Wahl® HEAT SPY®

NEW! Wahl 150 & 170 Imagers

Ultra-High Sensitivity and 2 Meter Drop Test!

IR / Visible Light / Picture-in-Picture / SpyLite™

Touch Screen

Every Pixel Calibrated

Standard Lens plus 3 Optional Lenses

60Hz* or 9Hz Frame Rate

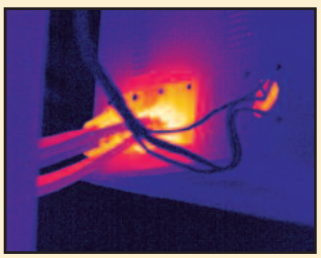
Model 170: Thermal Sensitivity ≤ 0.04°C
Detector Resolution: 384 x 288
110, 592 Pixels

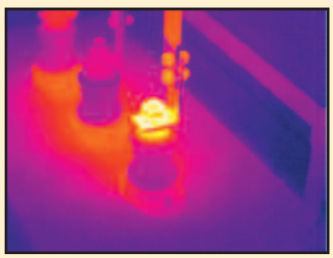
Model 150: Thermal Sensitivity ≤ 0.05°C
Detector Resolution: 160 x 120
19, 200 Pixels

- **"z" models - 60 Hz or "a" models - 9 Hz** (Factory Set)("a" models for use outside USA)
- **Large 3.6" LCD Touch Screen Display** for easy use of menu functions
- **Dual LED "Head Lights"** for clear, crisp visible light images even in low light conditions
- **Laser Aiming** pinpoints Hot Spots
- **Picture-in-Picture** - all temperatures shown thermally over visible image
- **SpyLite™** - only temperatures over or under preset point shown thermally over visible image
- **Thermal / Visible / PIP / SpyLite Image Saving**
- **Thermal / Visible / Video Recording**
- **25° x 19° Field of View**
- **3.2 Megapixel CMOS Sensor**
- **3 Optional Lenses** - 0.5X / 2X and 4X FOV
- **IP Address** for remote viewing and sharing
- **Ergonomic design** for quick and easy scans
- **Advanced Heat Spy Report and Analysis Software** included for quick and professional reports with precise image and temperature analysis on any point in an image.
- **Bluetooth** for Earphone and File Sharing

TWO YEAR 2 WARRANTY

IP54 COMPLIANT





Find problems quickly, easily, and safely with the Wahl z70

Including

SPY-CARE™

The FIRST No-Fault warranty plan in the industry is INCLUDED with your purchase!

We will repair or replace your camera for two years, for any reason - even if it's your fault - no questions asked!

Also includes:
FREE Training, FREE Phone Support,
FREE Annual lifetime recalibration, inspection, and firmware upgrades. (Excludes Battery and SD Card, see Spy-Care flyer on our website for more details.)

*Export Licensing Fee on 60Hz models may be required for your country, subject to US Government approval. No Export License required on 9Hz models.

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

Specifications subject to change without notice

www.wahlheatspy.com
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sales@palmerwahl.com • Phone: (800) 421-2853 • FAX: (828) 658-0728

