

# High Precision Infrared

## DHS520B High Precision Infrared with Bluetooth® Communications



The DHS520B features a 2-position trigger which takes and stores temperature readings.

The Wahl DHS520B Series Heat Spy® models are general purpose, high precision, portable infrared thermometers, designed for accurate high temperature measurement in the range of 1022° to 5432°F (550° to 3000°C).

The measured temperature is displayed in four simultaneous modes: continuous, peak, mean, and valley, with user selected mode for the viewfinder display. The bright, back-lit external display panel indicates status and configuration of thermometer.

Accurate sighting is ensured by the clear, wide angle (9°) field of view and small, clearly defined (1/3°) measurement area. Focusing is variable from 1m to infinity, with close focus options available using auxiliary lenses. The reflex optical system gives precise definition of target spot and simultaneous backlit display of user selected values in the viewfinder.

Emissivity compensation is provided via the icon-based menu system. The operating waveband has been carefully chosen to minimize errors due to uncertainty in emissivity and the effects of atmospheric vapor components.

### Features

- Advanced spectral filtering enhances performance
- Long term, drift free measurement
- High accuracy and repeatability
- Digital signal processing
- Flexible user configuration
- Robust - Ideal for industrial use

### Benefits

- No contamination, interference or damage to process or material
- Accurate, reliable and stable temperature measurement to aid product quality control
- Maximize production rates and efficiency

Target Size	
Distance: ft (m)	Target Size: in (mm)
328 (100)	22.6 (576)
164 (50)	11.2 (287)
65.6 (20)	4.48 (114)
32.8 (10)	2.24 (57)
22.9 (7)	1.53 (39)
16.4 (5)	1.10 (28)
6.5 (2)	0.43 (11)
3.2 (1)	0.18 (4.8)

Target size can be reduced to a minimum of 0.4mm/0.016in with optional close-up lenses.

Specifications	
Model Number	DHS520B - DHS520GB*
Temperature Range	1022° to 5432°F (550° to 3000°C)
Distance to Spot Ratio	20:1, 4:1 with closeup lens
Spectral Response	1 µm with advance spectral filtering
Emissivity	0.10 to 1.20 in 0.01 step graduations
Accuracy	< 0.25% (K) of reading
Repeatability	< 0.1% (K) of reading
Response Time	30 ms (98% response)
Operating Temp Range	32° to 122°F (0° to 50°C)
Measuring Mode	CONT, AVG, MAX & MIN
Optical System	9° Field of View with 1/3° (180:1 to 98% measurement energy) area. Eyepiece adjustable: -3.75 to +2.5 diopters
Focusing Range	39.3' / 1m to infinity 17.7 to 24.5' / 450 to 620mm with optional 8.5' / 215mm fixed focus close-up lens
Display Update Time	0.5 seconds
Sealing	IP54 / NEMA 3
Output	Bluetooth Communications
Power Supply	1 9V Battery
Dimensions	8.25 x 2.75 x 5.5 inches (210 x 70 x 140mm)
Weight	Approximately 6.87 ounces (195 grams) 0.83kg/1.8lb
Included Accessories	Lens Cap, Dark Glass Eye Protection Filter (G model includes 2 filters), Wrist Strap, 9V Battery and User Manual
Optional Accessories	User Manual, 9V Battery, Waterproof Carrying Case, Close-up Lenses, Datalogger Software

\* Model DHS520GB includes 2 dark glass eye protection filters for use in the Glass industry.

Specifications subject to change without notice

Note: The DHS520 replaces discontinued model DHS54.

### Applications

- Heat Treatment
- Refractories
- Semi-Conductors
- Steel
- Any Industrial use
- Glass

