

# Thermosight Series

## High Performance Handheld Infrared Thermometer



- Temperature ranges to 1800°C
- Back-lit LCD display
- Built-in laser sighting
- Integral tripod mount
- Trigger lock for continuous measurements
- Display HOLD function
- 9V battery operation

### GENERAL SPECIFICATIONS

Technical Data	Thermosight 400	Thermosight 500	Thermosight 600
Temperature range	-32°C to 400°C	-32°C to 500°C	-32°C to 600°C
Spectral range	8 to 14 µm	8 to 14 µm	8 to 14 µm
Distance:Spot size ratio	10:1	15:1	30:1
Accuracy @ 23°C ambient, 1.0 emissivity	2% of measured value or 2°C, whichever is greater. 2°C below -10°C	1% of measured value or 1°C, whichever is greater. 2°C below -10°C	1% of measured value or 1°C, whichever is greater. 2°C below -10°C
Repeatability	1% of measured value or 1°C, whichever is greater. 2°C below -10°C	0.5% of measured value or 1°C, whichever is greater. 2°C below -10°C	0.5% of measured value or 1°C, whichever is greater. 2°C below -10°C
Response time $t_{90}$	300 ms	300 ms	300 ms
Emissivity	Fixed at 0.95	0.2 to 1.0	0.2 to 1.0
Display resolution	0.1°C from -10°C to 200°C. Otherwise 1°C	0.1°C from -10°C to 200°C. Otherwise 1°C	0.1°C from -10°C to 200°C. Otherwise 1°C
Readings	Instantaneous or MAX (MIN or AVG on request)	Instantaneous, MAX, MIN or AVG	Instantaneous, MAX, MIN or AVG
Units of measurement	°C (°F on request)	°C or °F	°C or °F
Operating temperature	0°C to 55°C	0°C to 55°C	0°C to 55°C
Storage temperature	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C
Weight	340 g	340 g	340 g
Environmental protection	IP20	IP20	IP20

With its combination of flexibility and performance the Thermosight Series offers a reliable solution to most non-contact, infrared temperature measurement applications.

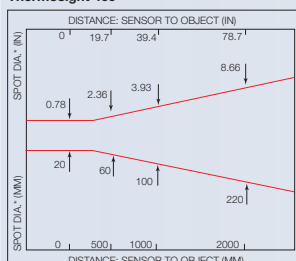
A choice of different spectral ranges enables the Thermosight Series to measure the temperature of most surfaces.

The large backlit LCD display indicates the temperature at a glance. Whilst the Thermosight's built-in laser sighting clearly indicates the target being measured.

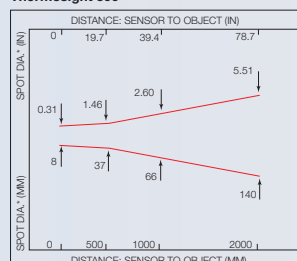
A USB interface is available on the high temperature (HT) model, allowing communications between the handheld unit and a PC if required.