PW1283
January 2015

150 • 170 Series Thermal Imagers Specifications

Model Number	a150	z150	a170	z170
Frame Rate	9Hz	60Hz*	9Hz	60Hz*
Image Performance				
Detector Type	Uncooled Microbolometer Focal Plane Array (FPA)			
Detector Resolution	160 x 120		384 x 288	
Number of Pixels	19,200		110,592	
Field of View (FOV)	25° x 19°			
Spatial Resolution (IFOV)	2.73 mrad		1.37 mrad**	
Thermal Sensitivity	≤ 0.05 @ 30°C		≤ 0.04 @ 30°C	
Focus Range	0.5 m to ∞ and beyond			
Focus Type	Manual			
IR Digital Zoom	X 2 or X 4			
Spectral Range	8 - 14µm			
Visible Light Camera	3.2 Megapixel CMOS Sensor, Dual LED Head Lights			
Wide Angle Lens Option	0.5X magnification allows for a 50° x 38° FOV [1]			
Telephoto Lens Option	2X magnification allows for a 12.5° x 9.5° FOV [1]			
	4X magnification allows for a 6.25° x 4.75° FOV [1]			
Image Display				
Thermal/Visible Light Image	Fast switch between Thermal, Visible Light, or Picture-in-Picture [2] or SpyLite [3]			
LCD Display	High Resolution 3.6" Color LCD Touch Screen, 640 x 480			
Image Control	**11 Display 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 and Contrast Control			
Measurement Analysis				
Measurement Range	-4° to 662°F (-20° to 350°C) User Selectable Temperature Extension to 1202°F (650°C)			
Measurement Accuracy	Greater of ±2% of reading or ±2°C. Instrument is not calibrated below -10°C.			
Measurement Correction	Auto / Manual			
Measurement Mode	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible and Visible)			
# of Measurement Spots	Up to 5 Moveable Spots, including Hot and Cold Seeking			
# of Measurement Areas	Up to 5 Movable and Sizeable Areas (Max, Min and Avg Temperatures)			
# of Measurement Lines	Up to 2 Moveable Lines, 1 Vertical, 1 Horizontal; Image Temperature Profile Lines			
Emissivity Correction	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table			
Reflected Temperature Compensation	Auto with manual reflected Temperature Adjustment			
Atmospheric Transmission Correction	Automatic Correction according to user input Object Distance, Humidity, and Temperature			
Alarm	High and Low Temperature Audible and Visible Alarm; Isotherm Visible Alarm			
Temperature Scale	User Selectable: °C, °F, and K			
User Settings	Date/Time, Temperature Unit, Brightness/Contrast, LCD Brightness and 8 Languages: English; Spanish; German; Portuguese; Korean; Russian; Simplified Chinese; Traditional Chinese			

Model Number	a150	z150	a170	z170
Frame Rate	9Hz	60Hz*	9Hz	60Hz*
Image Storage				
Removable Storage	8GB Micro SD, max 32GB			
Storage Mode	Manual Single Image Save or Programmable Auto Save to Micro SD Card, Single Thermal Image and Visible Image Save (with link option), Thermal, Visible, Picture-in-Picture [2] and SpyLite [3] Video Save			
File Format (Thermal)	JPEG / H.264 (Both with Radiometric information)			
File Format / (Visible Light)	JPEG, MPEG-4			
Voice Annotation	Maximum 60 seconds per image			
Text Annotation	Yes			
Laser				
Laser Pointer	Class 2, < 1mW / 635nm, Red			
Record				
Report Analysis Software	Yes			
Video Output	User Selectable PAL and NTSC			
Freeze Frame/Save Image	Freeze Frame and Save Image, Thermal and/or Visible to SD Card			
Interface				
Micro SD Card Slot	Yes			
Mini-USB	Yes			
Netware	Yes, with IP Address for real time image and data transfer			
Power	DC 12V			
Video	Yes			
Bluetooth	Bluetooth (Earphone/RS232)			
Environment				
Ambient Operating Temp	5° to 122°F (-15° to 50°C)			
Storage Temperature	-13° to 140°F (-25° to 60°C)			
Humidity	≤ 90% non-condensing			
IP Rating	IP54			
Drop Resistance	2 meters			
Power				
Power / Operating Time	1 Rechargeable Lithium Ion Battery, 2 Batteries provided for approx 3 hours continuous operation per battery			
Power Save Mode	Selectable Time Interval Auto Sleep to save battery, Auto Shut Off			
Charging System	Auxillary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger with International Plugs			
General Info				
Housing	Impact Resistant Molded Plastic with Hand Strap (fits either side). Tripod Mounting with 1/4"-20 Thread			
Dimensions	Width: 4.13 in. (105mm) x Length: 9.64 in. (245mm) x Height: 9 in. (230mm)			
Weight (w/o battery)	2.16 lbs (0.98 Kg)			
Software Compatibility	Microsoft Windows 2000, Windows XP, Windows Vista, and Windows 7			
Included Accessories	Spy-Care, Carrying Case; Hand Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Ethernet Cable; Heat Spy Report & Analysis Software; Micro SD Card and Reader; User Manual.			
Optional Accessories	NIST Traceable Certificate of Conformance; Extended Warranty; Auxillary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger with International Plugs			
Safety Certificates				
Shock Test/Vibration Test	25G, IEC68-2-29 / 2G, IEC68-2-6			
Immunity Tests/Emission Limits	Yes / Yes			

