

testo 845
Infrared Thermometer with Switchable Optics (75:1 optics)

For the first time, surface temperatures with smallest diameters can be measured accurately at short and long distances. The switchable optics for far-field and close focus measurement make this possible. Measurements in the far-field are made with an optical resolution of 75:1. Surface temperatures can thus be measured accurately even at greater distances from the object to be measured. At a distance of 1.2 metres from the object, the measurement point diameter is only 16 mm. A cross laser marks the measurement point exactly.

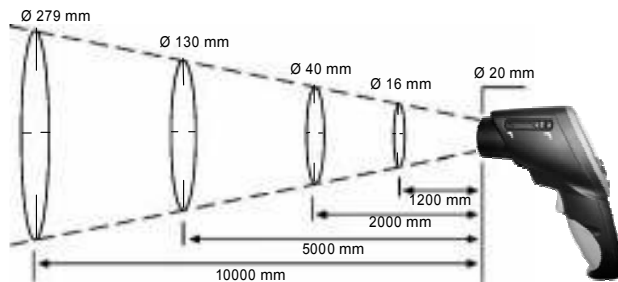
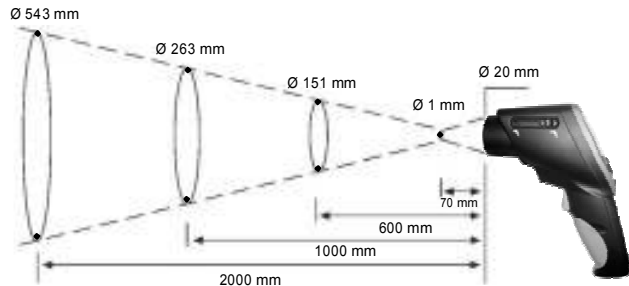
For measurements at a small distance from the object to be measured, the close focus optics provide a measurement point diameter of only 1 mm at a distance of 70 mm! Two laser points mark the measurement point.

- ◆ Switchable optics for far-field measurements (75:1) and close focus (1 mm, 70 mm distance)
- ◆ Especially bright cross laser sighting for indicating the actual measuring point
- ◆ Reference accuracy ± 0.75 °C with super-fast measurement technology (scanning 100 ms)
- ◆ Backlit display (3-line) showing °C, min./max. values, alarm values and degree of emission
- ◆ Optical and audible alarm when limit values are exceeded
- ◆ Probe socket for TC probes for determining emissivity
- ◆ Instrument memory for 90 measurement protocols
- ◆ PC software for archiving and documenting measurement data (included in delivery)
- ◆ Tripod fitting for online measurement via USB cable (included in delivery)
- ◆ Measurement data documentation on site with testo report printer
- ◆ Aluminium case for instrument and accessories (included)



testo 845, infrared temperature measuring instrument with cross laser marking and switchable optics for far-field and close focus measurement, incl. PC software with USB data transfer cable, aluminium case, battery and calibration protocol

Part no.
0563 8450

Far-field measurement

Close focus measurement

Technical data

Probe type	Infrared	Type K (NiCr-Ni)
Meas. range	-35 to +950 °C	-35 to +950 °C
Spectral range	8 to 14 µm	
Accuracy ±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 mv (+100 to +950 °C)	±0.75 °C (-35 to +75 °C) ±1% of mv (+75.1 to +950 °C)
Resolution	0.1 °C	0.1 °C
Measurement rate	t 95: 250ms Scanning Max/Min/Alarm: 100 ms	
Meas. spot marking	Cross-laser in the far-field 2-point laser in close focus	
Emission factor	Adjustable 0.1 to 1.0	
Distance to measurement spot	Far field: 75:1 16 mm @ 1200 mm (90%) Close focus: 1 mm @ 70 mm (90%)	
		Oper. temp. -20 to +50 °C Storage temp. -40 to +70 °C Battery type 2 AA batteries Battery life 25 h (without laser), 10 h (with laser without light), 5 h (with laser and 50% light)
		Material/Housing black/gray, metal screen
		Dimensions 155 x 58 x 195 mm
		Weight 465 g
		Warranty 2 years

Accessories

Accessories	Part no.
Humidity module, upgradeable for testo 845	0636 9784
Plug-in mains adapter, 5 VDC 500 mA with European adapter	0554 0447
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Testo printer with wireless IRDA and infrared interface, 1 roll of thermal paper and 4 AA batteries, for printout of reading on site	0554 0547
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
Control and humidity adjustment set 11.3 %RH/75.3 %RH incl. adapter for humidity probes, quick checks or calibration of humidity probe	0554 0660
Adhesive tape e.g. for polished surfaces (roll, 10 m long, 25 mm wide), E = 0.95, temperature resistant up to +300°C	0554 0051
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004
ISO calibration certificate/temperature, infrared thermometer, calibration points +60°C; +120°C; +180°C	0520 0002
ISO calibration certificate/temperature, Infrared thermometers, calibration points -18°C, 0°C, +60°C	0520 0401

