



testo 735

Advanced Multi-Channel Temperature Measuring Instrument

Highly accurate, precision thermometer with optional analysis software

NEW!

°C



Simultaneous multi-channel temperature measurement



The testo 735 is a highly versatile multi-channel temperature measuring instrument. The instrument has the capability to register and display up to 6 temperature probes: 3 wireless probes, 2 fast thermocouple probes (Type K / T) and one high precision PT100 probe.

temperature values can be calculated. The display of minimum or maximum values is possible for all temperature channels.

The testo 735 has a large measuring range - from -200 to +1350 °C (dependent on probe used). Two freely selectable temperature values are shown in the easy to read backlit display. The differential temperature between any

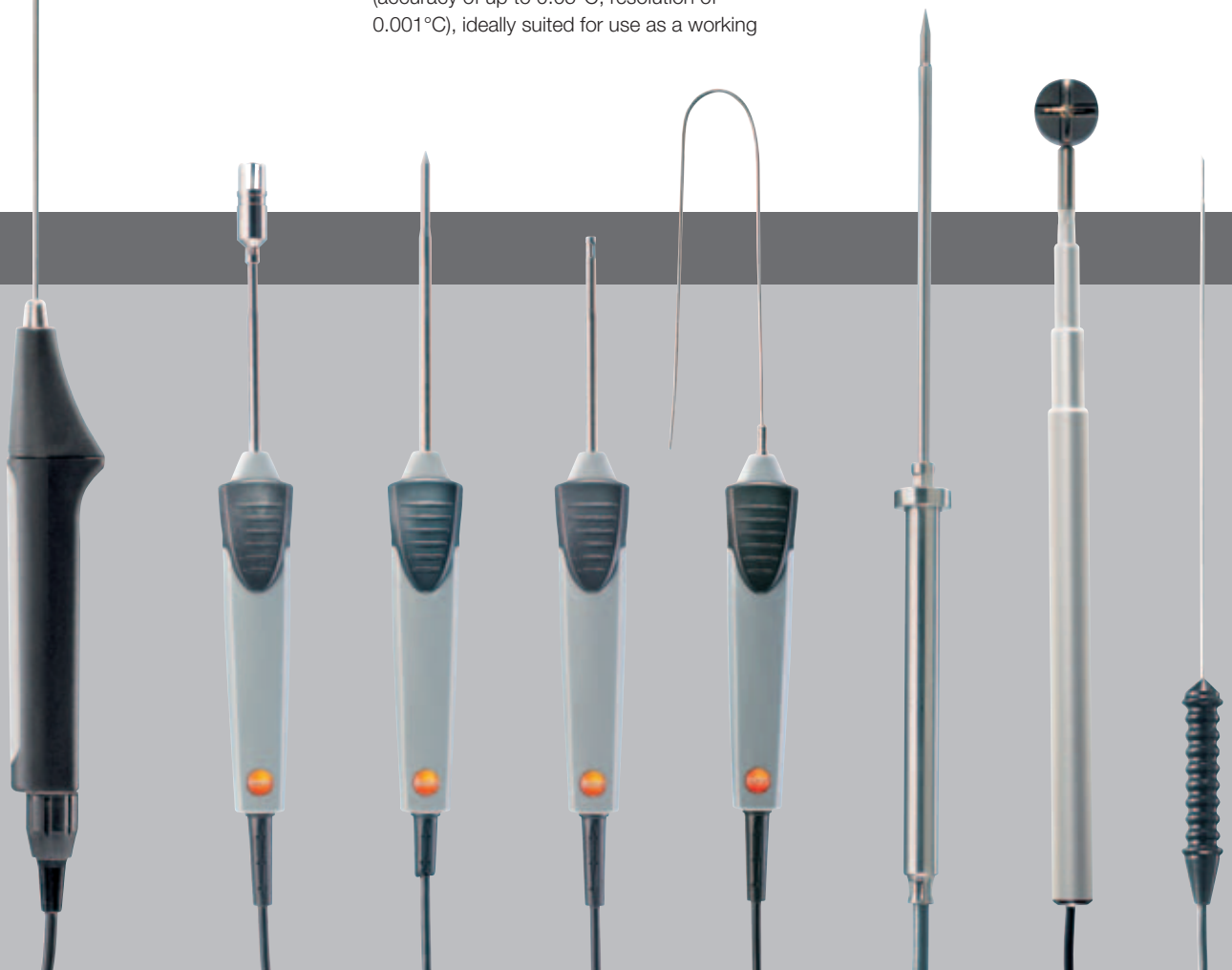
The right probe for every application

In order to meet a wide spectrum of measuring requirements, Testo provides a large range of professional probes for the testo 720 thermometer.

standard in quality assurance, laboratories and calibration services.

