

## Highly precise alarm and logger thermometer - with measurement location management

### testo 735

#### Measuring several temperatures simultaneously

testo 735 – the highly versatile multi-channel measuring instrument. Fully equipped, up to 6 temperature probes can be recorded and displayed: Three radio probes and three attachable probes. For classical probes with wire, two inputs for fast thermoelement probes (Type K/T/J/S) and one input for highly precise Pt100 probes are available. The highly precise immersion/penetration probe reaches an accuracy of up to 0.05 °C via the Pt100 probe input. The resolution of the probe is 0.001 °C.

#### Versatility through radio probes

Readings can be transmitted to the testo 735 over a distance of up to 20 m (without obstruction) by radio. This takes place using the optional radio module and the corresponding probes. Damage to the wire or hindrances in usage are thus eliminated.

#### More user comfort

The testo 735 excels through its logical use and easy-to-follow menu. Functions such as timed and multi-point mean value calculation, differential temperature measurement, display of min/max values and the freezing of readings in the display provide support in day-to-day measurement.



Wireless measurement with radio probes for air, immersion and penetration measurement



Evaluate and document readings by measurement location with PC software (included with testo 735-2)



Displays measurement location and parameter. Up to 99 product descriptions can be stored in the instrument (testo 735-2)



Print readings on site on testo printer



### Common advantages

- Connection of 3 attachable probes and three radio probes
- Data printout on the testo printer
- Audible alarm when limit values are exceeded
- System accuracy up to 0.05 °C
- Display of Delta T, min., max. and mean values
- Backlit display
- Protection class IP 65
- Instrument store for 10,000 readings
- PC software for archiving and documenting measurement data
- Measurement values can be shown in the display and simultaneously transferred to a PC and stored
- Storage of single measurements or measurement series by measurement location
- Quick access to the most important functions via user profiles
- Adjustment software for convenient calibration data management

### Further advantages testo 735-1

- Cyclical printing of readings on testo printer, e.g. once a minute

### Further advantages testo 735-2



PC software for archiving and documenting readings (included in delivery) testo 735-2

Monitoring temperature in a walk-in freezer

#### testo 735-1

testo 735-1, 3 channel temperature measuring instrument T/C Type K/T/J/S/Pt100, audible alarm, connection for max. 3 optional radio probes, incl. battery and calibration protocol

Part no. 0560 7351

#### testo 735-2

testo 735-2, 3 channel temp. meas. instr. T/C Type K/T/J/S/Pt100, audible alarm, connection for max. 3 optional radio probes, with readings memory, PC software and USB data transmission cable, with battery and calibration protocol

Part no. 0563 7352

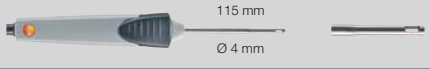
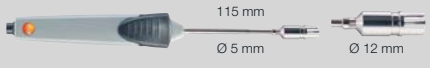
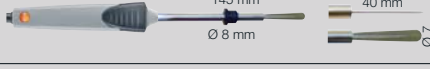
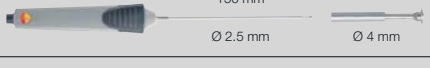


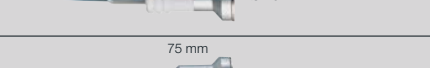

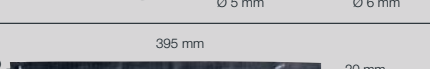
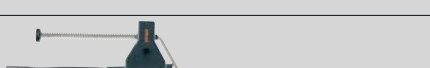

