



Infrared Thermometer with Measurement Point Marking

Switchable optics for far field and close focus non-contact temperature measurement

NEW!

°C

Applications:

- Heating
- Air conditioning and ventilation
- Manufacturing
- Machines
- Plus much more!

Benefits:

- Far-field and close focus non-contact temperature measurement
- 2 in 1 instrument offering significant cost savings
- Broad measurement range of -35 to +950 °C



Precise small measurement point for both near and far distances using new SWITCH optics.



1

The Testo 845 is a milestone in non-contact temperature measurement offering the ability to 'switch' between close focus and far-field measurements. For the first time, surface temperatures with a measurement point diameter down to 1mm can be measured and cross laser marking means that accurate measurements can be taken even at large distances.

The Testo 845 infrared thermometer offers fast temperature measurement. Min./max. values and exceeded limit values are updated at a time interval of 100 ms, enabling quick scans and evaluations of surfaces.



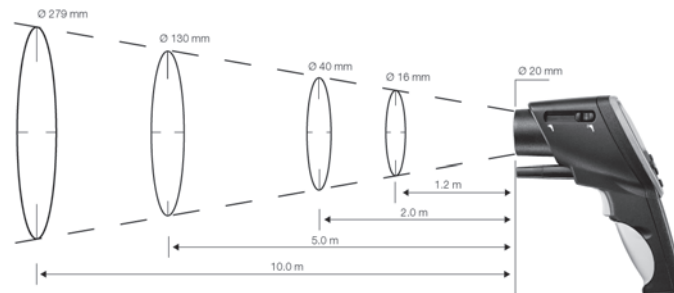
The Testo 845 guarantees a high level of accuracy in non-contact temperature measurement. In the temperature range from -35 to +950 °C, a measurement accuracy of up to ± 0.75 °C is achieved. External thermocouple probes can be attached and used for measuring temperatures when the degree of emission is not known. The Testo 845 also offers an adjustable emissivity factor from 0.1 to 1.0.

1 75:1 Far-field optics with cross laser for large distances:

For measurements at greater distances, the Testo 845 is equipped with 75:1 optics. A laser cross marks the exact measurement point at any distance. This ensures that the diameter of the measurement point is recognisable at all times during measurement therefore eliminating the risk of incorrect measurements.



2



Measurement point diameter and distance from the measurement surface

Switching:

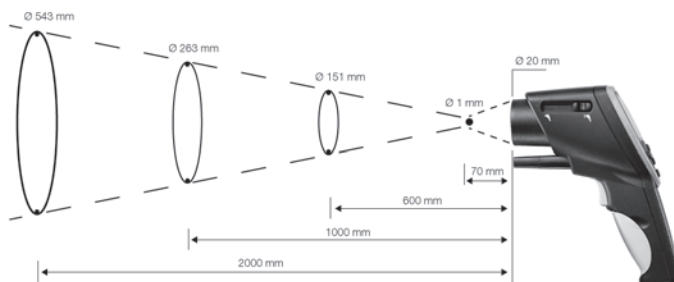
The optics are switched from far-field to close focus with the slide switch.

2 Close focus optics with 1 mm measurement point for small distances:

With the close focus optics measurement of surface temperatures with a point diameter up to 1 mm can be undertaken. A 2-point laser marks the exact of the measurement point.



2



Measurement point diameter and distance from the measurement surface



Innovation in non-contact temperature measurement

- SWITCH optics for both far-field and close focus temperature measurement
- Cross laser marking for accurate long distance measurement
- Measuring range $-35\text{ }^{\circ}\text{C}$ to $+950\text{ }^{\circ}\text{C}$
- Reference accuracy up to $\pm 0.75\text{ }^{\circ}\text{C}$ with ultra-fast measurement technology (scanning 100 ms)
- Connection of external thermocouple probes
- Documentation via software or on site with optional infrared printer
- Optical and audible alarm when limit values are exceeded



switchable optics for far-field/close focus measurement



Simple instrument operation with a clear display

- 3-line backlit display showing $^{\circ}\text{C}$, min./max. values of the alarm limit values and emissivity
- Optical and audible alarm when user adjustable limit values are exceeded
- Onboard memory for 90 measurement protocols



Display view infrared measurement: current value, min./max.value

Display view with attached $^{\circ}\text{C}$ contact probe: degree of emission, current value $^{\circ}\text{C}$ infrared measurement and $^{\circ}\text{C}$ contact probe

Record and save measurements

A PC software for archiving and documenting measurement data

The stored measurement protocols (max. 90) are read into the PC software via USB cable. The convenient PC software is used to archive, document and further process the measurement data (e.g. Excel, Visual Basic).

