



testo 635

# Compact Pro Series

The working standard for temperature and humidity measurements

**NEW!**



%RH

°F

°F td

"H<sub>2</sub>O

## Reliable long-term humidity measurement

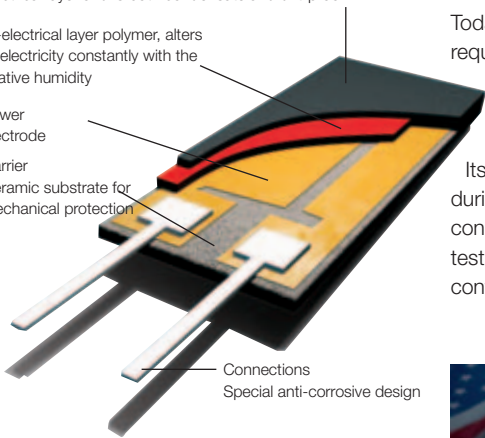
Upper electrode allows moisture to penetrate through to the di-electrical layer and is both condensate and dirt-proof

Di-electrical layer polymer, alters di-electricity constantly with the relative humidity

Lower electrode

Carrier  
Ceramic substrate for mechanical protection

Connections  
Special anti-corrosive design



Today's professional humidity measurements require a reliable and precise humidity probe.

The internationally patented Testo humidity probe guarantees accurate and reliable longterm measurement results everytime.

Its proven reliability has been demonstrated during many endurance tests under extreme conditions and in international inter-laboratory testing. Trust Testo probes to deliver measuring confidence in the most demanding applications.

With the new testo 635 you can monitor and analyze air humidity, material moisture (basis: equilibrium moisture) and pressure dew-point.

Three precision probes were tested in an extensive inter-laboratory test at the PTB in Berlin, the NIST in the USA, the French National Institute CETIAT, the Italian National Institute IMGC, the English National Institute NPL, the Spanish National Institute INTA, JQA in Japan, KRISS in Korea, NRCCM in Peking and Testo DKD calibrating laboratory. All test results confirmed their accuracy statements and long-term stability.



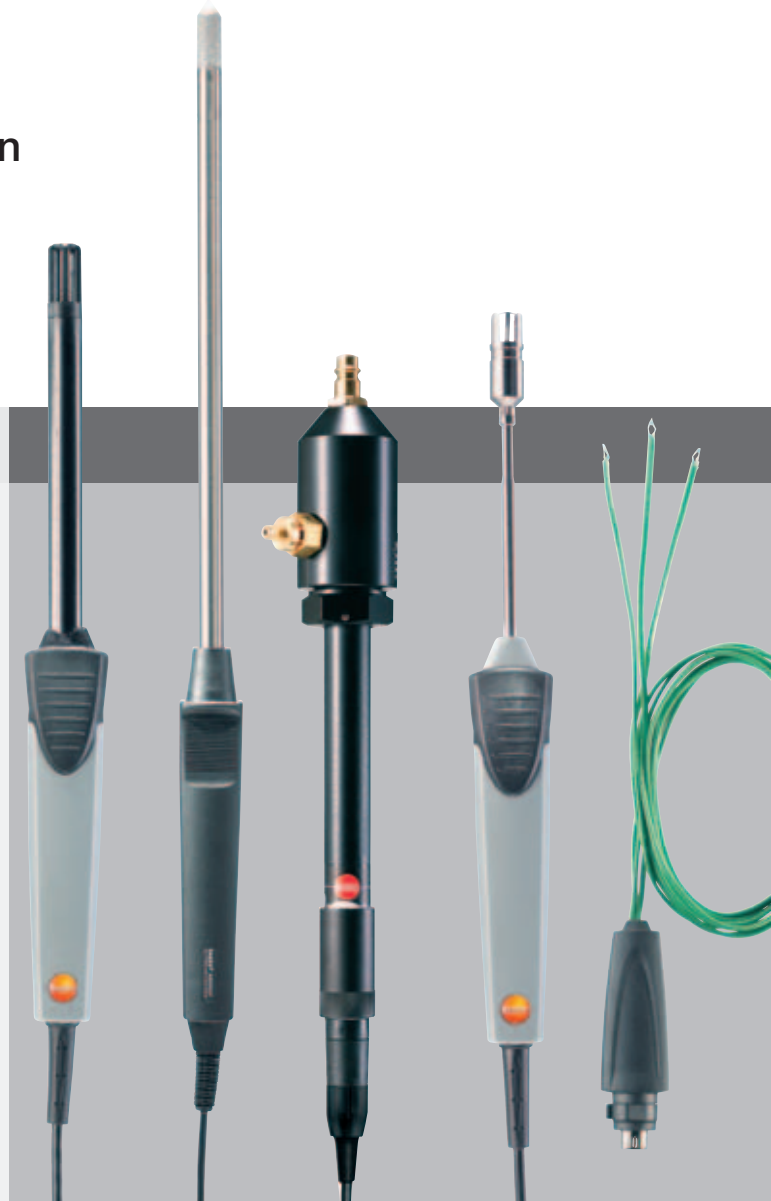
## The right probe for every application