Probes see page 44/45

Air probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Robust air probe, T/C Type K		-60 to +400 °C	Class 2*	25 s	0602 1793
Immers./penetr. probes					
Efficient and fast-action immersion probe, waterproof, TC Type K		-60 to +1000 °C	Class 1*	2 s	0602 0593
Fast-action, waterproof immersion/penetration probe, TC Type K		-60 to +800 °C	Class 1*	3 s	0602 2693
Immersion tip, flexible, TC Type K		-200 to +1000 °C	Class 1*	5 s	0602 5792
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters)		-200 to +1300 °C	Class 1*	4 s	0602 5693
Immersion tip, flexible, TC Type K		-200 to +40 °C	Class 3*	5 s	0602 5793
Waterproof immersion/penetration probe, TC Type K		-60 to +400 °C	Class 2*	7 s	0602 1293
Flexible, sharpened immersion measurement tip, ideal for immersion measurements in small volumes, such as test tubes, TC Type K			Class 1*		0602 2193
Surface probes					
Fast-reaction paddle surface probe, for measurements in inaccessible places, e.g. narrow apertures and slots, TC Type K		0 to +300 °C	Class 2*	5 s	0602 0193
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500 °C, TC Type K		-60 to +300 °C	Class 2*	3 s	0602 0393
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K		-60 to +400 °C	Class 2*	30 s	0602 1993
Fast-action surface probe with sprung thermocouple strip, bent, also for uneven surfaces, measurement range short-term to +500 °C, TC Type K		-60 to +300 °C	Class 2*	3 s	0602 0993
Efficient, waterproof surface probe with small measurement head for flat surfaces, TC Type K		-60 to +1000 °C	Class 1*	20 s	0602 0693
Flat head surface probe with telescopic handle max. 600 mm for measurements at hard-to-access points, TC Type K		-50 to +250 °C	Class 2*	3 s	0602 2394
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K		-50 to +170 °C	Class 2*		0602 4792
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K		-50 to +400 °C	Class 2*		0602 4892
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter up to max. 120 mm, Tmax +120 °C, TC Type K		-50 to +120 °C	Class 1*	90 s	0628 0020
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term to +280 °C, TC Type K		-60 to +130 °C	Class 2*	5 s	0602 4592
Spare meas. head for pipe wrap probe, TC Type K		-60 to +130 °C	Class 2*	5 s	0602 0092
Clamp probe for measurements on pipes, pipe diameter 15 to 25 mm (max. 1"), meas. range short-term up to +130 °C, TC Type K		-50 to +100 °C	Class 2*	5 s	0602 4692

*According to norm EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K)

testo 830-T2/-T3/-T4 • testo 845
Probes

Food probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Waterproof food probe made of stainless steel (IP65), TC Type K	<p>125 mm 30 mm Ø 4 mm Ø 3.2 mm</p> <p>Conn.: Fixed cable</p>	-60 to +400 °C	Class 2*	7 s	0602 2292
Robust food probe with special handle, IP 65, reinforced cable (PUR), T/C Type K	<p>115 mm Ø 5 mm 30 mm Ø 3.5 mm</p> <p>Conn.: Fixed cable</p>	-60 to +400 °C	Class 1*	6 s	0602 2492
Frozen food probe, corkscrew design, T/C Type K	<p>110 mm Ø 8 mm 30 mm Ø 4 mm</p> <p>Conn.: Plug-in cable</p>	-60 to +400 °C	Class 1*	15 s	0602 3292
Waterproof robust immersion/penetration probe with metal protection hose Tmax +230°C, e.g. for monitoring temp. in cooking oil, T/C Type K	<p>240 mm Ø 4 mm</p> <p>Conn.: Fixed cable</p>	-50 to +230 °C	Class 1*	15 s	0628 1292

Thermocouples	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Thermocouple with TC adapter, flexible, 800mm long, fibre glass, TC Type K	<p>800 mm Ø 1.5 mm</p>	-50 to +400 °C	Class 2*	5 s	0602 0644
Thermocouple with TC adapter, flexible, 1500mm long, fibre glass, TC Type K	<p>1500 mm Ø 1.5 mm</p>	-50 to +400 °C	Class 2*	5 s	0602 0645
Thermocouple with TC adapter, flexible, 1500mm long, Teflon, TC Type K	<p>1500 mm Ø 1.5 mm</p>	-50 to +250 °C	Class 2*	5 s	0602 0646

*According to norm EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K)