on it's own internal battery, enabling longer camera battery life.

Lease the camera at 0% interest (Call Customer Service for requirements, USA Customers only)

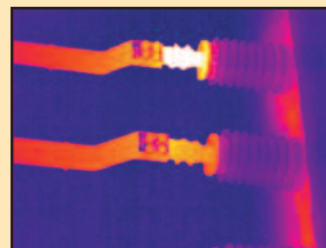
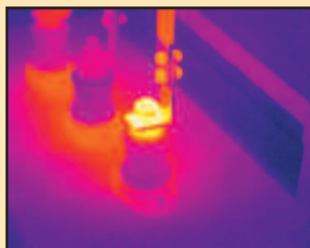
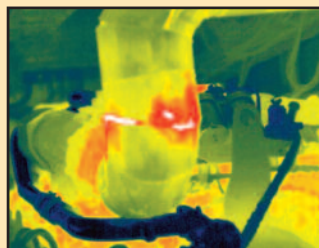
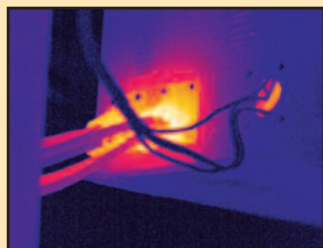
We are so confident that you will love this new camera that we are offering a 48 hour money back guarantee! (USA Customers only)

Call us now! You could win a Free Heat Spy, upgrade or accessory!



**Buy it, you'll like it; 48 hour
Money Back Guarantee***

* USA Customers only



Find problems quickly, easily, and safely with the Wahl Heat Spy.

Heat Spy® is a registered trademark of Wahl Instruments, Inc.

www.wahlheatspy.com

Specifications subject to change without notice

Palmer Wahl • 234 Old Weaverville Road • Asheville • North Carolina • 28804
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PW1280z
October 2011

APPLICATIONS
for many Industries

Aerospace
Automotive
Asphalt & Roofing
Breweries
Beverage Processing
Canning
Chemical
Coal & Mineral Mining
Condition Monitoring
Confectionery
Cosmetics
Dairy Processing
Electrical
Energy Audits
Facilities Management
Fire Fighting
Food Processing
Food Service
Glass
Government
Home Inspection
HVAC & Irrigation
Meat Processing
Mechanical
Military
Natural Gas
Oil & Petroleum
Petrochemical
Pharmaceutical
Pipe, Valve & Fitting
Plumbing
Police Search/Rescue
Poultry Processing
Power Generation
Pulp & Paper
Research & Development
Plastics
Rubber
Sanitary Processing
Semiconductor
Steel & Iron
Telecommunications
Test & Measurement
Verification
Water & Wastewater
Weatherization

and more!



IP54

Specifications	z30 Series Detector	z50 Series Inspector
UPGRADE Model	Upgrade to a z50 Inspector - in the Field!	
Measurement Range	-4° to 356°F (-20° to 180°C)	
UPGRADE to High Temperature	212° to 1112°F (100° to 600°C) (User Upgradeable in the Field)	
Temperature Accuracy	Greater of $\pm 2\%$ of reading or $\pm 2^\circ\text{C}$	
Temperature Scale	User Selectable $^\circ\text{C}$, $^\circ\text{F}$, and K	
Temperature Cursors	1 Hot Seeking, 1 Cold Seeking, 2 Adjustable	
Field of View	17.5° x 13°	
Resolution/Pixel Size	160 X 120	
Spectral Range	8-14 μm	
Thermal Sensitivity	0.1°C @ 30°C	
LCD Display	High Resolution 3.5" Color LCD, 640 x 480	
Digital Zoom	2 X Zoom	
Frame Rate	30 Hz (USA only) (9Hz Models a30 and a50, International)	
Display Color Palettes	4 Color Palettes: Ironbow; Negative Grayscale; Rainbow Blue-Red; High Contrast Blue-Yellow	11 Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White
Image Adjustment	Auto Ranging / Manual Level and Span / Adjustable Display Brightness Control	
Languages	11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Laser Pointer	Class 2 < 1mW / 635nm, Red	
Self Calibration	Auto Calibration with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Delta T	Spots, Areas, Lines, Isotherms, Delta T
Number of Measurement Areas	N/A	3
Emissivity Range	Adjustable from 0.01 to 1.00	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table
T Reflect	Manual Adjustment	
T Correct	N/A	Manual Adjustment
Digital Camera	N/A	1.3 Megapixel
Thermal/Digital Image	N/A	Toggle between Thermal and Digital
Alarm	High Temperature Audible and Visible Alarm	High Temperature Audible and Visible Alarm Isotherm Visible Alarm
UPGRADE Optics	Wide Angle (35° x 26° FOV), and/or Telephoto (8.75° x 6.5° FOV) (Factory Upgradeable options)	
Report Analysis Software	N/A	Yes
Image Storage	N/A	2GB SD / Time Stamped
Freeze Frame/Save Image	Freeze Frame only	Freeze Frame and Save Image, Thermal and/or Digital to SD Card
Storage Mode	N/A	Manual Single Image Save or Programmable Auto Save to SD Card
Voice Annotation	N/A	Maximum 45s per image
File Format (Thermal)	N/A	JPEG plus Temperature in 14 bit data
File Format (Visual)	N/A	JPEG
Video Output	User Selectable PAL and NTSC	
Dimensions / Weight (w/o battery)	Width: 4.5 in. (115mm) x Length: 5.9 in. (150mm) x Height: 9 in. (230mm) / 1.65 lbs (0.75 Kg)	
Power / Operating Time	1 Rechargeable Lithium ion Battery / 2 Batteries provide 6.0 plus hours operation	
Charging System	External AC Mains Battery Charger included; In Camera Charging with optional AC Battery Charger	
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity	$\leq 90\%$ non-condensing	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; Video Out Cable; AC Mains Battery Charger; Report & Analysis Software; User Manual. 50 Series only: SD Card and Reader.	
Options	NIST Traceable Certificate of Conformance; Extended Warranty; Damage Protection Plan; Hands Free Flashlight; Auxillary Charging Pkg includes: Car Charger, AC mains charger, and International Plugs	