### THERMOSIGHT 400, 500 AND 600 OPTICAL DIAGRAMS

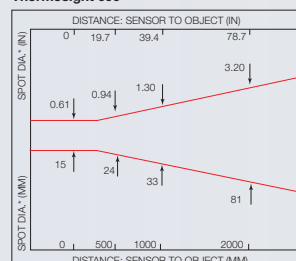
Thermosight 400



Thermosight 500



Thermosight 600

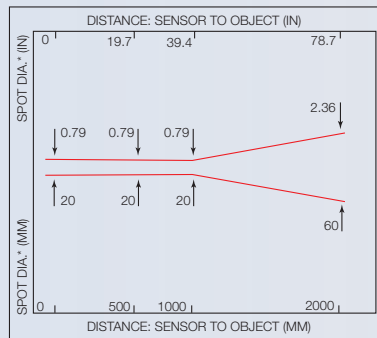


## GENERAL SPECIFICATIONS

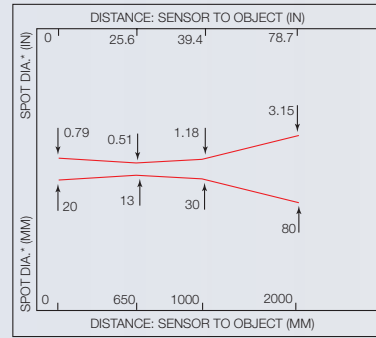
Technical Data	Thermosight 800	Thermosight 900 and 900 plus	Thermosight GL and GL plus	Thermosight HT
Temperature range	-32°C to 800°C	-32°C to 900°C	150°C to 1800°C	250°C to 1800°C
Spectral range	8 to 14 µm	8 to 14 µm	5.14 µm	1.45 to 1.8 µm
Distance:Spot size ratio	50:1	50:1	50:1	200:1
Close focus lens	N/A	Option	Option	Option
Accuracy @ 23°C ambient,1.0 emissivity	2% of measured value or 2°C, whichever is greater. 2°C below -10°C	2% of measured value or 2°C, whichever is greater. 2°C below -10°C	2% of measured value or 2°C, whichever is greater. 2°C below -10°C	0.6% of measured value
Repeatability	1% of measured value or 1°C, whichever is greater. 2°C below -10°C	1% of measured value or 1°C, whichever is greater. 2°C below -10°C	1% of measured value or 1°C, whichever is greater. 2°C below -10°C	0.2% of measured value
Temperature drift	0.03%/°C (23°C)	0.03%/°C (23°C)	0.03%/°C (23°C)	0.01%/°C (23°C)
Response time t <sub>90</sub>	150 ms	150 ms	150 ms	20 ms
Emissivity	0.2 to 1.0	0.2 to 1.0	0.2 to 1.0	0.1 to 1.0
Display resolution	0.1°C	0.1°C	0.1°C	0.1°C from 250°C to 999.9°C, 1°C from 1000°C to 1800°C
Readings	Instantaneous, MAX, MIN or AVG	Instantaneous, MAX, MIN or AVG	Instantaneous, MAX, MIN or AVG	Instantaneous, MAX, MIN, AVG or DIF
Data logging	20 points	N/A (900) 250 points (900 plus)	N/A (GL) 250 points (GL plus)	750 points
Serial interface	N/A	RS232	RS232	USB 2.0
Analogue output	N/A	N/A (900) 1 mV/°C (900 plus)	N/A (GL) 1 mV/°C (GL plus)	N/A
Acoustic alarm	HI/LO	HI (900), HI/LO (900 plus)	HI	HI
Units of measurement	°C or °F	°C or °F	°C or °F	°C or °F
Operating temperature	0°C to 55°C	0°C to 55°C	0°C to 55°C	0°C to 60°C
Storage temperature	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C
Weight	340 g	340 g	340 g	340 g
Environmental protection	IP20	IP20	IP20	IP20

## THERMOSIGHT 800/900, GL, HT AND CLOSE FOCUS OPTICAL DIAGRAMS

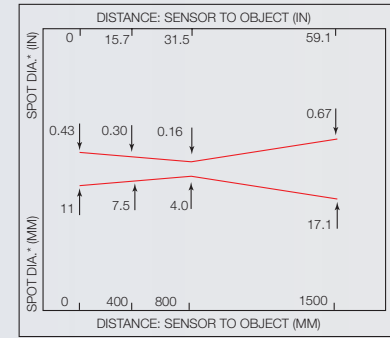
**Thermosight 800 and 900**



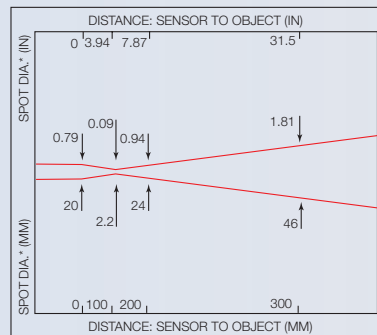
**Thermosight GL**



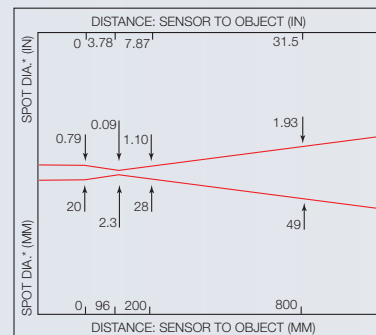
**Thermosight HT**



**Thermosight 900 Close Focus**



**Thermosight GL Close Focus**



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 Specifications subject to change without notice