The duct and indoor air temperature range of  $-4\dots+158\text{ }^{\circ}\text{F}$  is monitored with a compact humidity probe. In addition to relative humidity, both air temperature and dew-point are also displayed.

Moisture on ceilings and walls is often the result of building damage or insufficient ventilation. With the help of testo 635, the difference between the wall surface temperature and the calculated dew-point temperature of the room can be determined with the cross-band probe. The actual temperature of the wall surface is displayed in seconds.

The rugged humidity probe is available for measuring equilibrium moisture at higher temperatures up to  $+280\text{ }^{\circ}\text{F}$ . Building moisture as well as material moisture can be displayed by testo 635 on the basis of equilibrium moisture. Ten material characteristics curves are programmed in the testo 635 to help determine equilibrium moisture.

The pressure dew-point probe was developed especially for monitoring humidity in compressed air lines down  $-76\text{ }^{\circ}\text{F tpd}$ . The pressure dew-point is displayed directly on the testo 635 with the pressure dew-point probe.



## Wireless probes offer versatility

Wireless probes offer many advantages over traditional cable or integrated probes. Measurements up to 65 ft. are possible. There is no risk of damaging or tangling wires or cables. With the testo 635, up to three wireless probes can be read and displayed at once for temperature and humidity measurements. The optional, easily installed wireless module can be retrofitted at any time in either 635 model.





## Introducing the testo 635 Series

The remarkable testo 635 instruments offer easy humidity, equilibrium moisture, and pressure dewpoint measurements in seconds. Five probe inputs ensure maximum flexibility: 2 via cable connection and 3 via wireless connection. All are displayed on the large, backlit display for easy viewing including differential and mean values. Three function buttons provide access to advanced instrument features. The optional Testo printer provides wireless infrared printing of all channels for on-site documentation. Timed interval printing (ie. 1x per minute) makes longterm monitoring easy and repeatable. The 635-2 has the added value of large memory to 10,000 values and includes software and computer cable.

### Additional features:

- Record up to 10,000 values
- Analyze data via Testo's Comfort software (included)
- Selectable "User profiles" can be stored by location etc.
- User-defined timed-interval cycles (between 1 sec and 24 hrs.).
- Display the dewpoint difference between ambient air and surfaces, (t635-2)
- Precision pressure probes down to -76°F pressure dewpoint for checking compressed air lines, dryers, etc.

## Rugged enough for everyday use

The 635 is rugged by design and able to stand up to daily measuring tasks. The rubberized housing, offers protection against dirt and impact and will help protect your instrument. The large illuminated display is recessed for better protection.

The 635 is also equipped with a convenient carrying strap plus two powerful magnets in back that allow secure hands free operation.