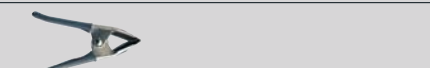
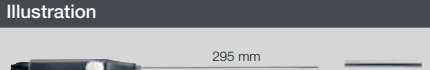
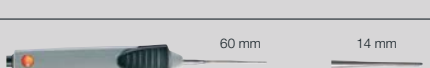
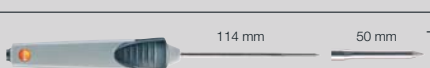
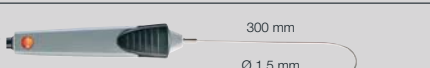
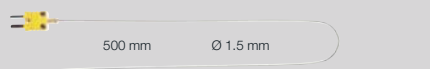
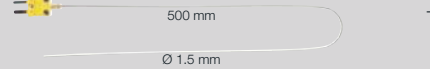
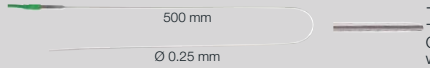
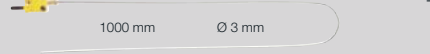

Additional accessories	Part no.
Software for adjustment testo 735-2 with user management, incl. USB data transfer cable	0554 0823
Plug-in mains adapter, 5 VDC 500 mA with European adapter, 100-250 VAC, 50-60 Hz	0554 0447
Extension cable, 5m, for thermocouple probe Type K	0554 0592
Silicone heat paste (14g), Tmax = +260°C, improves heat transfer in surface probes	0554 0004
Handle for attachable measurement tips	0409 1092
Transport and Protection	Part no.
Service case for basic equipment of measuring instrument and probes, dimensions: 400 x 310 x 96 mm	0516 0035
Service case for measuring instrument, probe and accessories, dimensions 520 x 380 x 120 mm	0516 0735
Calibration Certificates	Part no.
ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +60°C	0520 0072
ISO calibration certificate/temperature, single point calibration for surface thermometer; calibration point +120°C	0520 0073
ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate/temperature, for air/immersion probes, calibration points -8°C; 0°C; +40°C	0520 0181
ISO calibration certificate/temperature, Meas. instr. with air/immersion probe; cal. points 0°C; +150°C; +300°C (Applies only to immersion/penetration probe 0602 2693)	0520 0021

Printer and Accessories	Part no.
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries	0554 0549
Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years	0554 0568
Spare thermal paper for printer (6 rolls)	0554 0569
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

#### Technical data

Probe type	Pt100	Pt100 with probe 0614 0235	Type K (NiCr-Ni)	Type T (Cu-CuNi)	Type J (Fe-CuNi)	Type S (Pt10Rh-Pt)	
Meas. range	-200 to +800 °C	-40 to +300 °C	-200 to +1370 °C	-200 to +400 °C	-200 to +1000 °C	0 to +1760 °C	
Accuracy ±1 digit	±0.2 °C (-100 to +199.9 °C) ±0.2% of mv (remaining range)	See probe data	±0.3 °C (-60 to +60 °C) ±(0.2 °C + 0.3% of mv) (remaining range)	±0.3 °C (-60 to +60 °C) ±(0.2 °C + 0.3% of mv) (remaining range)	±0.3 °C (-60 to +60 °C) ±(0.2 °C + 0.3% of mv) (remaining range)	±1 °C (0 to +1760 °C)	
Resolution	0.05 °C	0.001 °C (-40 to +199.999 °C) 0.01 °C (remaining range)	0.1 °C	0.1 °C	0.1 °C	1 °C	
Oper. temp.	-20 to +50 °C	Battery type	Alkali manganese, mignon, Type AA	Battery life	Approx. 300 h with TC probe Approx. 250 h with Pt100 Approx. 60 h with 0614 0235	Dimensions	220 x 74 x 46 mm
Storage temp.	-30 to +70 °C					Protection class	IP65
						Weight	428 g