Specifications subject to change without notice

Heat Spy Thermal Imagers are available from:

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** 384 x 288 is not directly convertible to 640 x 480 imager display. Image is displayed as a 320 x 240 image. Full 384 x 288 resolution image, (1.09 mrad), downloads to computer.

TWO YEAR 2 WARRANTY

IP54 COMPLIANT

[1] Factory Upgrade
[2] Picture-in-Picture - all temperatures shown thermally over visible image
[3] SpyLite - only temperatures over or under preset point shown thermally over visible image

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PW1283
January 2015

Wahl®
HEAT SPY®

NEW! Wahl CHIEF INSPECTOR

Highest level of Resolution Designed for the Professional

BEST-IN-CLASS!

The a70 and z70 models include a 384 x 288 array with 110,592 pixels — 44% more pixels than 320 x 240 thermal imagers with 76,800 pixels.

Fully calibrated, high resolution camera captures clear, sharp images!

Easily load images to an iPad® using an SD adapter. The thermal images can be imported and stored in the regular photo application found on the iPad®, or used with a picture application like iPhoto®. The images can then be shared with other applications on the iPad®, offering the flexibility of easy to prepare reports.

Two temperature modes allow you to switch between the ranges of -4° to 356°F (-20° to 180°C) or 212° to 1112°F (100° to 600°C) to select the temperature range required for your application.

Temperature readings are always accurate. Quick stabilization circuitry enables the camera to acclimate to sudden ambient temperature changes in just a few minutes, compared to 30 - 45 minutes with other cameras.

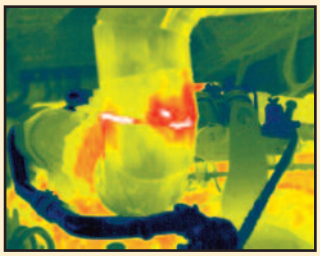
Simultaneously captures both a thermal and visible light picture, or either individually, with one pull of the trigger. View or download images to included Wahl Report Writer software, or an iPad®, with selectable voice recording, up to 45 seconds per picture.

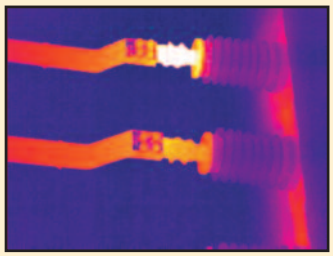
Thermal line analysis allows the user to select a target of interest as a temperature reference point, and show a relative comparison as a percentage between the target temperature and the temperatures in the surrounding area. This enables the user to quickly find potential problem areas in need of further attention.

The **z70** frame rate is 30Hz. The **a70** features a 9Hz frame rate for export without license restrictions.

TWO YEAR 2 WARRANTY

IP54





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Also includes:
FREE Training, FREE Phone Support,
FREE Annual lifetime recalibration, inspection, and firmware upgrades. (Excludes Battery and SD Card, see Spy-Care flyer on our website for more details.)

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iPad® and iPhoto® are registered trademarks of Apple.

