

Wahl is pleased to introduce six models to our famous line of Heat Spy® Infrared Thermometers, the **DHS85XL**, **DHS115XL**, **DHS115XEL**, **DHS135XEL**, **DHS215XEL** and the **NEW! DHS235XEL** (see pg 9). These incredibly accurate and robust instruments will help you diagnose any problem, and prevent costly equipment downtime. The variety of features enable you to select the most appropriate Heat Spy® for your application.



DHS85XL

### DHS85XL Model Features

- The most economical and highest performing Heat Spy in its class
- Used for Close Range: 8:1 (D:S Ratio)
- Maximum temperature: 619°F (326°C)
- Ultra low power consumption in shut-down mode

*Note: The DHS85XL replaces discontinued model DHS100X.*

### DHS115XL Model Features

- Used for Short Range: 12:1 (D:S Ratio)
- Temperature Range to 999°F (535°C)
- Easy Aiming
- Quick Response
- Easy location of hot spots
- Ultra low power consumption in shut-down mode

### DHS115XEL Model Extended Features

Same great features as the 115XL, *Plus:*

- Includes Hi, Low Alarms
- MAX/MIN/AVG/ $\Delta$ T calculations
- Adjustable Emissivity for better accuracy
- 10 points of memory to record temperature
- Electronic trigger lock which allows readings to be taken continuously



DHS115XEL  
and DHS115XL

*Note: The DHS115XL and DHS115XEL replace discontinued models DHS100XL and DHS100XEL.*

### APPLICATIONS

- Quality/Non-Destructive Testing
- Electrical Troubleshooting
- Manufacturing Process Control
- Diesel/Fleet Maintenance
- Plant/Facilities Maintenance
- HVAC/Refrigeration
- Automotive Repair and Diagnostics



**PALMER Wahl**

INSTRUMENTATION GROUP

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PW1230  
02/11 Rev A

## DHS135XEL • DHS215XEL and **NEW! DHS235XEL**



Easy to read digital display on models DHS135 and DHS215 and DHS235.



**DHS215XEL** shown with optional TC869 - 45° Spring Articulated Surface Probe, rugged Delrin® handle, ANSI mini-connector and 5-foot flexible compensated cable. For more information on optional probes visit [www.palmerwahl.com](http://www.palmerwahl.com).

### Model Features

#### DHS135XEL

- High Temperature 1832°F (1000°C)
- Long Range: 30:1 (D:S Ratio)

#### DHS215XEL

- High Temperature 1832°F (1000°C)
- Extra Long Range: 50:1 (D:S Ratio)

#### **NEW! DHS235XEL**

- Extra High Temperature 2732°F (1500°C)
- Extra Long Range: 50:1 (D:S Ratio)

#### All Models offer:

- 10 point memory log that can save current temperature
- MAX/MIN/AVG/ΔT
- Electronic Trigger Lock allows continuous readings
- Ultra low power consumption in shut-down mode

### DHS215XEL Model Additional Features

- Type K Thermocouple ANSI mini-connector input for probe to determine emissivity
- Heat Spy® Data Logging Software

### DHS215XEL Heat Spy® Data Logging Software



**DHS215XEL** interfaced with a laptop computer via USB cable and Heat Spy® Data Logging software for online data acquisition. Shown with optional tripod.

The DHS215XEL can be interfaced with a computer via the supplied USB cable and Heat Spy® Data Logging software. The software provides a convenient way to log temperature readings at user selectable time sampling intervals of 1 second to 999 hours in

High Performance Infrared Thermometer				
Item	Date	Time	Temperature	Unit
1	5/4	17:39:59	75.9	Fahrenheit
2	5/4	17:40:29	94.3	Fahrenheit
3	5/4	17:40:59	94.3	Fahrenheit
4	5/4	17:41:29	102.2	Fahrenheit
5	5/4	17:41:59	90.7	Fahrenheit

1-second increments. Temperature data is generated with a date and 24-hour format time stamp in a text file that can be used by programs such as Excel, Access, and Word for further analysis, graphing and report writing.