The range includes a choice of Pt100 and thermocouple (Type K / T) probes for immersion, surface and air measurements. Testo thermocouple probes offer users rapid measurements and a wide measuring range. As part of the PT100 probe range we offer a high accuracy Pt100 immersion/penetration probe (accuracy of up to 0.05°C, resolution of 0.001°C), ideally suited for use as a working

For accurate surface measurements we offer a choice of probes with a cross-band measuring head with a sprung thermocouple band which adapts to different surfaces. The crossband assumes the actual temperature of the object to be measured in a few seconds.



Exceptional practicality with wireless probes

As well as cable connected probes, the Testo 735 can also be used with a range of wireless probes. Wireless probes offer users exceptional practicality as hindrance during measurement and potential damage to the probe cable are eliminated.

To convert the instrument for use with the wireless probes an optional wireless module is required. This module can be used with either a radio probe with fixed immersion/penetration point or a highly versatility universal wireless handle with exchangeable surface or immersion / penetration probe heads. In addition, the universal wireless handle comes with an adapter for temperature probes with thermocouple plugs. Any thermocouple probe (Type K) with a TC plug can therefore be attached to the universal radio handle and used for wireless measurement.





Designed for ease of use

The testo 735 is designed for ease of use. The easy to follow menus allow users to take key measurements including time and point mean calculation, differential temperature measurement, max/min value display and the fixing of measurement values.

The testo 735-2 offers 3 User Profiles (Standard, Route and Longterm) which can be tailored to suit specific applications. For example, using the Route function, users can easily select measurement locations and the Longterm function provides direct access to the number of measurements and the measurement rate.

Robust design for durability

The testo 735 is a robust and reliable measuring instrument with the protection class IP 54. The testo 735 has been designed to provide an instrument that is both easy to use and of strong construction. For example, the housing material offers built-in protection against knocks and jars and the large illuminated display is set back in the housing to offer protection. To assist everyday use the instrument features a carrying strap and magnets on the back panel for attachment at the measuring location.



Assurance through reliable documentation

The testo 735 offers users 2 convenient documentation options; print out on-site or analysis and documentation on a PC.

The testo printer offers a convenient and easy to use option for on-site documentation. The testo 735 transmits the data to the printer wirelessly via an infrared interface. Date, time and measured data are all documented on the print-out.

The two testo 735 models offer differing functionality for the documentation of measurement series. The testo 735-1 offers the option to print measurement data to the

Testo printer at regular intervals (from 1 minute to 24 hours). In this way measurement series can be documented on paper without the need to store the data.

The testo 735-2 offers users the option to store both single measurements and measurement series (up to 10,000 measurement values). Data can then be analysed and documented on PC in either tables or graphs, using Testo's ComSoft software.

testo 735

Common features

- Connection of 3 attachable probes and 3 radio probes
- Data printing on testo report printer
- Audible alarm when limit values are exceeded
- System accuracy up to 0.05 °C
- Display of Delta T, min/max and mean values
- Easy to read backlit display
- Protection type IP 54

testo 735-1

Features

Cycle printing of readings on testo report printer, e.g. once per minute

testo 735-1 Part no. 0560 7351

testo 735-2





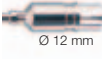

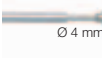
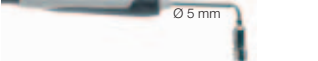


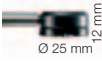

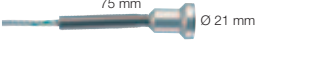


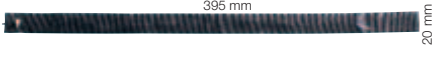

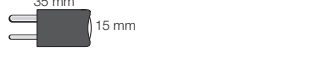


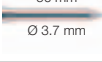





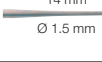
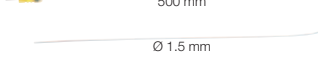