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PW1282
May 2013 Rev A

a70 • z70 CHIEF INSPECTOR Specifications

Model Number	a70	z70
Frame Rate	9Hz	30Hz*
Sensor Info		
Detector	Uncooled Microbolometer Focal Plane Array (EPA)	
Detector Resolution	384 x 288	
Spectral Range	8 - 14µm	
Thermal Sensitivity	≤ 0.06 @ 30°C	
Image Performance		
LCD Display	High Resolution 3.5" Color LCD Screen, 640 x 480	
Visible Light Camera	1.3 Megapixel CMOS Sensor	
Lens Parameter		
Field of View	25° x 19°	
Focus Range	0.1 m to ∞ and beyond	
Focus Type	Manual	
Spatial Resolution	1.37 mrad**	
Measurement Analysis		
Measurement Range	-4° to 356°F (-20° to 180°C) or 212° to 1112°F (100° to 600°C) Low/High Temperature User Switchable:	
Measurement Accuracy	Greater of ±2% of reading or ±2°C Instrument is not calibrated below -10°C.	
Image Control	**11 Display 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	
Measurement Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible and Visible)	
# of Measurement Spots	1 Hot, 1 Cold, plus 2 Adjustable	
# of Measurement Areas	Up to 3 Movable and Sizeable Areas (Max, Min and Avg Temperatures)	
# of Measurement Lines	Up to 2 Moveable Lines, 1 Vertical, 1 Horizontal; Image Temperature Profile Lines	
T Reflect	Manual Adjustment	
T Correct	Manual Adjustment	
IR Digital Zoom	X 2 or X 4	
Thermal/Visible Image	Toggle between Thermal and Visible Light	
Alarm	High and Low Temperature Audible and Visible Alarm; Isotherm Visible Alarm	
Temperature Scale	User Selectable:°C, °F, and K	
User Settings	Date/Time, Temperature Unit, Brightness/Contrast, LCD Brightness, and 11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Emissivity Range	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table	

Model Number	a70	z70
Image Storage		
Removable Storage	2GB SD / Time Stamped	
Storage Mode	Manual Single Image Save or Programmable Auto Save to SD Card	
File Format (Thermal)	JPEG plus Temperature in 14 bit data	
File Format/Size (Visible)	JPEG / 100K (Typical Value)	
Voice Annotation	Maximum 45 seconds per image	
Text Annotation	NA	
Laser		
Laser Pointer	Class 2, < 1mW / 635nm, Red	
Record		
Report Analysis Software	Yes	
Video Output	User Selectable PAL and NTSC	
Freeze Frame/Save Image	Freeze Frame and Save Image, Thermal and/or Visible to SD Card	
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	
IP Rating	IP 54	
Power		
Power	1 Rechargeable Lithium Ion Battery	
Operating Time	2 Batteries provide approx 4 hours operation	
Power Save Mode	Selectable Time Interval Auto Sleep to save battery, Auto Shut Off	
Charging System	External AC Battery Charger included; In Camera Charging with optional AC/DC Battery Charger; 12V DC Car Charger	
General Info		
Housing	Impact Resistant Molded Plastic and Wrist Strap	
Mounting	Hand Held with Tripod mounting / 1/4"-20 Thread	
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)	
Software Compatibility	Microsoft Windows 2000, Windows XP, Vista, and Windows 7	
Included Accessories	Spy-Care, Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Heat Spy Report & Analysis Software; SD Card/Reader; User Manual.	
Optional Accessories	NIST Traceable Certificate of Conformance; Extended Warranty; Auxillary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger and International Plugs	
Safety Certificates		
Shock Test	25G, IEC68-2-29	
Vibration Test	2G, IEC68-2-6	
Immunity Tests	Yes	
Emission Limits	Yes	

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TWO YEAR 2 WARRANTY

IP54

PALMER Wahl INSTRUMENTATION GROUP

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PW1282
May 2013 Rev A

Wahl® HEAT SPY®

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!

