Modular humidity measurement system, testo 650

The right probe for every application

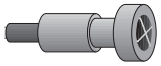
Quick-action immersion/penetration probes
To measure liquids and food

NEW

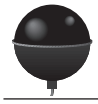
Highly accurate immersion/penetration probes
With a system accuracy of 0.05 °C in the measurement range from 0 to 100 °C and a resolution of up 0.001 °C

Quick-action surface probes
To measure surface temperature

Precision air probe
To measure air temperature



Magnetic probes, adhesive force approx. 10 N
For measurements on metal surfaces



Globe thermometer
To measure radiant heat

Current/voltage cable (± 1 V, ± 10 V, 20 mA)
For example, to check stationary transducers

CO_2 probes
To determine ambient air quality and monitor the workplace

Mechanical rpm probes with plug-in head
To measure rpm

Highly accurate reference humidity/temperature probes
For highest demands on accuracy ±1 %RH

Pressure dew point probes
To measure pressure dew point to - 60 °C tpd in compressed air systems

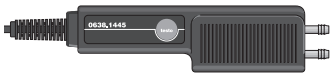
Robust humidity probes
For equilibrium moisture or duct measurements up to 180 °C

Flexible humidity probes with mini module
For measurements on test rigs, for example

Sword probes
For humidity/temperature measurement in stacked goods

Equilibrium probes
To determine equilibrium moisture

aw value set
Pressure-tight precision humidity probes to measure aw value



Differential (100 Pa / 10 hPa / 100 hPa) and absolute pressure probes
To measure pressure

Refrigerant-proof high pressure probes
For maintenance on refrigeration systems/water measurement

Temperature measurement

- The PTB accredited DKD laboratory for temperature guarantees reliable readings
- First PTB accredited DKD laboratory for surface temperature, developed in cooperation with PTB and the University of Ilmenau
- Patented crossband probe for fast surface measurements
- Custom-designed temperature probes for your application
- System accuracy of testo 650 up to 0.05 °C with precision probe 0614 0240

Current and voltage measurement

- Optional connection of external transmitters, such as particle counters and pressure transmitters and scaling of input in instrument

CO and CO_2 measurement

- Long-term stable 2 beam procedure to measure reference and measurement duct for CO_2

rpm measurement

- Mechanical rpm measurement from 20 to 20,000 rpm

Humidity measurement

- The first PTB accredited DKD laboratory for air moisture and dew point temperature guarantees reliable readings
- Worldwide patented (capacitive) Testo humidity sensor
- Inter-laboratory tests in national and international institutes confirm a sensor accuracy of ±1 %RH
- 2 year guaranteed long-term stability of the Testo humidity sensor under normal conditions
- Easy calibration or adjustment of humidity probe (on site) with defined salt solutions (11.3 %RH, 33 %RH and 75.3 %RH)

Pressure measurement

- Very high accuracy in lower measuring range (100 Pa) from +/- (0.3 Pa + 0.5 % of reading)
- Temperature-compensated pressure measurement

Modular humidity measurement system, testo 650

Upgradable
Barcode
Data management
Prints
500,000 readings
Reference measurement

Precision reference class measuring instruments have everything the professional user needs to complete complicated measurement tasks efficiently, accurately and conveniently.

testo 650 includes the basic parameters temperature, CO_2, rpm, current and voltage. It is also possible to measure humidity and pressure using testo 650. testo 650 can be upgraded to the multi-function measuring instrument testo 400.

The measuring instrument can keep up with the measurement tasks at hand thanks to upgrades. Intelligent electronics ensure the latest technology is used thanks to software updates.

Upgradable and teachable, highly reliable and of the highest quality - they are the properties which guarantee that the customer is equipped for the future.

Useful instrument functions:

- All functions of testo 950
- Calculation of all parameters in the Mollier diagram:
- Relative humidity %RH, dew point and pressure dew point (td, tpd)
- Absolute humidity g/m³, psychrometric wet bulb temperature
- Degree of humidity (g/kg), partial pressure in water vapour in mbar/hPa
- Enthalpy kcal/kg
- aw value measurement with trend display
- Barometric air pressure

testo 650

Reference humidity measuring instr., incl. battery, Li cell and cal. protocol
Used for:

- **Humidity, pressure**
- **Temperature**
- **CO_2, rpm and current/voltage**

Part no. 0563 6501