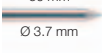
Features

- Instrument store for 10,000 readings
- PC-Software for filling and documenting measurement data
- Storage of single measurements or measurement series by location
- Quick access to the most important functions via user profiles








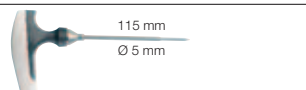
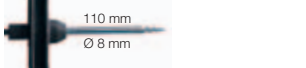

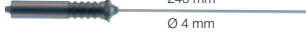
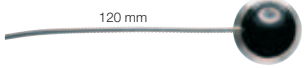
testo 735-2 Part no. 0563 7352



Probes

Laboratory probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.	
Laboratory probe, glass-coated, exchangeable glass pipe, resistant to corrosive substances	 200 mm Ø 6 mm	30 mm Ø 5 mm	-50 to +400 °C	Class A	45 s 12 s*	0609 7072 * Without protective glass
Glass shaft for immersion/penetration probe to protect from corrosive agents 0554 7072						
Surface probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.	
Robust, waterproof surface temperature probe, Pt100	 114 mm Ø 5 mm	 Ø 9 mm	-50 to +400 °C	Class B	40 s	0609 1973
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, T/C Type K	 115 mm Ø 5 mm	 Ø 12 mm	-60 to +300 °C	Class 2	3 s	0602 0393
Efficient, waterproof surface probe with small measurement head for flat surfaces, T/C Type K	 150 mm Ø 2.5 mm	 Ø 4 mm	-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, T/C Type K	 80 mm Ø 5 mm	 Ø 12 mm	-60 to +300 °C	Class 2	3 s	0602 0993
Flat head surface probe with telescopic handle max. 600 mm for measurements at hard-to-access points, T/C Type K	 660 mm	 Ø 25 mm 12 mm	-50 to +250 °C	Class 2	3 s	0602 2394
Magnetic probe, adhesive force approx. 20 N, for measurements on metal surfaces	 35 mm Ø 20 mm		-50 to +170 °C	Class 2		0602 4792
Magnetic probe, adhesive force approx. 20 N, for measurements on high temperature metal surfaces	 75 mm Ø 21 mm		-50 to +400 °C	Class 2		0602 4892
Waterproof surface probe with widened measurement tip for flat surfaces, T/C Type K	 115 mm Ø 5 mm	 Ø 6 mm	-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, Tmax +120°C	 395 mm 20 mm		-50 to +120 °C	Class 1	90 s	0628 0020
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Measurement range short-term to +280°C, T/C Type K	 35 mm 15 mm		-60 to +130 °C	Class 2	5 s	0602 4592
Spare measuring head for pipe wrap probe			-60 to +130 °C	Class 2	5 s	0602 0092
Clamp probe for measurements on pipes, pipe diameter 15 to 25 mm (max. 1"), measuring range short-term up to +130°C			-50 to +100 °C	Class 2	5 s	0602 4692
Immersion/penetration probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.	
Robust, waterproof Pt100 immersion/penetration probe	 114 mm Ø 5 mm	 50 mm Ø 3.7 mm	-50 to +400 °C	Class A	12 s	0609 1273
Highly accurate Pt100 immersion/penetration probe with certificate	 295 mm Ø 4 mm		-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
Efficient and fast-action immersion probe, waterproof, T/C Type K	 300 mm Ø 1.5 mm		-60 to +1000 °C	Class 1	2 s	0602 0593
Super-quick, waterproof immersion/penetration probe, T/C Type K	 60 mm Ø 5 mm	 14 mm Ø 1.5 mm	-60 to +800 °C	Class 1	3 s	0602 2693
Immersion tip, flexible	 500 mm Ø 1.5 mm		-200 to +1000 °C	Class 1	5 s	0602 5792
Waterproof immersion/penetration probe, T/C Type K	 114 mm Ø 5 mm	 50 mm Ø 3.7 mm	-60 to +400 °C	Class 2	7 s	0602 1293

