



# Service instrument for ventilation/air conditioning systems

- PC analysis
- 2 probe sockets
- Probes
- 3,000 readings



The testo 445 VAC instrument measures temperature, relative humidity, dew point, absolute humidity, degree of humidity, enthalpy, all types of air velocity (in ducts, duct openings or extractors), volume flow, pressure and indoor air quality.

Data can be saved according to location and then analysed on PC or printed on the Testo printer on site.

- Automatic mean calculation and volume flow measurement
- Automatic allocation of duct cross-section to location (max. 99 locations)
- Internal data logger (3,000 readings)
- Simultaneous measurement of up to 6 parameters



Volume flow measurement using timed and multi-point mean calculation



Monitors indoor air quality with CO2 probe

**testo 445**  
**Set with TopSafe**  
 testo 445, VAC measuring instrument, incl. TopSafe, battery and calibration protocol

Part no. 0563 4450

## Suitable probes at a glance

| Description  | Illustration | Probe type                  | Meas. range                                   | Accuracy                                     | Part no.  |
|--|--------------|-----------------------------|---|--|-----------|
| Vane probe, Ø 12 mm, can be attached to handle or telescopic handle  |              | Vane                        | +0.6... +20 m/s<br>Oper. temp. -30... +140 °C | ±(0.2 m/s ±1% of mv)<br>(+0.6... +20 m/s)    | 0635 9443 |
| Vane/temperature probe, Ø 16 mm, attachable to handle or telescopic handle   |              | Vane<br>Type K (NiCr-Ni)    | +0.4... +60 m/s<br>-30... +140 °C             | ±(0.2 m/s ±1% of mv)<br>(+0.4... +60 m/s)    | 0635 9540 |
| Vane/temperature probe, Ø 25 mm, can be attached to handle or telescopic handle  |              | Vane<br>Type K (NiCr-Ni)    | +0.4... +40 m/s<br>-30... +140 °C             | ±(0.2 m/s ±1% of mv)<br>(+0.4... +40 m/s)    | 0635 9640 |
| Bendable vane probe (can be bent by 90°), Ø 60 mm, attachable to handle or telescopic handle, for measurements on ventilation outlets  |              | Vane                        | +0.25... +20 m/s<br>Oper. temp. 0... +60 °C   | ±(0.1 m/s ±1.5% of mv)<br>(+0.25... +20 m/s) | 0635 9440 |
| Bendable vane probe (can be bent by 90°), Ø 100 mm, attachable to handle or telescopic handle, for measurements on ventilation outlets |              | Vane                        | +0.2... +15 m/s<br>Oper. temp. 0... +60 °C    | ±(0.1 m/s ±1.5% of mv)<br>(+0.2... +15 m/s)  | 0635 9340 |
| Affordable, robust hot bulb probe, Ø 3 mm, for measurements in the lower velocity range, with handle                                   |              | Hot bulb<br>NTC             | 0... +10 m/s<br>-20... +70 °C                 | ±(0.03 m/s ±5% of mv)<br>(0... +10 m/s)      | 0635 1549 |
| Robust hot bulb probe, Ø 3 mm, with handle and telescopic handle for measurements in the lower velocity range                          |              | Hot bulb<br>NTC             | 0... +10 m/s<br>-20... +70 °C                 | ±(0.03 m/s ±5% of mv)<br>(0... +10 m/s)      | 0635 1049 |
| Quick-action hot wire probe, Ø 10 mm, with telescopic handle, for measurements in the lower velocity range with direction recognition  |              | Hot wire<br>NTC             | 0... +20 m/s<br>-20... +70 °C                 | ±(0.03 m/s ±4% of mv)<br>(0... +20 m/s)      | 0635 1041 |
| Vane probe, Ø 16 mm, with telescopic handle, Tmax +60°C  |              | Vane                        | +0.6... +40 m/s                               | ±(0.2 m/s ±1.5% of mv)<br>(+0.6... +40 m/s)  | 0628 0005 |
| Vane probe, Ø 60 mm, with telescopic handle, for integrating velocity measurement  |              | Vane                        | +0.25... +20 m/s                              | ±(0.1 m/s ±1.5% of mv)<br>(+0.25... +20 m/s) | 0635 9449 |
| High temperature vane probe, Ø 25 mm, with handle for continuous measurements up to +350°C   |              | Vane<br>Type K (NiCr-Ni)    | +0.6... +20 m/s<br>-40... +350 °C             | ±(0.3 m/s ±1% of f.v.)<br>(+0.6... +20 m/s)  | 0635 6045 |
| Precision pressure probe, 100 Pa, measures differential pressure and velocities (in connection with Pitot tube)                        |              | Differential pressure probe | 0... +100 Pa                                  | ±(0.3 Pa ±0.5% of mv)<br>(0... +100 Pa)      | 0638 1345 |
| Pressure probe, 10 hPa, measures differential pressure and velocities (in connection with Pitot tube)                                  |              | Differential pressure probe | 0... +10 hPa                                  | ±0.03 hPa (0... +10 hPa)                     | 0638 1445 |