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)

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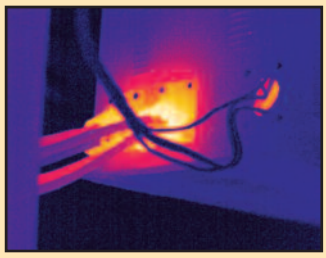
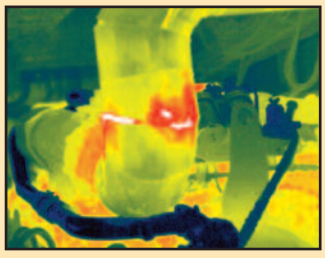
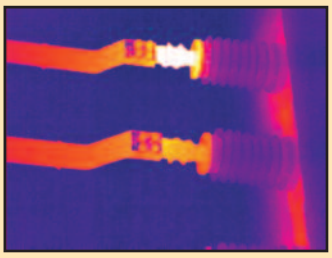
Buy it, you'll like it; 48 hour Money Back Guarantee*

* USA Customers only







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PW1280z
October 2011 Rev C

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!

TWO YEAR 2 WARRANTY

IP54

Specifications	z30 Series Detector	z50 Series Inspector
UPGRADE Model	Upgrade to z50 Inspector - in the Field!	Full Feature Series
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. Instrument is not calibrated below -10°C.	
Temperature Scale	User Selectable °C, °F, and K	
Number of Measurement Spots	1 Hot Seeking, 1 Cold Seeking, 2 Adjustable	
Field of View	17.5° x 13°	
Detector Resolution	160 X 120	
Spectral Range	8-14µm	
Thermal Sensitivity	≤ 0.1°C @ 30°C	
LCD Display	High Resolution 3.5" Color LCD Screen, 640 x 480	
IR Digital Zoom	X 2	
Frame Rate	"z" models - 30Hz* (may be subject to export licensing fee)	
Display Color Palettes	**4 Color Palettes:** Ironbow; Negative Grayscale; Rainbow Blue-Red; High Contrast Blue-Yellow (Additional Palettes with Upgrade)	**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	
Auto Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Delta T, High Temp Alarm (Audible/Visible) (Additional capabilities with Upgrade)	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible/Visible)
Number of Measurement Areas	(Available with Upgrade)	Up to 3 Movable & Sizeable Areas (Max, Min & Avg)
Emissivity Correction	Adjustable from 0.01 to 1.00 (Built-in Emissivity Table with Upgrade)	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table
T Reflect	Manual Adjustment	
T Correct	(Available with Upgrade)	Manual Adjustment
Visible Light Camera	(Available with Upgrade)	1.3 Megapixel CMOS Sensor
Thermal/Visible Light Image	(Available with Upgrade)	Toggle between Thermal and Visible Light
Alarm	High Temperature Audible and Visible Alarm (Additional functions with Upgrade)	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	(Available with Upgrade)	Yes
Image Storage	(Available with Upgrade)	2GB SD / Time Stamped
Freeze Frame/Save Image	Freeze Frame only (Additional capabilities with Upgrade)	Freeze Frame and Save Image, Thermal and/or Visible to SD Card
Storage Mode	(Available with Upgrade)	Manual Single Image Save or Programmable Auto Save to SD Card
Voice Annotation	(Available with Upgrade)	Maximum 45s per image
File Format (Thermal)	(Available with Upgrade)	JPEG plus Temperature in 14 bit data
File Format / Size (Visible)	(Available with Upgrade)	JPEG / 60K (Typical value)
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 provided, approx. 3 hours operation per battery	
Charging System	External AC Battery Charger included; In Camera Charging with optional AC/DC Battery Charger	
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity/IP Rating	≤ 90% non-condensing / IP54	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Report & Analysis Software; SD Card & Reader; User Manual; Spy-Care(30 Series upgrade)	
Options	NIST Traceable Certificate of Conformance; Extended Warranty; Auxillary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger and International Plugs	