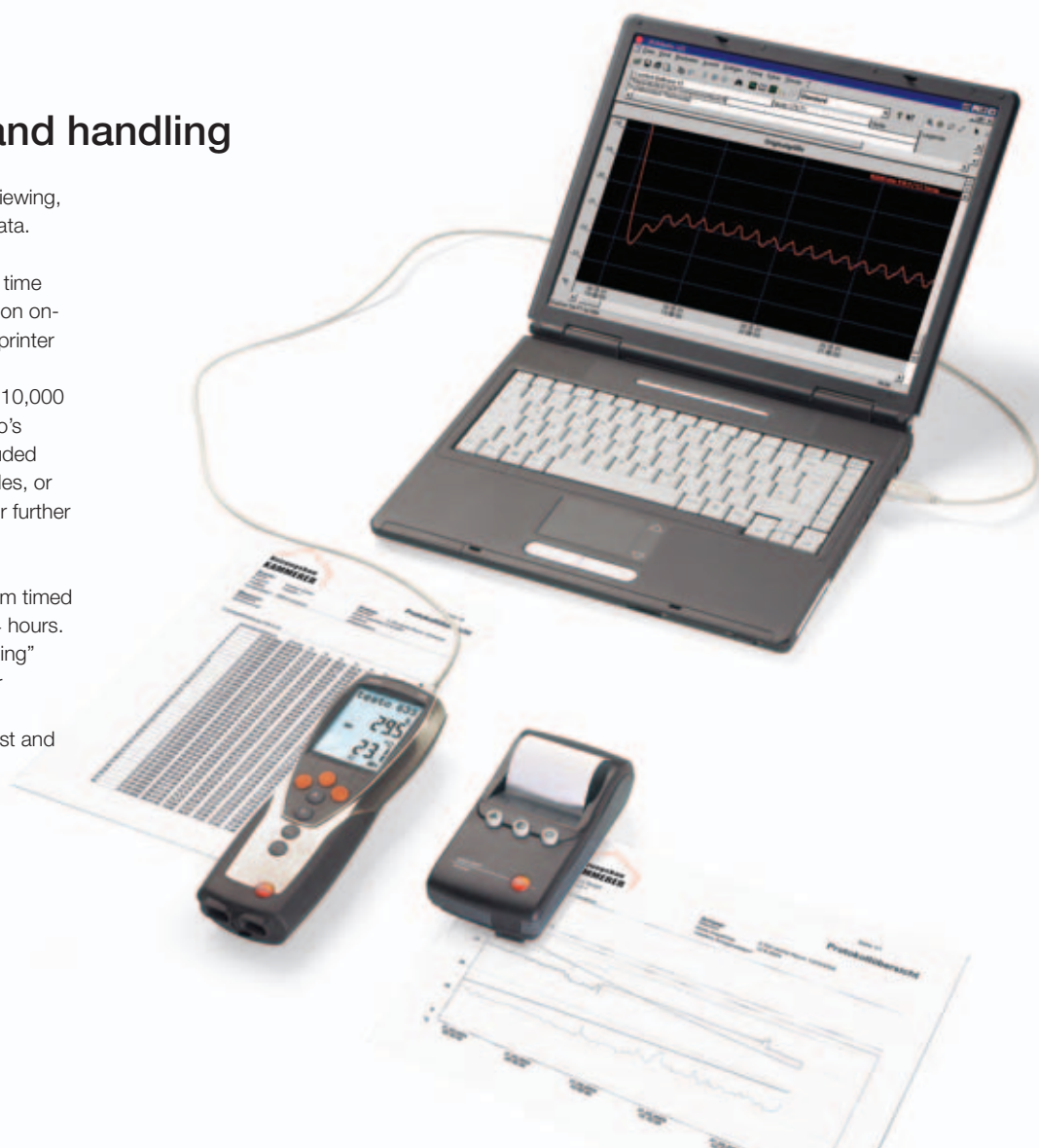
## Superior data communication and handling

The 635 offers several options for viewing, managing, printing and analyzing data.

Simply print out data with date and time for convenient and fast documentation on-site with the optional testo infrared printer

Measure and store from 1 to over 10,000 readings and analyze them via Testo's ComSoft3 Compact Software (included with the 635-2) in graphics and tables, or export the data to a spreadsheet for further analyses at a later time.

In addition the testo 635 can perform timed interval printing from 1 minute to 24 hours. Using its user-specified "Cycle printing" function for long-term monitoring or applications that require repeatable measurements documentation is fast and easy.



### testo 635 Common advantages

- Connection up to 3 wireless probes
- Measurement of air humidity, material equilibrium moisture and pressure dew-point in pressurized air systems
- Display of dew-point distance, min, max and mean values
- Printing of data on the testo report printer
- Backlit display
- Protection type IP 54

### testo 635-1 Advantages

testo 635-1 Part no. 0560 6351




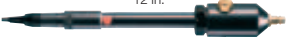





Cyclic printing of readings on testo report printer, e.g. once per minute

### testo 635-2 Advantages

testo 635-2 Part no. 0563 6352

- Instrument store for 10,000 readings
- PC software for archiving and documenting measurement data
- Direct display of material moisture due to storable characteristics curves (Basis: material equilibrium moisture)
- Storage of single measurements or measurement series by measurement location
- Quick access to the most important functions via user profiles