Color calibration bar with units: °C, %RH, td, g/kg, m/s, m³/h, hPa, ppm CO2, ppm CO

## Suitable probes at a glance

| Description   | Illustration | Probe type                                   | Meas. range                                 | Accuracy   | Part no.  |
|---|--------------|--|---|--|-----------|
| Pressure probe, 100 hPa, measures differential pressure and velocities (in connection with Pitot tube)                                      |              | Differential pressure probe                  | 0...+100 hPa                                | ±0.5% of mv (+20...+100 hPa)<br>±0.1 hPa (0...+20 hPa)   | 0638 1545 |
| Pressure probe, 2000 hPa, measures absolute pressure  |              | Absolute pressure probe                      | 0...+2000 hPa                               | ±5 hPa (0...+2000 hPa)   | 0638 1645 |
| Pitot tube, 500 mm long, stainless steel, measures velocity in connection with pressure probes 0638 1345/..1445/..1545                      |              |  | Oper. temp.<br>0...+600 °C                  |  | 0635 2045 |
| Pitot tube, 350 mm long, stainless steel, measures velocity flow in connection with pressure probes 0638 1345/..1445/..1545                 |              |  | Oper. temp.<br>0...+600 °C                  |  | 0635 2145 |
| Pitot tube, 300 mm long, stainless steel, measures velocity in connection with pressure probes 0638 1345/..1445/..1545                      |              |  | Oper. temp.<br>0...+600 °C                  |  | 0635 2245 |
| Pitot tube, 1000 mm long, stainless steel, measures velocity in connection with pressure probes 0638 1345/..1445/..1545                     |              |  | Oper. temp.<br>0...+600 °C                  |  | 0635 2345 |
| 3-function probe for simultaneous measurement of temperature, humidity and velocity. With plug-in head, 0430 0143 connection cable required |              | Hot bulb<br>Testo humid. sensor, cap.<br>NTC | 0...+10 m/s<br>0...+100 %RH<br>-20...+70 °C | ±(0.03 m/s ±5% of mv) (0...+10 m/s)<br>±2 %RH (+2...+98 %RH)<br>±0.4 °C (0...+50 °C)<br>±0.5 °C (-20...0 °C)<br>±0.5 °C (+50.1...+70 °C) | 0635 1540 |
| Comfort level probe for measuring degree of turbulence levels, with telescope and stand. Fulfills DIN 1946 Part 2 or VDI 2080               |              | Hot wire<br>NTC                              | 0...+5 m/s<br>0...+50 °C                    | ±(0.03 m/s ±4% of mv) (0...+5 m/s)<br>±0.3 °C (0...+50 °C)   | 0628 0009 |
| CO2 probe measures indoor air quality and monitors the workplace. With plug-in head, connection cable 0430 0143 or 0430 0145 required       |              | CO2 probe                                    | 0...+1 Vol. % CO2<br>0...+10000 ppm CO2     | ±(50 ppm CO2 ±2% of mv) (0...+5000 ppm CO2)<br>±(100 ppm CO2 ±3% of mv) (+5001...+10000 ppm CO2)   | 0632 1240 |
| CO probe to measure CO level in ambient air   |              | CO probe                                     | 0...+500 ppm CO                             | ±5% of mv (+100.1...+500 ppm CO)<br>±5 ppm CO (0...+100 ppm CO)  | 0632 1247 |

