The most precise and flexible all-rounder instrument for professional applications-easy to handle and robust for measurement of Temperature/Humidity, flow, co2 and air pressure

- **Parameters measured**
  Integrated sensor for air pressure, exchangable sensors for highly precise measurements of temperature, relative humidity and air flow

- **Measurement technology**
  Various - thus exchangable sensors

- **Product highlights**
  Precice and flexible all-rounder handheld instrument, easy to handle and robust, sensor connection with automatic recognition, saves measuring campaignes, allows all climate data to be calculated and archieved, evaluation software SmartGraph3 included

- **Interfaces**
  USB (Cable and SmartGraph3 software included)

- **Article number**
  5900.00

"All-rounder" in the handheld measurement technology segment. A universal measuring device for professionals with the inclusion of exchangeable SDI Sensors. Highly precise measurements of temperature and relative humidity. Integrated air pressure sensor, online/offline data recording. Equipped with test certificate, can be calibrated.

Beschreibung	Wert
General	
Dimensions	170 x 62 x 34 mm
Weight	Approx. 205 g
Storage conditions	
Permissible ambient temperature	-20...60 °C
Operating rel. humidity	< 90 % r.h. non - condensing
Operating conditions	
Operating rel. humidity	< 90 % r.h. (20 g/m^3) non - condensing
Admissible height above absolute altitude	4000 m
Power supply	
Power supply	4 Alkaline LR6 AA 1.5 V/USB 5 V
Active power consumption	Approx. 400 mW
Battery life passive	Approx. 1 year
Battery life active	min. 24 hours
Sensor power supply	5.5 V ± 10 % DC, max. 200 mA
Data storage	
Integrated data storage	up to 200 gauges taking approx. 1 mill. values
Interface	
USB	Cable and SmartGraph3 software included
Display	
Definition of measured values	2 decimal places
Control	Touch screen, capacitive
Technology	TFT, resolution 240 x 320, 65 k colours, very good contrast due to Piezoresistive technology
Surface, toughened glass	Degree of hardness: 7, scratch - resistant
Integrated air pressure sensor	
Measurement range	800...1100 mbar
Accuracy at 25°C, 1013.25mbar	0.5 mbar
Long-term stability	typ. 1 mbar/year
Measurement resolution	0.024 mbar
Measuring principle	Piezoresistive
Compatibility	Sensor/probe: all SDI/digital sensors (temperature, humidity, SDI airflow, air pressure integrated)
Others	

Calculated measurement categories for external temperature/humidity sensors	Mathematical: MIN/MAX/AVG/HOLD Temperature (°C/°F) Rel. humidity (% RH) Rel. humidity of ice (% RH) Water vapour density (absolute humidity) g/m 3 Dew point temperature °C/°F Frost point temperature °C/°F Mixing ratio at saturation (100%) g/kg Volume fraction of water vapour /mass fraction of water vapour (%) Wet-bulb temperature °C/°F Ice-bulb temperature °C/°F Speci c Enthalpy (mass of air) kJ/kg Saturation vapour pressure above ice/water (hPa) Vapour particle pressure (hPa) Air density kg/m 3

Calculated measurement categories for external airflow sensors	Operating air ow volume - various units: (m 3 /s) (m 3 /h) (l/min); Standard air ow volume: DIN 1343 (°C, 1013.25hPa), ISO 2533 (15°C, 1013.25hPa), DIN 1945 (20°C, 1013.25hPa); Various units: (m 3 /s), (m 3 /min), (m 3 /h), (l/min)