

Entsorgung der Batterien: Batterien und Akkus dürfen keinesfalls in den Hausmüll.



Sie enthalten Schadstoffe wie Schwermetalle, die bei unsachgemäßer Entsorgung der Umwelt und der Gesundheit Schaden zufügen können und wertvolle Rohstoffe wie Eisen, Zink, Mangan oder Nickel, die wiedergewonnen werden können. Als Verbraucher sind Sie gesetzlich verpflichtet, gebrauchte Batterien und Akkus zur umweltgerechten Entsorgung beim Handel oder entsprechenden Sammelstellen gemäß nationalen oder lokalen Bestimmungen abzugeben. Die Rückgabe ist unentgeltlich. Adressen geeigneter Sammelstellen können Sie von Ihrer Stadt- oder Kommunalverwaltung erhalten. Die Bezeichnungen für enthaltene Schwermetalle sind: Cd=Cadmium, Hg=Quecksilber, Pb=Blei. Reduzieren Sie die Entstehung von Abfällen aus Batterien, indem Sie Batterien mit längerer Lebensdauer oder geeignete wiederaufladbare Akkus nutzen. Vermeiden Sie die Vermüllung der Umwelt und lassen Sie Batterien oder batteriehaltige Elektro- und Elektronikgeräte nicht achtlos liegen. Die getrennte Sammlung und Verwertung von Batterien und Akkus leisten einen wichtigen Beitrag zur Entlastung der Umwelt und Vermeidung von Gefahren für die Gesundheit.

WARNUNG! Umwelt- und Gesundheitsschäden durch falsche Entsorgung der Batterien!

Explanation of symbols



This sign certifies that the product meets the requirements of the EEC directive and has been tested according to the specified test methods.

8. Technische Daten:

Messbereich Infrarot:	-60 .. +500 °C (-76 .. +932 °F)
Messbereich Thermoelement:	-64 .. +1400 °C (-83,2 .. +1999 °F)
Arbeitstemperatur:	0 .. +50 °C (32 .. 122°F)
Lagertemperatur:	-20 .. +65 °C (-4 .. 149°F), 95 %RH
Ansprechzeit:	1 Sekunde
Messfleckverhältnis zur Entfernung:	12:1
Einstellbarer Emissionsgrad:	0.10~1.00 Schrittweite 0.01
Mode :	MAX, MIN, dIF, AVG, HAL, LAL, PRB, Lock)
Batteriestandzeit:	min. 140 Std. im Dauerbetrieb
Abmessungen:	141 x 134 x 42 mm
Gewicht:	186 g (inkl. Batterien)

Eine Emissionsgradtabelle ausgewählter Materialien finden Sie auf Seite 37/38.

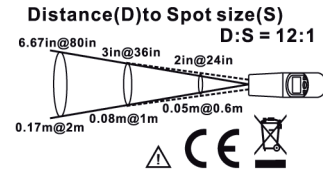
ScanTemp 450 – Infrared Thermometer

1. Before you start using it

- Please make sure to read the instruction manual carefully.
- Following and respecting the instructions in your manual will prevent damage to your instrument and loss of your statutory rights arising from defects due to incorrect use. We shall not be liable for any damage occurring as a result of non-following of these instructions.
- Likewise, we take no responsibility for any incorrect readings and for any consequences which may result from them.
- Please take particular note of the safety advice!
- Please keep this instruction manual for future reference.

2. Field of operation and all the benefits

- The ScanTemp 450 infrared thermometer is a non-contact infrared thermometer with Thermocouple connector. For the infrared part, simply aim the thermometer at the target and press the measurement button to display the surface temperature in less than a second. Plug in the specific thermocouple (not included), ScanTemp 450 may take contact temperature as high as 1400 °C.
- The distance to target diameter ratio (field of view) is 12:1. For accurate reading, please make sure the target size is smaller than the spot size.



3. Features

- 2 x 1,5 Volt AAA batteries included
- Large LCD screen, with backlight
- Friendly user interface: 3-Key with trigger
- With high-end arithmetic: Max; Min and DIF; AVG mode
- Auto Power Off in 1 minute
- Precision K type thermocouple thermometer inside



4. For your safety

- The device should only be used as described within these instructions.
- Unauthorized repairs, modifications or changes to the product are prohibited.

! Caution! Risk of injury:

- Never point the device towards anyone's eyes.
- Keep this device and the battery out of the reach of children.
- Batteries must not be thrown into a fire, short-circuited, taken apart or recharged. Risk of explosion!
- Batteries contain harmful acids. Low batteries should be changed as soon as possible to prevent damage caused by leaking.
- Never use a combination of old and new batteries together, or batteries of different types. Wear chemical resistant protective gloves and safety glasses when handling leaking batteries.
- Remove the battery if you do not use the device for a long period of time.



! Important information on product safety!

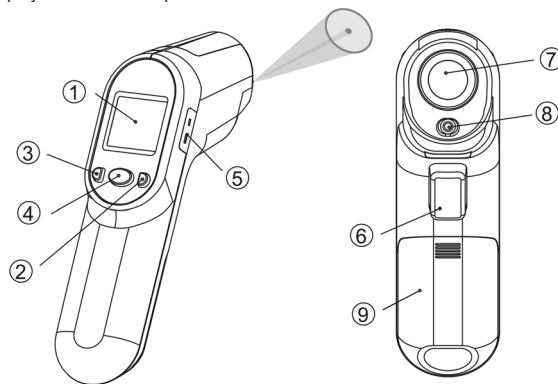
! EMC/RFI

- Readings may be affected if the device is operated with in radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.
- Do not place your device near extreme temperatures, vibrations or shocks.
- The ScanTemp 450 should be stored at room temperature between -20 to $+65^{\circ}\text{C}$.
- The lens should be kept clean at all times.
- The sensor lens is the most delicate part of the ScanTemp. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol, allowing the lens to fully dry before using the ScanTemp 450.
- Do not leave the device near objects of high temperature.