| Description   | Illustration | Meas. range                      | Accuracy  | t90   | Conn. | Part no.   |           |
|---|--------------|----------------------------------|---|---|-------|--|-----------|
| Standard indoor air quality probe up to +70°C   |              | 0...+100 %RH<br>-20...+70 °C     | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+70 °C)  | 12 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 9740 |
| Duct humidity/temperature probe, can be connected to telescopic handle<br><small>Telescopic handle 0430 9715, see Ordering data for Accessories</small>                 |              | 0...+100 %RH<br>-20...+70 °C     | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+70 °C)  | 12 s  | Fixed cable  | 0636 9715 |
| <b>NEW</b> Thin humidity probe incl. 4 attachable protection caps for ambient air measurements, measurements in exhaust air ducts and equilibrium moisture measurements |              | 0...+100 %RH<br>-20...+70 °C     | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+70 °C)  | 15 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 2130 |
| Highly accurate reference humidity/temp. probe incl. calibration certificate  |              | 0...+100 %RH<br>-20...+70 °C     | ±1 %RH (+10...+90 %RH)*<br>±2 %RH (0...+9.9 %RH)<br>±2 %RH (+90.1...+100 %RH) | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+70 °C)  | 12 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 9741 |
| Flexible humidity probe with mini module for meas. e.g. on material testing rigs, module cable length 1500mm, probe tip 50x19x7mm                                       |              | 0...+100 %RH<br>-20...+125 °C    | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+125 °C)   | 20 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0628 0013 |
| Sword probe for measuring humidity and temperature in stacked material  |              | 0...+100 %RH<br>-20...+70 °C     | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+70 °C)  | 12 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 0340 |
| <b>NEW</b> High humidity level probe with heated sensor element, no condensation on sensor  |              | 0...+100 %RH<br>-20...+85 °C     | ±2.5 %RH (0...+100 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+85 °C)  | 30 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 2142 |
| Robust humidity probe e.g. for measuring equilibrium moisture or for measurements in exhaust ducts to +120°C  |              | 0...+100 %RH<br>-20...+120 °C    | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+120 °C)   | 30 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 2140 |
| Robust high temperature/humidity probe up to +180°C   |              | 0...+100 %RH<br>-20...+180 °C    | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (+0.1...+50 °C)<br>±0.5 °C (-20...0 °C)<br>±0.5 °C (+50.1...+180 °C)  | 30 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0628 0021 |
| Flexible humidity probe (does not retain shape) for measurements in inaccessible places   |              | 0...+100 %RH<br>-20...+180 °C    | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (+0.1...+50 °C)<br>±0.5 °C (-20...0 °C)<br>±0.5 °C (+50.1...+180 °C)  | 30 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0628 0022 |
| Standard pressure dew point probe for measurements in compressed air systems  |              | 0...+100 %RH<br>-30...+50 °C tpd |   | ±0.9 °C tpd (+0.1...+50 °C tpd)<br>±1 °C tpd (-4.9...0 °C tpd)<br>±2 °C tpd (-9.9...-5 °C tpd)<br>±3 °C tpd (-19.9...-10 °C tpd)<br>±4 °C tpd (-30...-20 °C tpd)    | 300 s | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 9840 |
| Precision pressure dew point probe for measurements in compressed air systems incl. cert. with test point -40°C tpd   |              | 0...+100 %RH<br>-60...+50 °C tpd |   | ±0.8 °C tpd (-4.9...+50 °C tpd)<br>±1 °C tpd (-9.9...-5 °C tpd)<br>±2 °C tpd (-19.9...-10 °C tpd)<br>±3 °C tpd (-29.9...-20 °C tpd)<br>±4 °C tpd (-40...-30 °C tpd) | 300 s | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0636 9841 |
| Flexible humidity probe (retains shape) for measurements at inaccessible points   |              | 0...+100 %RH<br>-20...+140 °C    | ±2 %RH (+2...+98 %RH)   | ±0.4 °C (-10...+50 °C)<br>±0.5 °C (-20...-10.1 °C)<br>±0.5 °C (+50.1...+140 °C)   | 30 s  | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0628 0014 |

☑ The measuring instrument inside TopSafe is waterproof with this probe.