# Probes

Humidity probes	Illustration	Meas. range	Accuracy	Part no.
Humidity/temperature probe		-4 to +160 °F 0 to +100 %RH	±0.5 °F ±2 %RH (+2 to +98 %RH)	0636 9735
Rugged humidity probe for measurements up to +284°F, Ø 0.5, for exhaust ducts and measuring equilibrium moisture		0 to +100 %RH -4 to +257 °F	±2 %RH (+2 to +98 %RH) ±0.4 °F (13 to +122 °F) ±0.9 °F (remaining range)	0636 2161
Thin humidity probe with built-in electronics, incl. 4 attachable Teflon protection caps for material equilibrium humidity measurement		0 to +100 %RH -4 to +160 °F	±2 %RH (+2 to +98 %RH) ±0.4 °F (13 to +122 °F) ±0.9 °F (remaining range)	0636 2135
Pressure dewpoint probes	Illustration	Meas. range	Accuracy	Sec Part no.
Pressure dewpoint probe for measurements in compressed air systems		-22 to +122 °F tpd 0 to +100 %RH	±1.6 °F tpd (+32 to +122 °F tpd) ±1.8 °F tpd (41 to 32 °F tpd) ±4 °F tpd (14 to 23 °F tpd) ±5 °F tpd (-4 to 14 °F tpd) ±7 °F tpd (-22 to -4 °F tpd)	300 s 0636 9835
Precision pressure dewpoint probe for measurements in compressed air systems, including certificate with test point -40°F tpd		-76 to +122 °F tpd 0 to +100 %RH	±1.4 °F tpd (-23 to +122 °F tpd) ±1.8 °F tpd (14 to 23 °F tpd) ±4 °F tpd (-4 to 14 °F tpd) ±5 °F tpd (-22 to -4 °F tpd) ±7.2 °F tpd (-40 to -22 °F tpd)	300 s 0636 9836
Absolute pressure probes	Illustration	Meas. range	Accuracy	Part no.
Absolute pressure probe 800 "H2O		0 to +800 "H2O	±2 "H2O	0638 1835
Air probes	Illustration	Meas. range	Accuracy	Sec Part no.
Rugged air probe, T/C Type K		-76 to +752 °F	Class 2	25 s 0602 1793
Surface probes	Illustration	Meas. range	Accuracy	Sec Part no.
Fast-action surface probe with spring thermocouple for uneven surfaces, short-term range to +923°F, T/C Type K		-76 to +572 °F	Class 2	3 s 0602 0393
Temperature probe to determine U-value, triple sensor system for measuring wall temperature		-4 to +160 °F	Class 1	0614 1635

## Technical data testo 635


Probe type	Type K (NiCr-Ni)	NTC (Humidity probe)	Testo humid. sensor, cap.	Absolute pressure probe	Oper. temp.
Range	-328 to +2498 °F	-40 to +302 °F	0 to +100 %RH	0 to 800 "H2O	-4 to +122 °F
Accuracy ±1 digit	±0.5 °F (-76 to +140 °F) ±0.9% of rdg (remaining range)	±0.4 °F (-13 to +167 °F) ±0.7 °F (-40 to -13 °F) ±0.7 °F (+167 to +212 °F) ±0.9% of rdg (remaining range)			Storage temp. -22 to +160 °F
Resolution	0.1 °F	0.1 °F	0.1 %RH	0.04 "H2O	Battery type Alkaline, Type AA
					Battery life 200 hr
					Dimensions 8.6 x 3 x 1.8 in.
					Weight 15 oz.
					Material/Housing ABS/TPE/Metal
					Warranty 2 years


## Option: Wireless

### Wireless module for upgrading instrument to wireless option


Version	Radio freq.	Part no.
Wireless module for instrument, 915.00 MHz FSK, approved for USA and Canada	915.00 MHz FSK	0554 0190

### Pre-assembled: Wireless handles with probe head

Wireless handles with probe head for surface measurement	Meas. range	Accuracy	Resolution	Sec
<b>Wireless handle for plug-in probe heads with T/C probe head for surface measurement</b>  <p>5 in. 1.5" Ø 0.20" Ø 0.5"</p>	-58 to +662 °F Short-term to +932 °F	Wireless handle: ±(0.9 °F +0.3% of rdg) (-40 to +932 °F) ±(1.3 °F +0.5% of rdg) (remaining range) T/C probe head: Class 2	0.1 °F (-58 to +392 °F) 1.0 °F (remaining range)	5 s
Version	Radio freq.	Part no.		
Wireless handle for plug-in probe heads, incl. T/C adapter, approved for USA and Canada	915.00 MHz FSK	0554 0191		
T/C probe head for surface measurement, attachable to wireless handle, T/C Type K		0602 0394		