Probes

Air probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Robust air probe, T/C Type K	 115 mm Ø 4 mm	-60 to +400 °C	Class 2	25 s	0602 1793
Efficient, robust air probe, Pt100	 114 mm Ø 4 mm	-50 to +400 °C	Class A	70 s	0609 1773
Thermocouples	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Thermocouple with T/C adapter, flexible, 800mm long, fibre glass, T/C Type K	 800 mm Ø 1.5 mm	-50 to +400 °C	Class 2	5 s	0602 0644
Thermocouple with T/C adapter, flexible, 1500mm long, fibre glass, T/C Type K	 1500 mm Ø 1.5 mm	-50 to +400 °C	Class 2	5 s	0602 0645
Thermocouple with T/C adapter, flexible, 1500mm long, Teflon, T/C Type K	 1500 mm Ø 1.5 mm	-50 to +250 °C	Class 2	5 s	0602 0646
Food probes	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Robust, Pt100 stainless steel food probe (IP65)	 125 mm Ø 4 mm 15 mm Ø 3 mm	-50 to +400 °C	Class A	10 s	0609 2272
Waterproof food probe made of stainless steel (IP65), T/C Type K	 125 mm Ø 4 mm 30 mm Ø 3.2 mm	-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	 115 mm Ø 5 mm 30 mm Ø 3.5 mm	-60 to +400 °C	Class 1	6 s	0602 2492
Frozen food probe, corkscrew design, T/C Type K	 110 mm Ø 8 mm 30 mm Ø 4 mm	-60 to +400 °C	Class 1	15 s	0602 3292
Waterproof super-fast needle probe, highly accurate measurements without visible penetration hole. Specially for food, ideal for hamburgers, steaks, pizza, eggs etc., T/C Type K	 150 mm Ø 1.4 mm 15 mm Ø 1 mm	-60 to +250 °C	Class 1	1 s	0628 0026
Waterproof robust immersion/penetration probe with metal protection hose Tmax +230°C, e.g. for monitoring temp. in cooking oil, T/C Type K	 240 mm Ø 4 mm	-50 to +230 °C	Class 1	15 s	0628 1292
Stable, robust surface probe with PTFE standing area and metal protection hose Tmax +230°C for cooking surfaces, heating and baking trays, T/C Type K	 120 mm Ø 60 mm	-50 to +230 °C	Class 2	45 s	0628 9992

Technical data testo 735


Probe type	Pt100	Pt100 with probe 0614 0235	Type K	Oper. temp.	-20 to +50 °C
Meas. range	-200 to +800 °C	-40 to +300 °C	-200 to +1370 °C	Storage temp.	-30 to +70 °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) ±0.5% of mv (remaining range)	Battery type	Alkali manganese, mignon, Type AA
Resolution	0.05 °C	0.001 °C (-40 to +199.999 °C) 0.01 °C (remaining range)	0.1 °C	Dimensions	220 x 74 x 46 mm
				Weight	428 g
				Material/Housing	ABS/TPE/Metal
				Warranty	2 years
				Battery life: 200h	

Wireless Probes


Upgrade module for wireless option


	Radio freq.	Part no.
Wireless module for measuring instrument	869.85 MHz	0554 0188

Wireless probe for immersion/penetration measurements


	Meas. range	Accuracy	Resolution	t ₉₉	Radio freq.	Part no.
Wireless immersion/penetration probe, NTC 	-50 to +275 °C	±0.5 °C (-20 to +80 °C) ±0.8 °C (-50 to -20.1 °C) ±0.8 °C (+80.1 to +200 °C) ±1.5 °C (remaining range)	0.1 °C	t ₉₉ (in water) 12 s	869.85 MHz	0613 1001 0394
	76 mm 29 mm Ø 5 mm Ø 3.4 mm					
Wireless immersion/penetration probe, NTC					869.85 MHz	0613 1001 0394

Wireless handle with probe head

	Meas. range	Accuracy	Resolution	t ₉₉	Radio freq.	Part no.
Wireless handle for attachable probe heads with T/C probe head for air and immersion/penetration measurement 	-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 ₉₉ (in water) 10 s	869.85 MHz	0554 0189 0602 0293
	120 mm 30 mm Ø 5 mm Ø 3.4 mm					
Wireless handle for plug-in probe heads (including T/C adaptor) T/C probe head for air/immersion/penetration temperature measurement (attachable to wireless handle), T/C Type K					869.85 MHz	0554 0189 0602 0293