\* in the temperature range from +10°C to +30°C

| Description  | Illustration | Meas. range  | Accuracy  | t99 | Conn.  | Part no.  |
|--|--------------|--|---|-----|--|-----------|
| Quick-action surface probe with sprung thermocouple strip, measuring range short-term to +500°C                  |              | -200... +300 °C  | Class 2   | 3 s | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0604 0194 |
| Super quick-action immersion/penetration probe for measurements in liquids                                       |              | -200... +600 °C  | Class 1   | 1 s | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0604 0493 |
| Super quick-action immersion/penetration probe for measurements in gases and liquids with a low-mass tip         |              | -200... +600 °C  | Class 1   | 1 s | Plug-in head, connection cable 0430 0143 or 0430 0145 required | 0604 9794 |
| Pipe wrap probe for pipes with diameter of up to 2", for flow/return temperature measurement in hydronic systems |              | -60... +130 °C   | Class 2   | 5 s | Fixed cable  | 0600 4593 |
| Spare meas. head for pipe wrap probe   |              | -60... +130 °C   | Class 2   | 5 s |  | 0602 0092 |
| Globe thermometer to measure radiant heat  |              | Accuracy corresponds to ISO 7243, ISO 7726, DIN EN 27726, DIN 33403 requirements<br>0... +120 °C | ±0.5 °C (0... +49.9 °C)<br>±1 °C (+50... +120 °C)       |     | Fixed cable  | 0554 0670 |
| Infrared surface probe for fast non-contact temperature measurement on live, inaccessible and rotating parts     |              | -18... +260 °C   | ±2% of mv (+100.1... +260 °C)<br>±2 °C (-18... +100 °C) | 2 s | Fixed cable, coiled  | 0600 0750 |

💧 The measuring instrument inside TopSafe is waterproof with this probe.

| Accessories for velocity probes, pressure probes   | Part no.  | Accessories/Humidity, 3-function probe  | Part no.  |
|--|-----------|---|-----------|
| Professional telescopic handle for plug-in vane probes, max. 1 m long, extension on request          | 0430 0941 | Cable, 1.5 m long, connects probe with plug-in head to meas. instrument<br>PUR coating material   | 0430 0143 |
| Extension for telescopic handle, 2 m long<br>Please also order the 0409 0063 extension cable         | 0430 0942 | Cable, 5 m long, connects probe with plug-in head to measuring instrument<br>PUR coating material   | 0430 0145 |
| Handle for plug-in vane probes   | 0430 3545 | Extension cable, 5 m long, between plug-in head cable and instrument<br>PUR coating material  | 0409 0063 |
| Swan neck, flexible connection between probe and connection part                                     | 0430 0001 | Telescopic handle, max. 1 m, for probe with plug-in head<br>Cable: 2.5 m long, PUR coating material   | 0430 0144 |
| Extension cable, 5 m long, between plug-in head cable and instrument<br>PUR coating material         | 0409 0063 | Telescopic handle, 340 - 800mm long   | 0430 9715 |
| Magnetic probe holder for vane probes  | 0554 0430 | Control and humidity adjustment set 11.3%RH/75.3%RH incl. adapter for humidity probes   | 0554 0660 |
| Connection hose, silicone, 5m long<br>Silicone hose connects Pitot tube and pressure probe, 5 m long | 0554 0440 | Adapter for humidity adjustment of 3-function probe 0635 1540<br>Order with adjustment set  | 0554 0661 |
| Magnetic holder for pressure probes<br>For pressure probes 0638 1345/..1445/..1545/..1645            | 0554 0225 | Control and storage humidity (33%RH) for humidity probes  | 0554 0636 |
| Cover plugs for test holes (50 off)  | 0554 4001 | Metal protection cage, Ø 21 mm for humidity probes<br>For velocities of less than 10 m/s  | 0554 0665 |
|  |           | Metal protection cage, Ø 12 mm for humidity probes<br>For velocities of less than 10 m/s  | 0554 0755 |
|  |           | Wire mesh filter, Ø 21 mm, for metal protection cage and plastic cap<br>Protects from dirt and damage. Applications: meteorology, splashwater, condensation | 0554 0667 |
|  |           | Cap with wire mesh filter, Ø 12 mm  | 0554 0757 |
|  |           | Teflon sintered filter, Ø 21 mm, for corrosive substances<br>High humidity range (long-term measurements), high velocities                                  | 0554 0666 |
|  |           | Teflon sintered filter, Ø 12 mm, for corrosive substances<br>High humidity range (long-term measurements), high velocities                                  | 0554 0756 |
|  |           | Stainless steel sintered cap, Ø 21 mm, can be screwed onto humidity probe<br>Protection in case of high mechanical load and high velocities                 | 0554 0640 |
|  |           | Stainless steel sintered cap, Ø 12 mm, is screwed onto humidity probe<br>For measurements at high velocity speeds or in dirt ingressed air                  | 0554 0647 |
|  |           | Teflon cap, Ø 5 mm, attachable, PTFE material, (5 off)  | 0554 1031 |
|  |           | Dust protection, high humidity measurements, high velocities<br>For 0636 2130 humidity probe  |           |

💧 The instrument is waterproof inside TopSafe if this item is connected.