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PW1280z
October 2011 Rev C

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FEATURES

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

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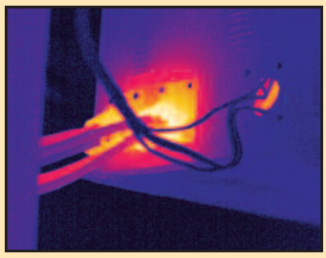
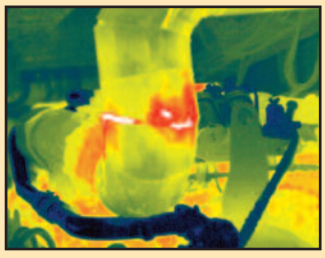
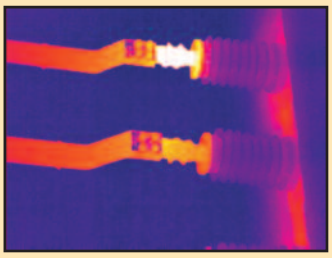
"Double Vision" provides simultaneous capture of both a Thermal and Digital picture, and can include up to a 45 second voice recording. (z50 Series only)

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.







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

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

Specifications subject to change without notice

Digital version of catalog may differ from printed version.

www.wahlheatspy.com

Palmer Wahl • 234 Old Weaverville Road • Asheville • North Carolina • 28804

sales@palmerwahl.com • Phone: (800) 421-2853 • FAX: (828) 658-0728

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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!

TWO YEAR 2 WARRANTY

IP54

Specifications	a30 Series Detector	a50 Series Inspector
UPGRADE Model	Upgrade to a50 Inspector - in the Field!	Full Feature Series
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. Instrument is not calibrated below -10°C.	
Temperature Scale	User Selectable °C, °F, and K	
Number of Measurement Spots	1 Hot Seeking, 1 Cold Seeking, 2 Adjustable	
Field of View	17.5° x 13°	
Detector Resolution	160 X 120	
Spectral Range	8-14µm	
Thermal Sensitivity	0.1°C @ 30°C	
LCD Display	High Resolution 3.5" Color LCD Screen, 640 x 480	
IR Digital Zoom	X 2	
Frame Rate	"a" models - 9Hz* (no export licensing fee)	
Display Color Palettes	**4 Color Palettes:** Ironbow; Negative Grayscale; Rainbow Blue-Red; High Contrast Blue-Yellow (Additional Palettes with Upgrade)	**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	
Auto Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Delta T, High Temp Alarm (Audible/Visible) (Additional functions with Upgrade)	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible/Visible)
Number of Measurement Areas	(Available with Upgrade)	Up to 3 Movable & Sizeable Areas (Max, Min & Avg)
Emissivity Correction	Adjustable from 0.01 to 1.00 (Built-in Emissivity Table with Upgrade)	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table
T Reflect	Manual Adjustment	
T Correct	(Available with Upgrade)	Manual Adjustment
Visible Light Camera	(Available with Upgrade)	1.3 Megapixel CMOS Sensor
Thermal/Visible Light Image	(Available with Upgrade)	Toggle between Thermal and Visible Light
Alarm	High Temperature Audible and Visible Alarm (Additional functions with Upgrade)	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	(Available with Upgrade)	Yes
Image Storage	(Available with Upgrade)	2GB SD / Time Stamped
Freeze Frame/Save Image	Freeze Frame only (Additional functions with Upgrade)	Freeze Frame and Save Image, Thermal and/or Visible to SD Card
Storage Mode	(Available with Upgrade)	Manual Single Image Save or Programmable Auto Save to SD Card
Voice Annotation	(Available with Upgrade)	Maximum 45s per image
File Format (Thermal)	(Available with Upgrade)	JPEG plus Temperature in 14 bit data
File Format / Size (Visible)	(Available with Upgrade)	JPEG / 60K (Typical value)
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 provided, approx. 3 hours operation per battery	
Charging System	External AC Battery Charger included; In Camera Charging with optional AC/DC Battery Charger	
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity/IP Rating	≤ 90% non-condensing / IP54	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Report/Analysis Software; SD Card & Reader; User Manual; Spy-Care(30 Series upgrade)	
Options	NIST Traceable Certificate of Conformance; Extended Warranty; Auxillary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger and International Plugs	

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