Wireless probes incl. humidity probe head	Meas. range	Accuracy	Resolution
<b>Wireless handle for plug-in probe heads with humidity probe</b> 	0 to +100 %RH -4 to 160 °F	±2 %RH (+2 to +98 %RH) ±0.9 °F	0.1 %RH 0.1 °F
Version	Radio freq.	Part no.	
Wireless handle for plug-in probe heads, incl. T/C adapter, approved for USA and Canada	915.00 MHz FSK	0554 0191	
Humidity probe head, attachable to wireless handle		0636 9736	

### Wireless handles, separate

Wireless handles for attachable T/C probes	Meas. range	Accuracy	Resolution
<b>Wireless handle for attachable probe heads incl. adapter for attaching T/C probes (Type K)</b> 	-58 to +1832 °F	±(1.3 °F +0.3% of rdg) (-40 to +1652 °F) ±(1.6 °F +0.5% of rdg) (remaining range)	0.1 °F (-58 to +392 °F) 1.0 °F (remaining range)
Version	Radio freq.	Part no.	
Wireless handle for plug-in probe heads, incl. T/C adapter, approved for USA and Canada	915.00 MHz FSK	0554 0191	

### Radio probes: General technical data

	Wireless immersion/penetration probe, TC	Wireless handle	Measuring rate	Radio transmission
Battery type	2 x 3V button cell (CR 2032)	2 AAA batteries	0.5 s or 10 s, adjustable on handle	Rf Direct
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)		Oper. temp. -4 to +122 °F
			Radio coverage Up to 65 ft. (without obstructions)	Storage temp. -40 to +160 °F



## Ordering information

Instrument	Part no.
testo 635-1, humidity/temperature instrument, with battery and calibration document	0560 6351
testo 635-2, humidity/temperature instrument with memory, PC software and USB cable, incl., battery and calibration document	0563 6352

Accessories	Part no.
External recharger incl. 4 Ni-MH rechargeable batteries with built-in, international power adapter - 100-240 V, 300 mA, 50/60 Hz, 12 VA/instrument	0554 0610
Plug-in power supply for testo 735, testo 635, testo 435, 5 VDC 500 mA with European adapter	0554 0447

Additional accessories	Part no.
Wireless handle for RH probe incl. probe wire, for measurement / calibration	0430 9735
Control and humidity adjustment set 11.3%RH/75.3%RH incl. adapter for humidity probes	0554 0660
Teflon sintered filter, (Ø 0.5 in.), for corrosive substances Longterm high humidity ranges and high velocities	0554 0756
Stainless steel sintered cap, (Ø 0.5 in.), screws onto humidity probe; for high velocity speeds or in "dirty" air	0554 0647
Adapter for humidity probes for surface measurements, (Ø 0.5 in.), i.e. damp walls	0628 0012

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
Extra thermal paper for printer (6 rolls) ...legible up to 10 years	0554 0568

Transport and protection	Part no.
Basic service case for instrument and probes, (16" x 12" x 4")	0516 0035
Deluxe service case for instrument, probes and accessories, (19" x 17" x 4")	0516 0135

Calibration Certificates	Part no.
ISO calibration certificate/Temperature, instr. with surface probe; calibration points +140°F; +250°F; +360°F	0520 0071
ISO calibration certificate/Humidity, Electronic hygrometers; calibration points 11.3%RH and 75.3%RH at +77°F	0520 0006
ISO calibration certificate/Pressure dew point Two adjustment points -14/-40 °F tpd	0520 0136
ISO calibration certificate/Pressure Absolute pressure; accuracy 0.1 to 0.6; 3 measuring points distributed over meas. range (0 to 102 psi)	0520 0185

### Wireless measurement of warehouse conditions

The wireless probe records critical measurements during the storage of products requiring precise air humidity and temperature control.

**TRANSCAT®**  
 35 Vantage Point Drive  
 Rochester, NY 14624  
 1.800.800.5001

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