



## X-pert range for humidity and temperature measurements in climate and environmental technology.

- **Parameters measured**  
Air pressure, temperature and humidity
- **Measurement technology**  
Various - thus exchangeable sensors
- **Product highlights**  
Precise and flexible all-rounder handheld instrument, easy to handle and robust, sensor connection with automatic recognition, saves measuring campaigns, allows all climate data to be calculated and archived, evaluation software SmartGraph3 included
- **Interfaces**  
USB (Cable and SmartGraph3 software included)
- **Article number**  
5820.00

Hand held device with integrated air pressure sensor is compatible with various intelligent external temperature and humidity probes.

IMPORTANT: Hand-held measuring device XP200 is discontinued

Please check the alternative: [All-in-One Handheld Device XA1000](#)

# Technical Data

Handheld measuring device XP200 - discontinued



## General

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

## Storage conditions

|                                 |                           |
|---------------------------------|---------------------------|
| Permissible ambient temperature | -20...60 °C               |
| Operating rel. humidity         | <90 % RH non - condensing |

## Operating conditions

|   |                                     |
|---|-------------------------------------|
| Operating rel. humidity                   | <90 % RH (20 g/m3) 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 $\pm$ 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 in delivery |
|-----|---|

## Display

|                               |                  |
|-------------------------------|------------------|
| Definition of measured values | 2 decimal places |
|-------------------------------|------------------|

## Display

|                          |  |
|--------------------------|--|
| 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

|                               |                  |
|-------------------------------|------------------|
| Measuring 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   |

Calculated measurement  
categories for external  
temperature/humidity sensors

Mathematical: MIN/MAX/AVG/HOLD

Temperature °C/°F

Rel. humidity %r.h

Rel. humidity of ice %r.h

Water vapour density (absolute humidity) g/m<sup>3</sup>

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

Specific Enthalpy (mass of air) kJ/kg

Saturation vapour pressure above ice/water hPa

Vapour particle pressure hPa

Air density kg/m<sup>3</sup>