5. Parts description

Simply aim the ScanTemp450 at the measure target and press the Meas. key 6 to display the surface temperature.

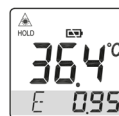


1. LCD
2. Up key
3. Down key
4. Mode key
5. Thermocouple socket

6. Measuring key
7. Infrared Lens
8. Laser
9. Battery cover



Default Screen



Infrared function

ScanTemp 450 is supplied with a default emissivity of 0.95.



→ Press Mode key 4 for scrolling more display function as follows:

"E"	Press emissivity key 4 key to adjust the emissivity. The emissivity can be changed from 0.10 to 1.00.
MAX	Press the Meas. key 6 to display the surface temperature. Keep pressing Mode key 4 for the Maximum (MAX), Minimum (MIN), Different between MAX and MIN (DIF) and Average (AVG) readings during the last measurement period.
MIN	
DIF	
AVG	
HAL	Press Down key 2 or Up key 3 to change the High Alarm (HAL) or Lo Alarm (LAL). F. e.: When the reading 27 °C < LAL 27.1 °C, the Low icon will flash and you will hear a beep sound.
LAL	
The measurement range: -60 .. +500 °C.	

→ ScanTemp will automatically shut off if left idle for more than 60 sec, unless in PRB mode.

Thermocouple probe scan function:

Press the mode key 4 until PRB appears: on the LCD.

Connect the thermocouple with Scan Temp 450's thermocouple socket 5 and put the probe in or on the target, the temperature will be displayed beside the "PRB" icon.

→ ScanTemp 450 will automatically shut off if left idle for more than 12 min in PRB mode.

→ The measurement range: -64 to +1400 °C.




⚠ After measure high temp, the probe may remain HOT for a while.



Key pad:

In Default: Max, Min, DIF, AVG, HAL, LAL, PRB	Press Lock key for infrared LOCK mode ON/OFF. Press °C/°F key for °C or °F transferred.
In all modes: Hold the Measuring key 6	Press Lock key for backlight function ON/OFF. Press °C/°F key for Laser function ON/OFF.

Batterie:

		
Battery OK	Battery Low	Battery Exhausted
Measurements are possible	Battery needs to be replaced, measurements are still possible	Measurements are not possible

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with two AAA, 1.5V batteries.

Please note: It is important to turn the instrument off before replacing the battery otherwise the ScanTemp 450 may malfunction..



6. Trouble shooting

	<p>→ 'Low Battery' icon indicates the battery is low. → The battery should be replaced with 2x AAA (LR6), 1.5V batteries immediately.</p>
 don't work	<p>→ Please check the model with/without this function. → Replace the batteries</p>
	<p>→ 'Hi' is displayed when the temperature being measured is outside of the settings of HAL. → Please reset the HAL or select target within specifications.</p>
	<p>→ 'Lo' is displayed when the temperature being measured is outside of the settings of LAL. → Please reset the LAL or select target within specifications.</p>
	<p>→ For all other error messages it is necessary to reset the ScanTemp 450. → To reset the ScanTemp 450, please wait the instrument automatic off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. → If the error message remains please contact the Service, Department for further assistance.</p>

7. Waste disposal

This product and its packaging have been manufactured using high-grade materials and components which can be recycled and reused. This reduces waste and protects the environment. Dispose of the packaging in an environmentally friendly manner using the collection systems that have been set up.

Disposal of the electrical device: Remove non-permanently installed batteries and rechargeable batteries from the device and dispose of them separately. This product is labelled in accordance with the EU Waste Electrical and Electronic Equipment Directive (WEEE). This product must not be disposed of in ordinary household waste. As a consumer, you are required to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment, in order to ensure environmentally-compatible disposal. The return service is free of charge. Observe the current regulations in place!



Disposal of the batteries: Batteries and rechargeable batteries must never be disposed of with household waste. They contain pollutants such as heavy metals, which can be harmful to the environment and human health if disposed of improperly, and valuable raw materials such as iron, zinc, manganese or nickel that can be recovered from waste. As a consumer, you are legally obliged to hand in used batteries and rechargeable batteries for environmentally friendly disposal at retailers or appropriate collection points in accordance with national or local regulations. The return service is free of charge. You can obtain addresses of suitable collection points from your city council or local authority.

The names for the heavy metals contained are: Cd=cadmium, Hg=mercury, Pb=lead. Reduce the generation of waste from batteries by using batteries with a longer lifespan or suitable rechargeable batteries. Avoid littering the environment and do not leave batteries or battery-containing electrical and electronic devices lying around carelessly. The separate collection and recycling of batteries and rechargeable batteries make an important contribution to relieving the impact on the environment and avoiding health risks.

WARNING! Damage to the environment and health through incorrect disposal of the batteries!

Explanation of symbols



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8. Specifications:

Measurement range Infrared: -60 .. +500 °C (-76 .. +932 °F)

Temperature range Thermocouple: -64 to +1400 °C (-83.2 to +1999 °F)

Operating environment: 0 .. +50 °C (32 .. 122°F)

Storing conditions: -20 .. +65 °C (-4 .. 149°F)

Response time: 1 second

Optical resolution: 12:1

Emissivity: 0.10~1.00 step 0.01

Mode : MAX, MIN, dIF, AVG, HAL, LAL, PRB, Lock)

Battery life: min 140 hours continuous use (without laser and backlight).

Dimension: 141 x 134 x 42 mm

Weight: 186 grams including batteries

Note: Subject to change without notice.

For a table of emissivity values of common materials please see page 37/38.