## Suitable probes at a glance

Air probes	Illustration	Meas. range	Accuracy	t <sub>99</sub>	Part no.
Robust air probe, T/C Type K		-60 to +400 °C	Class 2	25 s	0602 1793
Surface probes	Illustration	Meas. range	Accuracy	t <sub>99</sub>	Part no.
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
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
Efficient, waterproof surface probe with small measurement head for flat surfaces, TC Type K		-60 to +1000 °C	Class 1	20 s	0602 0693
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
Flat head surface probe with telescopic handle max. 680 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
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K		-60 to +400 °C	Class 2	30 s	0602 1993
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter up to max. 120 mm, T <sub>max</sub> +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
Immersion/penetr. probes	Illustration	Meas. range	Accuracy	t <sub>99</sub>	Part no.
Highly accurate Pt100 immersion/penetration probe incl. factory certificate (test points 0 °C and +156 °C)		-40 to +300 °C	±0.05 °C (+0.01 to +100 °C) ±(0.05 °C +0.05% of mv) (remaining range)	60 s	0614 0235
Fast-action, waterproof immersion/penetration probe, TC Type K (Calibration not possible over +300 °C)		-60 to +800 °C	Class 1	3 s	0602 2693
Waterproof immersion/penetration probe, TC Type K		-60 to +400 °C	Class 2	7 s	0602 1293
Efficient and fast-action immersion probe, waterproof, TC Type K		-60 to +1000 °C	Class 1	2 s	0602 0593
Immersion tip, flexible, TC Type K		-200 to +1000 °C	Class 1	5 s	0602 5792
Immersion tip, flexible, TC Type K		-200 to +40 °C	Class 3	5 s	0602 5793
Flexible, low-mass immersion measurement tip, ideal for measurements in small volumes such as petri dishes, or for surface measurements (e.g. attached with adhesive tape), TC Type K		-200 to +1000 °C	Class 1	1 s	0602 0493
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K		-200 to +1300 °C	Class 1	4 s	0602 5693


## Suitable probes at a glance / Option: Radio

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


### Radio module for upgrading measuring instrument with radio option

Country versions	Radio freq.	Part no.
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0188
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	915.00 MHz FSK	0554 0190

### Assembled for you: Radio handles with probe head


Radio handles with probe head for air-/ immersion-penetration-meas.	Meas. range	Accuracy	Resolution	t <sub>99</sub>	
<b>Radio handle for attachable probe heads with T/C probe head for air and immersion/penetration measurement</b>		-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C + 0.3% of mv) (-40 to +500 °C) ±(0.7 °C + 0.5% of mv) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t <sub>99</sub> (in water) 10 s

Country versions	Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0189
T/C probe head for air/immersion/penetration measurement, attachable to radio handle, T/C Type K		0602 0293
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL	915.00 MHz FSK	0554 0191
T/C probe head for air/immersion/penetration measurement, attachable to radio handle, T/C Type K		0602 0293

Radio handles with probe head for surface measurement	Meas. range	Accuracy	Resolution	t <sub>99</sub>	
<b>Radio handle for attachable probe heads with T/C probe head for surface measurement</b>		-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C + 0.3% of mv) (-40 to +500 °C) ±(0.7 °C + 0.5% of mv) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s

Country versions	Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0189
T/C probe head for surface measurement, attachable to radio handle, T/C Type K		0602 0394
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL	915.00 MHz FSK	0554 0191
T/C probe head for surface measurement, attachable to radio handle, T/C Type K		0602 0394

### Radio handles, separate

Radio handles for attachable T/C probes	Meas. range	Accuracy	Resolution
<b>Radio handle for attachable probe heads incl. adapter for attaching T/C probes (Type K)</b>		-50 to +1000 °C	±(0.7 °C + 0.3% of mv) (-40 to +900 °C) ±(0.9 °C + 0.5% of mv) (remaining range)

Country versions	Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0189
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL	915.00 MHz FSK	0554 0191

### Radio probes: General technical data

	Radio immersion/penetration probe,	Radio handle	Measuring rate	Radio coverage	Radio transmission	Unidirectional
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries	0.5 s or 10 s, adjustable on handle	Up to 20 m (without obstructions)	Oper. temp.	-20 to +50 °C
Battery life	150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)			Storage temp.	-40 to +70 °C
					Protection class	IP54