## Practical accessories and recommended sets

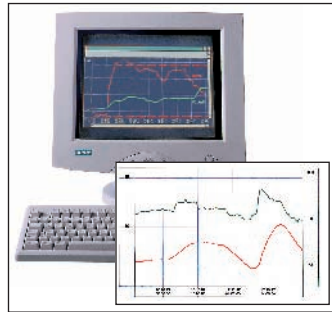


Testo printer with 1 roll of thermal paper and 4 AA size batteries

Part no. 0554 0545

**NEW** testo 575 fast printer, incl. 1 roll of thermal paper and batteries

Part no. 0554 1775



ComSoft 3 - Professional with data management Incl. database, analysis and graphics function, data analysis, trend curve

Part no. 0554 0830

### testo 445, Introduction Set for velocity/VAC measurements in ducts



testo 445, VAC measuring instrument, incl. TopSafe

Vane probe, Ø 16 mm

Standard ambient air probe

Connection cable, 1.5 m long

Transport case

Part no. 0563 4453

### testo 445, Set for monitoring indoor air quality



testo 445, VAC measuring instrument, incl. TopSafe

CO<sub>2</sub> probe

Connection cable, 1.5 m long

3-function probe

Connection cable, 1.5 m long

Transport case

Part no. 0563 4456



TopSafe (indestructible protection case), with bench stand and belt clip  
Protects instrument from water, dust, impact, scratches. IP 65 only with waterproof probes (drop symbol)

**Included**



testovent 410, volume flow funnel, Ø 340mm/330 x 330mm, incl. case

Part no. 0554 0410

testovent 415, volume flow funnel, Ø 210mm/190x190mm, incl. case

Part no. 0554 0415

### Ordering data for instrument and accessories

#### Part no.

|   |           |
|---|-----------|
| testo 445, VAC measuring instrument, incl. TopSafe, battery and calibration                 | 0563 4450 |
| Plug-in mains unit  | 0554 0088 |
| For mains operation and recharging battery in instrument                                    |           |
| 9V rechargeable battery for instrument  | 0515 0025 |
| Instead of battery  |           |
| Testo printer with 1 roll of thermal paper and 4 AA size batteries                          | 0554 0545 |
| Prints readings on location   |           |
| <b>NEW</b> testo 575 fast printer, incl. 1 roll of thermal paper and batteries              | 0554 1775 |
| Infrared thermal line printer with graphics function  |           |
| Recharger for printer (with 4 standard rech. batt.)   | 0554 0110 |
| Spare thermal paper for printer (6 rolls)   | 0554 0569 |
| Spare thermal paper for printer (6 rolls)   | 0554 0568 |
| Measurement data documentation legible for up to 10 years                                   |           |
| Label thermal paper (Testo patent) for testo 575 printer (6 rolls), can be applied directly | 0554 0561 |
| Cable, 1.5 m long, connects probe with plug-in head to meas. instrument                     | 0430 0143 |
| Cable, 5 m long, connects probe with plug-in head to measuring instrument                   | 0430 0145 |
| Extension cable, 5 m long, between plug-in head cable and instrument                        | 0409 0063 |
| ComSoft 3 - Professional with data management   | 0554 0830 |
| Incl. database, analysis and graphics function, data analysis, trend curve                  |           |
| RS232 cable   | 0409 0178 |
| Connects instrument to PC (1.8 m) for data transfer   |           |
| Transport case (plastic) for measuring instrument, probes and accessories                   | 0516 0445 |
| Now bigger for safe and orderly storage   |           |
| System case (plastic) for measuring instrument, probes and accessories                      | 0516 0400 |
| Probes in lid make it easy to find parts in case  |           |
| System case (aluminium) for measuring instrument, probes and accessories                    | 0516 0410 |
| Probes in lid make it easy to find parts in case  |           |
| <b>ISO calibration certificate/Velocity</b>   | 0520 0004 |
| Hot wire, vane anemometer, Pitot tube; calibration points 1; 2; 5; 10 m/s                   |           |
| <b>ISO calibration certificate/Velocity</b>   | 0520 0034 |
| Hot wire, vane anemometer, Pitot tube; calibration points 5; 10; 15; 20 m/s                 |           |
| <b>DKD calibration certificate/Velocity</b>   | 0520 0244 |
| Hot wire, vane anemometer; calibration points 0.5; 1; 2; 5; 10 m/s                          |           |
| <b>DKD calibration certificate/Velocity</b>   | 0520 0204 |
| Hot wire, vane anemometer, Pitot tube; calibration points 2; 5; 10; 15; 20 m/s              |           |