## DHS85XL • DHS115XL • DHS115XEL DHS135XEL • DHS215XEL • DHS235XEL

Specifications						
Model Number	DHS85XL	DHS115XL	DHS115XEL	DHS135XEL	DHS215XEL	NEW! DHS235XEL
Description	Close Range	Mid Temperature Short Range	Mid Temperature Short Range Extended Features	High Temperature Long Range Extended Features	High Temperature Extra Long Range Extended Features USB, Type K Probe	Extra High Temperature Extra Long Range Extended Features
Temperature Range	-4° to 619°F -20° to 326°C	-25° to 999°F -32° to 535°C	-25° to 999°F -32° to 535°C	-58° to 1832°F -50° to 1000°C	-58° to 1832°F -50° to 1000°C	-58° to 2732°F -50° to 1500°C
Distance to Spot Ratio	8:1	12:1		30:1	50:1	
Spectral Range	5 to 14µm	5 to 14µm	5 to 14µm	8 to 14µm	8 to 14µm	8 to 14µm
Emissivity	Fixed at 0.95	Adjustable 0.10 to 1.00		Adjustable 0.10 to 1.00	Adjustable 0.10 to 1.00	Adjustable 0.10 to 1.00
Accuracy	±2% of reading or 2°C whichever is greater	±5°F (±3°C) from -25° to -4°F (-32° to -20°C) ±3°F (±2°C) from -4° to 212°F (-20° to 100°C) ±2% from 212° to 999°F (100° to 535°C)		±5°F (±3°C) from -58° to -4°F (-50° to -20°C) ±3°F (±2°C) from -4° to 212°F (-20° to 100°C) ±2% above 212°F (100°C)		
Repeatability	±2°F (±1°C)	±2°F (±1°C)	±2°F (±1°C)	±2°F (±1°C)	±2°F (±1°C)	±2°F (±1°C)
Resolution	0.1°F (0.1°C)	0.1°F (0.1°C)	0.1°F (0.1°C)	0.1°F (0.1°C)	0.1°F (0.1°C)	0.1°F (0.1°C)
Response Time	500 ms.	500 ms.	500 ms.	500 ms.	500 ms.	500 ms.
Operating Temperature	32° to 122°F (0 to 50°C) 10 - 90% RH	32° to 122°F (0 to 50°C) 10 - 90% RH	32° to 122°F (0 to 50°C) 10 - 90% RH	32° to 122°F (0 to 50°C) 10 - 90% RH	32° to 122°F (0 to 50°C) 10 - 90% RH	32° to 122°F (0 to 50°C) 10 - 90% RH
Storage Temperature	14° to 140°F (-10° to 60°C)	14° to 140°F (-10° to 60°C)	14° to 140°F (-10° to 60°C)	14° to 140°F (-10° to 60°C)	14° to 140°F (-10° to 60°C)	14° to 140°F (-10° to 60°C)
LCD Backlight	Yes	Yes	Yes	Yes	Yes	Yes
Dual Display	NA			Yes	Yes	Yes
°F & °C Selectable	Yes	Yes	Yes	Yes	Yes	Yes
Laser Sight Switchable	User Selectable, Class II Laser, less than 1mW					
Auto Power Off	Automatically after approx. 6 seconds	Automatically after approx. 6 seconds	Automatically after approx. 6 seconds	Automatically after approx. 6 seconds	Automatically after approx. 30 seconds	Automatically after approx. 6 seconds
Max/Min/Avg/ΔT	No	No	Yes	Yes	Yes	Yes
Auto Measuring	No	No	Yes	Yes	Yes	Yes
Audible Alarm	No	Yes	Yes	Yes	Yes	Yes
10 Point Memory	No	No	Yes	Yes	Yes	Yes
Electronic Trigger Lock	No	Yes	Yes	Yes	Yes	Yes
Tripod Mount	Yes	No	No	Yes	Yes	Yes
USB Data Output	No	No	No	No	Yes	No
Type K Thermocouple	No	No	No	No	Yes	No
Operating Software	NA				Software Cd Included	NA
Power Supply	9V Battery	9V Battery	9V Battery	9V Battery	9V Battery	9V Battery
Battery Life with Laser Off	16 hrs for continuous operation	15 hrs for continuous operation		15 hrs for continuous operation		
Dimensions	5.9 x 5.2 x 1.8" (150 x 133 x 45mm)	6.8 x 3.6 x 1.8" (173 x 93 x 45mm)		7.9 x 5.0 x 1.9" (200 x 127 x 47mm)		6.7 x 5.2 x 1.8" (200 x 132 x 45mm)
Weight with Battery	4.7 oz (135g)	7.8 oz (220g)		12.7 oz (360g)		11.6 oz (330g)
Included Accessories	User Manual, 9V Battery	User Manual, 9V Battery, Soft Pouch		User Manual, 9V Battery, Carrying Case, and Wrist Strap	User Manual, 9V Battery, Carrying Case, Wrist Strap & Software	User Manual, 9V Battery, Carrying Case, and Wrist Strap
Optional Accessories	Soft Pouch	No		No	USB Cable, Type K Probe*	No

\* Wire Bead thermocouple - 1 meter in length, \*\* For more information on optional probes visit [www.palmerwahl.com](http://www.palmerwahl.com).

Specifications are subject to change without notice