



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.

IMPORTANT: XA1000 Handheld Device is discontinued













| Beschreibung | Wert |
|--------------|------------------|
| General | |
| Dimensions | 170 x 62 x 34 mm |
| Weight | Approx. 205 g |

| Storage conditions | |
|---------------------------------|------------------------------|
| Permissible ambient temperature | -2060 °C |
| Operating rel. humidity | < 90 % r.h. non - condensing |

| Operating conditions | |
|-------------------------|--|
| Operating rel. humidity | < 90 % r.h. (20 g/m³) non - condensing |
| Admissible height above | 4000 m |
| absolute altitude | |

| 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 | 8001100 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 | Mathematical: MIN/MAX/AVG/HOLD |
|---------------------------------|---|
| categories for external | Temperature (°C/°F) |
| temperature/humidity sensors | 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 | Operating air ow volume - various units: (m 3 /s) (m 3 /h) (l/min); |
| categories for external airflow | Standard air ow volume: DIN 1343 (°C, 1013.25hPa), ISO 2533 |
| sensors | (15°C, |
| | 1013.25hPa), DIN 1945 (20°C, 1013.25hPa); |
| | Various units: (m 3 /s), (m 3 /min), (m 3 /h), (I/min) |