Online measurements are also possible with the Testo 845 and the PC software. A bracket allows the Testo 845 to be securely fitted into the tripod during measurement. Data transfer from the instrument to the PC takes place in a time interval from 100ms. Voltage supply during online measurement takes place via USB or battery.

PC software, USB cable and tripod adapter are included in delivery as standard.

B Documentation on site with the Testo infrared printer

The Testo 845 transfers the data wirelessly to the report printer via infrared interface. In addition to the measurement values the date and time are also documented on the printout.

A

B



Technical and ordering data

Testo 845

Measuring range °C:	IR °C: -35 to +950 °C Contact °C: -35 to +950 °C
Spectral range:	8 to 14 µm
Accuracy °C IR (at +23 °C): ± 1 digit:	±2.5 °C (-35 to -20.1 °C) ±1.5 °C (-20 to +19.9 °C) ±0.75 °C (+20 to +99.9 °C) ±0.75 % of m.v. (+100 to +950 °C)
Accuracy °C contact (Type K): ± 1 digit:	±0.75 °C (-35 to +75 °C) ±1 % of m.v. (75.1 to +950 °C)
Resolution:	0.1 °C (°C-measurement parameters)
Emission factor:	Adjustable 0.1 to 1.0
Optical resolution:	Far field: 75:1 (16 mm, distance 1200 mm) Close focus: 1 mm, distance 70 mm
Measuring rate:	t 95: 150 ms Scanning Max/Min/Alarm: 100 ms
Housing material:	ABS black/grey, metal cover
Dimensions:	155 x 58 x 195 mm (LWH)
Weight:	465 g
Dimensions case (included in delivery)	405 x 340 x 93 mm (LWH)
Voltage supply:	2 x AA AlMn or via USB
Battery life:	25h (without laser); 10h (with laser without backlight); 5h (with laser and 50% backlight)
Operating temperature:	-20 to +50 °C
Storage temperature:	-40 to +70 °C
Warranty:	2 years



Testo 845

Testo 845, infrared temperature measuring instrument including carry strap, PC software, USB-data transfer cable, aluminium transport case, battery and calibration protocol

Part no.

0563 8450

Temperature probes (TE Type K)

Very fast reaction surface probe with sprung thermocouple band, also for uneven surfaces, measuring range short-term up to +500°C, TC Type K	0602 0393
Very fast reaction surface probe with sprung thermocouple band, bent, also for uneven surfaces, measuring range short-term up to +500°C, TC Type K	0602 0993
Precise, waterproof surface probe with small measuring head for flat surfaces, TC Type K	0602 0393
Robust air probe, TC Type K	0602 1793

Accessories

Mains unit, 5 VDC 500 mA with European plug	0554 0447
External charger including 4 Ni-MH rechargeable batteries with integrated international plug —100-240 V, 300 mA, 50/60 Hz, 12 VA/instrument	0554 0610
Testo infrared printer with 1 roll of thermal paper and 4 AA batteries	0554 0547
Spare thermal paper for printer (6 rolls)	0554 0569
Spare thermal paper for printer (6 rolls), long-term legible measurement up to 10 years	0554 0568
Adhesive tape for polished surfaces (roll, L.: 10 m, W 25 mm), E=0.93, temperature-proof to +300 °C	0554 0051
Silicone heat paste (14g), Tmax = +260 °C, for improving heat transfer in surface probes	0554 0004

Calibration certificates

ISO calibration certificate temperature, infrared thermometer, calibration points +60 °C,+120 °C,+180 °C	300520 0038
User specified points	On request