### Technical data

| Probe type       | Type K (NiCr-Ni)  | Type J (Fe-CuNi)  | NTC   | Testo humid. sensor, cap. |
|------------------|---|---|---|---------------------------|
| Meas. range      | -200... +1370 °C  | -200... +1000 °C  | -50... +150 °C  | 0... +100 %RH             |
| Accuracy         | ±0.5% of mv (-200... -60 °C)<br>±0.5% of mv (+60... +1370 °C)<br>±0.3 °C (-60... +60 °C)<br>0.1 °C (-200... +1370 °C) | ±0.5% of mv (-200... -60 °C)<br>±0.5% of mv (+60... +1000 °C)<br>±0.3 °C (-60... +60 °C)<br>0.1 °C (-200... +1000 °C)                                 | ±0.5% of mv (+100... +150 °C)<br>±0.2 °C (-25... +74.9 °C)<br>±0.4 °C (-50... -25.1 °C)<br>±0.4 °C (+75... +99.9 °C)<br>0.1 °C (-200... +1000 °C) | See probe data            |
| Resolution       | 0.1 °C  | 0.1 °C  | 0.1 °C  | 0.1 %RH (0... +100 %RH)   |
| Probe type       | Vane  | Thermal   | Pressure  |                           |
| Meas. range      | 0... +60 m/s  | 0... +20 m/s  | See pressure probes   |                           |
| Accuracy         | See probe data  | See probe data  | ±0.1% of mv   |                           |
| ± 1 digit        |   |   |   |                           |
| Resolution       | 0.01 m/s (0... +60 m/s)   | 0.01 m/s (0... +10 m/s)<br>0.1 m/s (+10.1... +20 m/s)   | 0.001 hPa (0638 1345 probe)<br>0.001 hPa (0638 1445 probe)<br>0.01 hPa (0638 1545 probe)<br>1 hPa (0638 1645 probe)                               |                           |
| Probe type       | CO <sub>2</sub> probe   | CO <sub>2</sub> probe   | CO probe  |                           |
| Meas. range      | 0... +1 Vol. % CO <sub>2</sub>  | 0... +10000 ppm CO <sub>2</sub>   | 0... +500 ppm CO  |                           |
| Accuracy         | See probe data  | ±(100 ppm CO <sub>2</sub> ±3% of mv) (+5000... +10000 ppm CO <sub>2</sub> )<br>±(500 ppm CO <sub>2</sub> ±2% of mv) (0... +5000 ppm CO <sub>2</sub> ) | ±5% of mv (+100... +500 ppm CO)<br>±5 ppm CO (0... +100 ppm CO)   |                           |
| ± 1 digit        |   |   |   |                           |
| Resolution       | 0 Vol. % CO <sub>2</sub> (0... +1 Vol. % CO <sub>2</sub> )  | 1 ppm CO <sub>2</sub> (0... +10000 ppm CO <sub>2</sub> )  | 1 ppm CO (0... +500 ppm CO)   |                           |
| Dimensions       | 215x68x47 mm  |   | Battery life: 6-45 h (depending on probe)   |                           |
| Weight           | 255 g   |   | Mains conn. and batt. rech. in instr.   |                           |
| Oper. temp.      | 0... +50 °C   |   | Calculated humidity parameters: td, g/m <sup>3</sup> , g/kg pressure-compensated, J/g   |                           |
| Storage temp.    | -20... +70 °C   |   | Calculated volume flow: m <sup>3</sup> /h (e.g. 0 to 99999 m <sup>3</sup> /h), m <sup>3</sup> /min, m <sup>3</sup> /s, l/s, cfm                   |                           |
| Battery type     | 9V block battery  |   | Calculated velocity values (density-compensated): 0 to 100 m/s; 0 to 99999 m <sup>3</sup> /h  |                           |
| Material/Housing | ABS   |   | Humidity measurement: Measuring range -50 to 180°C; See Probes for accuracy   |                           |
| Power supply     | Battery/Rechargeable battery  |   | Accuracy of Type K, J: Additional error via operation temperature 0.2 °C (adjustment point)   |                           |
| Power supply     | Mains unit  |   |   |                           |
| PC               | RS232 interface   |   |   |                           |
| Memory           | 3000  |   |   |                           |
| Warranty         | 2 years   |   |   |                           |