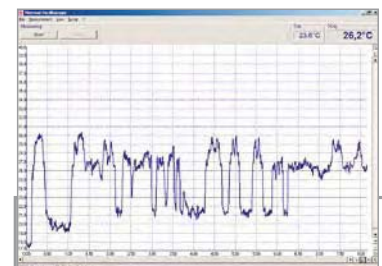# thermoMETER LS

thermoMETER LS Infrared thermometer with crosshair laser sighting

The LS is the most sophisticated IR hand held device. It provides an accurate measurement with its precision optics (adjustable for close or far field focus) and marks the actual true measurement with a laser crosshair, eliminating the guesswork out of handheld IR devices. It is fully programmable, offers a digital interface for on and offline data logging and includes a thermocouple plug in.

➔ Measuring range from -35° to +900°C

➔ The new performance standard with spot sizes as small as 1mm

➔ Crosshair laser sighting marks the actual spot size at any distance

➔ Optical resolution 75:1

➔ Response time 150ms

➔ Thermocouple input

➔ USB interface and graphic software with oscilloscope function

➔ Multi function flip display

➔ Programmable emissivity

➔ High and low limits

➔ Statistical data processing

Flip display for multi purposes:
Measurement of smallest objects (1mm) on a circuit board - data transfer via USB to a common PC

Optical specifications thermoMETER LS

☐ = smallest spot size (mm)

Standard Focus optics	75:1	20	16	40	70	100	130
	distance in mm	0	1200	2000	3000	4000	5000
Close Focus optics	CF 75:1	17	1	123	262		
	distance in mm	0	62	500	1000		

Model	thermoMETER LS
Optical resolution	75:1
Temperature range	-35 to 900°C
Spectral response	8 to 14μm
System accuracy	±0.75°C or ±0.75% [1]
Temperature coefficient	±0.05°C or ±0.05% [1]
Response time (95%)	150ms
Repeatability	±0.5°C or ±0.5% [1]
Switchable to focus	1mm @ 62mm (90%)
Smallest spot	1mm
Laser class II	standard focus: patented crosshair laser (crosshair size = IR spot size@any distance) close focus: two point laser (laser dot size = IR spot size@focus distance)
Emissivity/gain	0.100 to 1.100 (adjustable)
Configurations	MAX/MIN/HOLD/DIF/AVG/°C/°F
Alarm functions	audible and visible HIGH/LOW alarm
Display	LC flip display (horizontal and vertical viewing directions controlled by position sensor)
Display LCD backlight	green and alarm colours (red, blue)
Bar graph display	auto scaling
Ambient temperature	0 to 50°C
Storage temperature	-30 to 65°C
Relative humidity	10 - 95% (non condensing)
Weight	420g
EMV	89/336/EWG
Vibration/Shock	IEC 68-2-6: 3 G, 11-200Hz, any axis IEC 68-2-27: 50 G, 11ms duration, any axis
Temperature range t/c probe input	-35 to 900°C (-30 to 1650°F)
Accuracy t/c probe input	±0.75°C or ±1% of reading [1]
Interface, data output	USB
Data memory	100 measurement protocols with time stamps, customizable 4 digit location and material names
Software	CompactConnect oscilloscope software with 20 readings per second
Power	battery 2xAA Alkaline or via USB
Battery life time	5h with laser on and 50% backlight use 10h with laser on and w/o backlight 25h w/o laser and backlight
Tripod mount	1/4-20 UNC
Option	certificate of calibration or DKD certificate

[1] whichever is greater; ± at ambient temperatures 23 ±5°C; 20 to 900°C range

Software IRConnect
- Data logging
- Display and recording of temperature graphs
- Modifications of handheld settings

System requirements
- Windows XP, Windows 2000
- USB 2.0
- Hard disc min. 30 MByte
- min. 128 MByte RAM
- CD-ROM drive

<u>Scope of supply</u>
- thermoMETER LS
- USB cable and software
- t/c type K insertion probe
- carrying case
- padded pouch
- wrist strap
- manual
- cells