	Meas. range	Accuracy	Resolution	t ₉₉	Radio freq.	Part no.
Wireless handle for attachable probe heads with T/C probe head for surface measurement 	-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	869.85 MHz	0554 0189 0602 0394
	120 mm 40 mm Ø 5 mm Ø 12 mm					
Wireless handle for plug-in probe heads (including T/C adaptor) T/C probe head for surface temperature measurement (attachable to wireless handle), T/C Type K					869.85 MHz	0554 0189 0602 0394

Wireless handles for attachable T/C probes

	Meas. range	Accuracy	Resolution	Radio freq.	Part no.
Wireless handle for attachable probe heads including adaptor for attaching T/C probes (Type K) 	-50 to +1000 °C	±(0.7 °C +0.3% of mv) (-40 to +900 °C) ±(0.9 °C +0.5% of mv) (remaining range)	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	869.85 MHz	0554 0189
Wireless handle for plug-in probe heads (including T/C adaptor)				869.85 MHz	0554 0189

Wireless probes: General technical data

	Wireless immersion/penetration probe, NTC	Wireless handle	Measuring rate	Radio transmission
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries	0.5 s or 10 s, adjustable on handle	Unidirectional
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)	Radio coverage	Oper. temp. -20 to +50 °C Storage temp. -40 to +70 °C
			Up to 20 m (without obstruction)	

Ordering data

Measuring instrument	Part no.	Calibration Certificates	Part no.
testo 735-1, 3 channel temperature measuring instrument T/C Type K/Pt100, audible alarm, connection for max. 3 optional radio probes, incl. battery and calibration protocol	0560 7351	ISO calibration certificate / Temperature. For air / immersion probes, calibration points -18, 0, +60°C	300520 0042
testo 735-2, 3 channel temp. meas. instr. T/C Type K/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	0563 7352	ISO calibration certificate / Temperature. For air / immersion probes, calibration points 0, +50, +100°C	300520 0082
		ISO calibration certificate / Temperature. For surface probes, calibration points +60, +120, +180°C	300520 0038
		UKAS calibration certificate / Temperature. For air probes, calibration points 0, +50°C	300520 0218
		UKAS calibration certificate / Temperature. For immersion probes, calibration points 0, +50, +100°C	3005200214
		Alternative points available on request.	Please call for further information.
Accessories for measuring instrument	Part no.		
External recharger incl. 4 Ni-MH rechargeable batteries with built-in, international mains adapter - 100-240 V, 300 mA, 50/60 Hz, 12 VA/instrument	0554 0610		
Plug-in mains adapter for testo 735, testo 635, testo 435, 5 VDC 500 mA with European adapter	0554 0447		
Service case for basic equipment of measuring instrument and probes, dimensions: 400 x 310 x 96 mm	0516 0035		
Service case for measuring instrument, probes and accessories dimensions: 490 x 420 x 110 mm	0516 0235		
Printer and accessories	Part no.		
Testo printer with wireless IRDA and infrared interface, 1 roll of thermal paper and 4 round cell batteries	0554 0547		
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		
Additional accessories	Part no.		
Probe holder for connection to stand	0554 0735		
Handle for attachable measurement tips, For measurement tip 0602 5792, thermocouples 0602 0644, 0602 0645, 0602 0646	0409 1092		
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		

Applications

Simultaneous measurement of several temperatures, e.g. in a refrigeration system

The testo 735 has the capability to display measurement values from up to 6 temperature probes; 3 wireless probes and 3 attachable probes.

Measured values can then be documented either on location via the Testo printer or on a PC using Testo's ComSoft software.



Fast temperature measurement on surfaces with cross-band probes

Our specially designed fast-action surface probe with sprung thermocouple strip enables rapid measurements of surface temperature. The probe is suitable for measurements on both flat and uneven surfaces.



Highly precise temperature measurement with an accuracy of up to 0.05 °C

When used with our high accuracy Pt100 probe, the testo 735 offers accuracy of up to 0.05°C and a resolution of 0.001°C. The testo 735 is therefore suitable for use as a working standard in quality assurance, laboratories and calibrating services.



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