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PW1280z
October 2011



Wahl® HEAT SPY® z30 • z50 Thermal Imagers

Full Specifications		
Model Number	z30 Series Detector	z50 Series Inspector
UPGRADE Model	Upgradeable to a z50 Inspector - in the Field!	Full Feature Series
Temperature		
Measurement Range	-4° to 356°F (-20° to 180°C)	
UPGRADE to High Temperature	212° to 1112°F (100° to 600°C) (User Upgradeable in the Field)	
Temperature Accuracy	Greater of ±2% of reading or ±2°C	
Temperature Scale	User Selectable °C, °F, and K	
Temperature Cursors	1 Hot Seeking, 1 Cold Seeking, 2 Adjustable	
Camera Info		
Field of View	17.5° x 13°	
Focus Range	0.1 m to ∞	
Focus Type	Manual	
Spatial Resolution	1.9 mrad	
UPGRADE Wide Angle Lens	.5 magnification allows for a 35° x 26° FOV (Factory Upgrade)	
UPGRADE Telephoto Lens	2 X magnification allows for a 8.75° x 6.5° FOV (Factory Upgrade)	
Sensor Info		
Detector	Uncooled Focal Plane Array (FPA)	
Resolution/Pixel Size	160 X 120	
Spectral Range	8-14µm	
Thermal Sensitivity	0.1°C @ 30°C	
Display Info		
LCD Display	High Resolution 3.5" Color LCD, 640 x 480	
Digital Zoom	2 X Zoom	
Frame Rate	30 Hz (USA only) (9Hz Models a30 and a50, International)	
Display Color Palettes	4 Color Palettes: Ironbow; Negative Grayscale; Rainbow Blue-Red; High Contrast Blue-Yellow	11 Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White
Image Adjustment	Auto Ranging / Manual Level and Span / Adjustable Display Brightness Control	
Languages	11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Features		
Laser Pointer	Class 2, < 1mW / 635nm, Red	
Self Calibration	Auto Calibration with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Delta T	Spots, Areas, Lines, Isotherms, Delta T
Number of Measurement Spots	1 Hot, 1 Cold, plus 2 Adjustable	
Number of Measurement Areas	N/A	3
Emissivity Range	Adjustable from 0.01 to 1.00	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table
T Reflect	Manual Adjustment	
T Correct	N/A	Manual Adjustment

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Wahl® HEAT SPY® z30 • z50 Thermal Imagers

Full Specifications		
Model Number	z30 Series Detector	z50 Series Inspector
Features (continued)		
Digital Camera	N/A	1.3 Megapixel
Thermal/Digital Image	N/A	Toggle between Thermal and Digital
Alarm	High Temperature Audible and Visible Alarm	High Temperature Audible and Visible Alarm; Isotherm Visible Alarm
Record		
Report Analysis Software	N/A	Yes
Image Storage	N/A	2GB SD / Time Stamped
Freeze Frame/Save Image	Freeze Frame only	Freeze Frame and Save Image, Thermal and/or Digital to SD Card
Storage Mode	N/A	Manual Single Image Save or Programmable Auto Save to SD Card
Voice Annotation	N/A	Maximum 45s per image
File Format (Thermal)	N/A	JPEG plus Temperature in 14 bit data
File Format (Visual)	N/A	JPEG
Video Output	User Selectable PAL and NTSC	
General Info		
Housing	Impact Resistant Molded Plastic and Wrist Strap	
Mounting	Hand Held with Tripod mounting / 1/4"-20	
Dimensions	Width: 4.5 in. (115mm) x Length: 5.9 in. (150mm) x Height: 9 in. (230mm)	
Weight (w/o battery)	1.65 lbs (0.75 Kg)	
Power	1 Rechargeable Lithium Ion Battery	
Operating Time	2 Batteries provide 6.0 plus hours operation	
Charging System	External AC Mains Battery Charger included; In Camera Charging with optional AC Battery Charger	
Environment		
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity	≤ 90% non-condensing	
Safety Certificates		
Shock Test	25G, IEC68-2-29	
Vibration Test	2G, IEC68-2-6	
IP Rating	IP 54	
Immunity Tests	Yes	
Emission Limits	Yes	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; Video Out Cable; AC Mains Battery Charger; Report & Analysis Software; User Manual. 50 Series only: SD Card and Reader.	
Optional Accessories	NIST Traceable Certificate of Conformance; Extended Warranty; Damage Protection Plan; Hands Free Flashlight; Auxillary Charging Pkg includes: Car Charger, AC mains charger, and International Plugs	

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